EXPERIENTIAL LEARNING FOR 16-19 YEAR OLD STUDENTS: USING EXPERIENCES OF RISK AND FAILURE TO MAKE LEARNING MORE FLEXIBLE AND ENTREPRENEURIAL

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Declaration of Authenticity

I, Raymond Dwerryhouse hereby declare that the following thesis is my own and that:

- this work has been done while in candidature for a research degree at Liverpool John Moores University;

- where I have consulted the published work of others, this is always clearly attributed;

- where I have quoted from the work of others the source is always given, and with the exception of such quotations, this thesis is entirely my own work; and,

- I have acknowledged all main sources of help.

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Abstract

In this thesis the aim has been to consider student learning in Business Education in the 16-19 age range through an examination of aspects of Experiential Learning. The main aspects of Experiential Learning that have been focused on include enterprise, work-related learning, risk and failure and how these impact on student learning and motivation. There is also a focus on the Young Enterprise Programme.

The methodology used in the research is underpinned by a pragmatist paradigm in terms of the choice of methods, which has led to the use of a mixed methods or 'blended' approach. Data was collected from the key stakeholders in the 16-19 age phase of education and included the students themselves, educational institutions, teachers, employers, and students involved in the Young Enterprise Programme. The data was then analysed in order to illuminate the six themes for investigation.

An initial study was undertaken and the findings from this indicated a dichotomy between schools and colleges in how Experiential Learning was used. More significantly however, there was contradictory evidence with regard to risk taking, and the opportunities which students are given in order to experience failure. These findings, alongside key aspects of the literature, were used to develop six main themes for investigation. The main study that then followed, indicated that experience of risk and failure, often via informal and incidental learning, can lead to new understanding and new modes of

thinking. It also indicated that although valuable, work placement does not always provide a meaningful and consistent experience for students, and may encourage them to focus on success and the established ways of doing things. The findings then led to the conclusion that in a successful collaborative group, learners can have the support and encouragement to take risks and make changes. In turn, such groups and the associated support that they provide can promote more effective work related Experiential Learning. The findings from the main study, and the subsequent discussion and analysis of these, and also led to a consideration of the implications of the study for professional practice.

Young people seeking work in the future are likely to need to be more flexible and entrepreneurial in their attitudes. The research indicates that the education system needs a greater capacity for innovation and creativity, in relation to facilitating the experience of risk and failure for students, in order to develop those flexible and entrepreneurial attitudes.

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CHAPTER 1

Background, Rationale, Objectives and Structure

The aim of this opening chapter is to first of all consider the background and context relating to this research study. It will start by looking at changes in the nature of work and the demands that this will place on students who are leaving education to enter the employment market in the 21st century. It will then provide an overview of the current educational offer for students in the 16-19 age range, and will also draw some comparisons with vocational education in Europe. There will also be reference to some of the key changes and reforms relating to vocational and work related education will be discussed. Once the context has been set, the chapter will then consider the rationale behind the study and the objectives being pursued. Finally, the chapter will provide a summary of what is to follow in the remaining chapters of the thesis.

1.1 Background

There are a number of key forces, both from an employment and an educational perspective, which are working towards change in the range of educational opportunities offered for 16 to 19 year olds. This is within the context of globalisation, which means that all countries, not just the UK, are facing the challenge of economic improvement and international competitiveness (Deuchar, 2007). The European Centre for the Development of Vocational Training (Cedefop, 2009) has stated that the recent world economic crisis, climate change, combined with demographic developments,

including ageing and migration, are all presenting huge challenges for labour markets in Europe and across the world. In order to respond to this then it is vital that economic recovery is driven forward through skills enhancement so that labour markets can respond to the new structures and new jobs that will emerge as the 21st century progresses.

The world of work is changing fast. Over the last two decades the number of people working in small firms or who are self-employed has grown sharply, while jobs in the public sector and large firms have been cut back (Jenkins and Leaker, 2010). These trends, both in the public and the private sector, seem set to continue. Looking forward, therefore, young people seeking work In the future are likely to need to be more flexible and entrepreneurial in their attitudes. Even in larger firms and in the public and voluntary sectors entrepreneurial skills are more highly valued than they were in the past (Davies, 2002).

Employers increasingly want recruits who are going to be effective in the future, changing world, who can work on a range of tasks simultaneously, and who are not resistant to change and who are quick to learn. Baylis et al (1999 p.2) state that young people are now faced with working lives, which demand great flexibility, frequent shifts between employers and roles and a very high degree of adaptability. The needs of the 21st century are for young people to enter the workforce with broad-ranging knowledge, along with a range of work and personal skills. As Deuchar (2007) has noted, in many societies throughout the world, conventional wisdom says that schools need to take a l

eading role in equipping young people to function successfully in the wider world. This will then ensure that they can play an active part in cosmopolitan communities, that they will be employable, and that they will be able to contribute towards competitive global economies. Thus, technological change and the global economy are leading to a quantitative change in demand for what might be referred to as knowledge workers, who will need a broader range of work place competencies and soft skills that complement academic or technical skills. Education and training in the UK is changing in line with this to ensure that every young person has a high-quality, interesting and useful curriculum that will help them achieve their potential and progress to further and higher education and skilled employment (DCSF, 2009d).

In order to better prepare students for the changing world of work a number of writers (Revans, 1998; McGill and Beatty, 1995; Ofsted, 1998;) have stressed the importance of the need to approach reality within teaching and learning. Hogan (1992), for example, states that a major problem facing many students is that they lack experience of the real world. Effective performance most often needs to be team based and cannot be achieved by functioning alone, and hence managers have to continually work with people through understanding and empathy. These skills can only be learned through experience. Such an approach to teaching and learning would in many respects mirror the methods of industry and commerce, where the need for adaptability and continual learning is largely framed within an active mould, with an emphasis on learning through experience by responding to events and crises as they happen. Taking this one step further, others such as Stinson

and Milter (1996) have suggested that in order for learning about business to have an underpinning realism, then that learning should also encapsulate the holistic nature of business. Machuca (1992), when referring to Business Education, states that very often the firm is broken up into its basic parts, and consequently many interactions fail to be taken into consideration. It is assumed that the sum of the performances of the different parts studied will indicate the performance of the whole, which is absolutely false, given the synergy brought about by the interactions between each part.

Wilmot (1994) has suggested that contemporary changes in the organisation of work; reliance on teamwork and erosion of functional boundaries, will progressively undermine established forms of expert knowledge. Guile and Young (1998) point to growing evidence that as the organisation of work changes, then demands for more generic problem solving abilities and of greater levels of collaboration and devolved responsibility are emerging. These changes clearly emphasise the need for an approach to learning that links the way employee identities are formed to the increasingly collective character of work and supports a greater emphasis on self-reliance so that learners are able to cope with the changes in work that are taking place.

Against this background is an education system in the United Kingdom, which is characterised by an artificial divide between academic and Vocational Education. One result of this is that vocational courses have for a long time often been held in relatively low esteem. In addition, participation and completion rates in the post-16 sector are amongst the lowest in Western

Europe. The Leitch Report (2006) points out that despite having made good progress over the last decade, aspects of the UK's skills base remain weaker than those in other developed economies, and for example:

- out of 30 OECD countries, the UK lies 17th on low skills, 20th on intermediate skills and 11th on high skills;

- 5 million adults in the UK lack functional literacy;

- 17 million adults in the UK have difficulty with numbers; and,

- more than one in six young people leave school unable to read, write or add up properly.

As Donovan states:

"To meet escalating demands, the education system needs a greater capacity for innovation and creativity. Maximising the effective use of resources, creating and applying knowledge in new ways, these aims are as important to education as to any other sector. We must also recognise that innovation partly depends on being able to leave behind established assumptions and educational methods, which may have outlived their usefulness."

(Donovan, 2005 p.4)

The 14-19 reforms currently underway are the biggest changes in education for more than 30 years (DCSF, 2009d). They aim to tackle the above issues and raise the education and skills levels of students by delivering a curriculum, which gives them life, and social skills, sets stretching and

challenging targets, and better prepares them for a fast-changing world. The new curriculum prioritises the functional skills of English, Mathematics and ICT. It also focuses on teamwork and other personal skills, preparing young people for study at a higher level or for employment. The key elements of the reform programme are raising the minimum age at which young people leave education or training to 18 by 2015. A new suite of qualifications, (diplomas) are being introduced, along with reform of A levels, the creation of new functional skills standards and qualifications in English, Mathematics and ICT, and an expansion of apprenticeship opportunities. There will also be a revised support framework for learners below level 2 and level 1 through a foundation learning tier (DCSF, 2009d).

These reforms will hopefully collectively encourage more young people to continue in learning on courses that they find engaging and that will help them to achieve more by 19. The ultimate goal is, by 2020, for 90% of young people to achieve Level 2 (5 A* to C GCSEs equivalent) by the age of 19, and 70% to achieve level 3 qualifications by that age. Of course, deficiencies in the English education system with respect to vocational education, the development of employability skills and the lack of engagement by many young people have long been recognised (for example, by Hodgson and Spours, 1999). More recent reports (Davies, 2002; Leitch, 2006) have put these concerns into even sharper focus, and even more recent pronouncements further emphasise the need to act.

In a recent speech on em ployer engagement, Sarah McCarthy Fry (MP) commented that:

"In the current economic climate, education and training are more important than ever. We don't know what's around the corner, but we do know that a well-trained and well-educated workforce will be best fitted to survive the new economic conditions. And indeed, not just to survive: to flourish"
(McCarthy-Fry, 2009).

To help contextualise the arguments that follow it will be helpful to provide an overview of the National Qualifications Framework in the UK.

The aims of the National Qualifications Framework are to:
1. Promote access, motivation and achievement in education and training and therefore strengthen international competitiveness.
2. Promote lifelong learning by helping people to understand clear routes of progression.
3. Avoid unnecessary duplication and overlap of qualifications whilst ensuring all learning needs are covered.
4. Promote confidence in the integrity and relevance of national awards.

Each accredited qualification has an NQF level. If qualifications share the same level this means that they are broadly similar in terms of the demand they place on the learner. However, qualifications at the same level can still be very different in terms of content and duration.

Table 1a shows a selection of individual qualifications and how they appear in the current NQF, and how they broadly compare to the Framework for Higher Education Qualification (FHEQ) levels.

For clarity, this table includes examples of qualifications that were previously at levels 4 to 5 but now have more precise levels.

National Qualifications Framework

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Following two years of tests and trials by the Qualifications and Curriculum Authority (now the Qualifications and Curriculum Development Agency), a new Qualifications and Credit Framework (QCF) has been approved by the Department for Innovation Universities and Skills for implementation. The framework is a new way of recognising skills and qualifications. It does this by awarding credit for qualifications and units. It enables people to gain qualifications at their own pace along flexible routes, and will help present qualifications in a way that is easy to understand and measure. Every unit and qualification in the framework will have a credit value (one credit represents 10 hours) and a level between Entry level through to GCSE (level 2), Advanced level (level 3) and on to level 8 (PhD). There are three sizes of qualifications in the QCF:

1. Awards (1 to 12 credits).
2. Certificates (13 to 36 credits).
3. Diplomas (37 credits or more).

So in the framework students can have an award at level 1 or an award at level 8. This is because the qualification type 'award, certificate, diploma' represents the size of a qualification, not how difficult it is.

The Qualifications and Credit Framework will enable people to gain qualifications at their own pace, from a number of sources, in a way that suits them - and to carry the modules with them if, for example, they change jobs. Employers will find it easier to find or develop employees with the skills they

need for business success. By early 2010 all key vocational qualifications will be approved by Sector Skills Councils and readily available to learners in small, credit-based units of learning.

1.2 Vocational Education in Europe: a model for change?

The continuing failures of the UK system are often highlighted by comparisons to those abroad and in particular with the German system of vocational education. These aspects will now be given brief consideration in an attempt to make clearer the problem that exists. Pathways to parity - a survey of 14–19 vocational provision in Denmark, the Netherlands and New South Wales (Ofsted, 2004), examines the lessons that might be learned in England from a consideration of Vocational Education and training for 14-19 year olds in these three areas. The report sets out concerns that participation of 17-year-olds in education and training in England is low compared with other European countries and that there remains in this country a perceived lack of parity of esteem, or value, between vocational and academic qualifications. The survey found that in all three countries:

- vocational courses are held in higher esteem by young people and others than in England, mainly because they are more often seen as providing clear pathways to higher education and employment;

- staying-on rates into full-time education or training beyond the end of compulsory education are higher than in England;

- employers are more consistently and directly involved in determining the content and assessment of vocational courses than in England; this

- gives the courses and associated qualifications currency and status and helps to ensure that provision is more closely aligned to the needs of the economy;

- vocational teachers are normally required to have industrial experience, which is regularly updated through industrial placements. This ensures that teaching is firmly embedded in current commercial and industrial practice and that strong links are forged with employers;

- structured work placements are a much stronger feature of post-16 vocational courses than they are in England, and hence are more often seen as more applied and relevant to young people;

- Vocational Education takes place in good quality accommodation, which reflects the working environment; and,

- careers education and guidance are seen as an integral part of vocational courses.

Compared with the other countries, the qualifications system in England is complex and does not always provide clear progression routes for students. There is wide variation in the scope and quality of vocational training among institutions and within different parts of the country. However, the report notes that 14-16 vocational provision in England is increasingly regarded as providing greater flexibility for young people, giving a broad introduction to vocational work, without tying them down to one specific type of employment too soon.

The system of Vocational Education in Germany is often referred to as the

Dual System. It is frequently regarded as a model system, and one, which could be used as an example to improve economic performance and skills shortages in other countries (Cockrill and Scott, 1997). In Germany there is a legal requirement to undertake education on at least a part-time basis until 18. In the UK, the last change in the school leaving age was 1972 when it was raised to 16. In recent years however, moves have begun to raise this further. In 2007, a government team was set up to organise the raising of the age at which young people must be at school, in an apprenticeship or in training from 16 to 18 by 2013. Subsequently, in 2008 an Act of Parliament raised the education leaving age to 17 in 2013 and to 18 from 2015. This proposal does not necessarily mean staying in school full time. Young people will be able to choose how they participate in education, which can include school, college, apprenticeship or part-time training.

Under the German system, pupils are divided, in more or less equal proportions, between three types of school at the age of 12 - the Hauptschule for the least able, the Realschule for the middle group, and the Gymnasium for the most able in academic terms. The first two types of school end at 15/16, whereas the Gymnasium carries on into its upper stage (Gymnasiale Oberstufe) to 18. Although there are different schools for children of different ability, all teach a common core of required subjects, which continue into the upper secondary phase of general education (OECD, 1994).

After leaving Haupt- or Realschule at 15, around two thirds of pupils pass through the Duales system: this is organised into 370 recognised occupations,

each with a syllabus for practical training, a framework for theoretical learning and assessment requirements agreed by the two sides of the sector concerned. Firms are approved to take apprentices by local industry chambers, and follow the practical training syllabus, sometimes using group-training centres to supplement their facilities, while paying a trainee wage. About 66% of students move into the dual system. The system of Vocational Education is complex and targeted: as well as Berufsschulen providing one- or two- day release within the apprenticeship system, there are dedicated full-time vocational colleges in the form of Berufsfachschulen catering for certain occupations where apprenticeship is not the model, and Berufsoberschulen specifically geared to producing candidates for the polytechnic. Crucially, in some cases, technological subjects are regarded as lying within the sphere of general education, and as attracting the same, or nearly the same, kudos as academic subjects (OECD, 1994). There is a contrast here with the perception of technological and vocational subjects in the UK, where the academic form of learning is often held in higher esteem than the vocational. This is in spite of the fact that economic data suggests that those persons with a skill can expect wage returns over a lifetime, which are on a par with those who have an academic qualification. The perception of the lesser status held by vocational qualifications is based often on an out-dated class view of the worth of certain forms of knowledge. In turn, this notion of a lesser status is often reinforced by different forms of testing and assessment (Campaign for Learning, 2006).

In Germany, general education within vocational pathways is reflected in the curriculum of the Berufsschulen, where a third of the available curriculum time

is taken up with German, social studies, economics, religious education and sport, in addition to those subjects (often including mathematics, science and sometimes a foreign language) specified in their occupational off the-job training. The syllabus is designed so that able and willing students can gain the middle school leaving certificate (Realschulabschlub) if they have not already obtained this. Similarly there are rather more substantial components of general education in the full-time Berufsfachshulen and Oberfachschulen such that, in the latter case, the equivalent of the Gymnasium's leaving certificate (the Allgemeine Hochreife) can be achieved. In this way, educational, as well as occupational, progression links are built into the vocational system (OECD, 2006). In the UK the new Diploma qualifications, which will be fully rolled out by 2013, aim to bridge the gap between vocational and academic study. The Minister for 14-19 Education, Iain Wright, has recently stated that schools already involved in delivering the Diplomas are finding them engaging and stimulating. However, the future of this qualification would appear to be uncertain. Michael Gove, the recently appointed Secretary of State for Education, has reiterated the Conservative plans to abolish the so-called academic Diplomas in languages, science and humanities. He also states that the qualifications have not satisfied employers in their rigour and quality (Delivering Diplomas, 2010).

In the UK, it is currently being argued that the term vocational should be replaced with the term professional, with its associations of prestige and prosperity. The point of contrast here is that the concept of 'vocation' is central to the German system of vocational education and training. It refers to the

ability of the individual 'to act competently in a vocational environment' and coexists with the concepts of education for personal development. Importantly, this provides students with the knowledge and understanding to undertake company-specific tasks, whilst at the same time ensuring that they acquire qualifications and skills that are transferable to other companies, as well as enabling them to more easily adapt to social and labour market change (Misko, 2006).

In Germany, industry is a key collaborator in the development of regulations and guidelines for vocational training, and for example will specify the period of training and the skills and knowledge to be developed as students move through the curriculum. This is not dissimilar to the UK (for example, commerce and industry have a key role in the development and implementation of the new 14-19 Diplomas) however in Germany, industry, as a social partner, plays a far more significant role in the provision and assessment of training. For example, they certify the technical aptitudes of trainers, develop and conduct examinations for apprentices, and monitor the performance of training companies (Misko, 2006).

Deissinger and Hellwig (2004) have noted that the dual system is facing a number of major crises mainly due to insufficient numbers of training places in companies. Apprenticeships are most highly prized in Germany where about two-thirds of a cohort of German school leavers will move into an apprenticeship pathway. There are however moves to reform the specific occupation approach to apprenticeship training so that the changing needs of

the workplace and local situations can be accommodated (especially for information technology occupations). High levels of both youth unemployment and disengagement from education and training have in the UK helped to push forward reform of vocational education and training. In the UK the government is considering raising the school-leaving age to 18 immediately as a way of combating the rise in youth unemployment. In Germany the issue of high youth unemployment has been less problematic mainly because of high participation rates in the dual system. Although as noted above there are moves underway to improve the flexibility and responsiveness of the system in respect of economic change (OECD, 2006).

1.3 Opportunity and Excellence 14–19

Reform of 14-19 Education is a key component of Government educational policy. Students in the 14-19 age range are at a critical phase in their lives as they attempt to build on prior learning and prepare for employment and/or higher education. A number of writers have highlighted weaknesses in educational provision in the 14-19 phase (for example, see Hodgson and Spours, 1999) and it is these perceived deficiencies that have been the genesis of current attempts at reform. The Government response can be found in the document Opportunity and Excellence (July 2003), which was the precursor to The Diploma Proposals: a new approach to 14-19 learning (Feb 2004).

Some of the deficiencies highlighted in this document are quite stark. They include the fact that only 51% of pupils achieve 5 good GCSEs (at A*–C) or

equivalent by age 16, and just over 5% achieve no GCSEs. The document also notes that in a league table of participation rates for 17 year-olds the UK is equal 25th out of 29 OECD countries, ahead of just Greece, Mexico and Turkey. Significantly too, one in four 16–18 year-olds had dropped out of education and training at the end of 2000, significantly above the OECD and European Union averages.

The CBI, in its response to the initial proposals (Opportunity and Excellence, July 2003), pointed out that businesses want young people with the right attitude who can make a difference, and are both numerate and literate. They then went on to say that business also needs more highly skilled people to be able to survive and flourish in an increasingly global, highly competitive economy. This is supported by statistical forecasts, which indicate that until 2020 more and different jobs will be created, and that most jobs in 2020 will require high and medium level qualifications. By 2020 the proportion of jobs needing no or low-level qualifications is expected to fall to around 18%, compared to a previous figure of 31% in 1996 (Cedefop, 2009).

The Diplomas, and the new approach to 14-19 learning, are intended to provide a single, easy to understand, framework, which ensures that young people can develop their interests as they change and grow, without hitting barriers and dead ends (DCSF, 2009d). The Diplomas will ensure that young people can develop essential practical skills for life and work and they can see how their studies will lead to further education and employment. The Diplomas also aim to ensure that all students will learn about work and enterprise and

that there is no artificial divide between the world of education and the world of work, so that young people should develop some understanding of the day-to-day expectations of employees, their working practices and environments and their rights and responsibilities. In order that the organisation and delivery of the Diplomas is effective and meets the desired aims, then the barriers between schools and colleges need to be broken down and there needs to be a growing emphasis on local innovation and partnership between schools, colleges and employers. Obviously, underpinning this will be a closer harmony between academic and vocational courses so that the distinction between them will be removed. The Diploma proposals were formalised in the Government White Paper 14-19 Education and Skills published in February 2005. In September 2009 there were 10 Diploma subjects available which provide a mix of class work and hands on experience.

At this point, it is worth noting some similarities in the Diplomas and the German system referred to earlier. For example, the German system and the Diplomas both have a common curriculum for all pupils in the lower secondary phase (14-16), and there is an expectation in both systems that students will continue with a broad range of subjects. In both systems there are vocational routes that provide access to higher education as well as employment, and both have procedures and support mechanisms in place to encourage disadvantaged and disaffected students to participate in learning. Similar to the German system, the Diplomas aim to develop a coherent 14 -19 phase of education, responding to individual need, offering choice to young people and also promoting progression at every stage.

1.4 The Howard Davies Report

Learning about work and enterprise is a key part of the Diploma qualifications. A report, spearheaded by Howard Davies in 2002, and entitled 'The Review of Enterprise and Education in the Economy', highlighted several key issues in relation to the position of Enterprise Education as part of the curriculum offer for young people in the 14-19 age range. In essence the report recognises changes in the world of work and the need for greater flexibility and a wider range of employment skills amongst young people. In particular, the report points to the growth in the small business sector, which now accounts for over four in ten of business jobs, and in self- employment, which accounts for almost one in eight jobs in the economy as a whole.

The report then goes on to address the question of how well education is adapting to these changes, and in so doing Davies makes the following observations. First of all, it is likely that young people in education will now face greater economic uncertainty and more frequent change in their future working lives. Against that background, all young people will need more enterprising skills and attitudes, not just to enter self-employment, but also to build their own careers; to stay employable; with the ability to make choices and manage risk. Secondly, Davies notes that whilst young people recognise the challenges and rewards involved in starting and running a business, many lack the skills and confidence to turn positive attitudes into action during their future careers. In turn, those confidences, and those skills, are more likely to be developed through involvement in enterprise activities, such as mini-company schemes, or enterprise projects, undertaken as part of a curricular

course. Thirdly, a survey of work experience which was undertaken as part of the Davies enquiry, found that, although well organised in over 90% of schools, one fifth of pupils reported that their work placement was unsatisfactory, largely because of limited scope for taking responsibility. Finally, Davies noted that while young people think job security is important, it seems that given the wider trends in the economy, this preference will be increasingly to difficult to fulfill. Equally, risk taking (and the ability to manage risk) is likely to increase in importance in all jobs, even for the many young people who do not at present seek roles associated with this characteristic. The conclusion drawn from this was that more attention should be given to providing effective enterprise activities, which should be student-led and experiential. They should offer opportunities to manage and evaluate risk, and wherever possible projects should involve local business people, and be self-contained, with clear results and conclusions.

1.5 The Leitch Report

In 2004, the Chancellor of the Exchequer and the Secretary of State for Education and Skills commissioned Lord Sandy Leitch to lead an independent review to consider the skills base that the UK should aim to achieve in 2020 to maximise growth, productivity and social justice and to consider the policy implications of achieving the level of change required. The Leitch Report, 'Prosperity for all in the Global Economy: World Class Skills' (Leitch, 2006), examines the UK's long-term skills needs. It sets out ambitious goals for 2020 which, if achieved, would make the UK a world leader in skills. World class skills are defined by the UK being in the upper quartile of OECD nations in

any assessment of educational achievement. The report recommends and sets out a far-reaching reform agenda.

The recommendation of the Leitch Report is that economically valuable skills must be delivered through a demand-led approach, facilitated by a new culture of learning, and an appetite for improved skills amongst individuals and employers. To attain these goals, the system must become more efficient, responding to market needs, and Government, employers and individuals must all engage and invest more in skills development. Lord Leitch recommends radical change across the whole skills spectrum in order to increasing skill attainments at all levels. According to Lord Leitch this can come about through routing public funding of vocational skills through Train to Gain and Learner Accounts, and strengthening the employer voice on skills through creation of a new Commission for Employment and Skills, increasing employer engagement and investment in skills, and reforming Sector Skills Councils who will simplify and approve vocational training. The report also recommends launching a new 'pledge' for employers to voluntarily train more employees at work. If insufficient progress has been made by 2010, then there should be the introduction of a statutory right for employees to access workplace training.

The Leitch Report also demands increasing employer investment in higher level qualifications, especially in apprenticeships and in degree and postgraduate levels, along with significantly more training in the workplace. Alongside of this raising people's aspirations and awareness of the value of

skills, and creating a new universal adult careers service to diagnose skill needs with a skills health check available for all, will be vital. Overall then, the Leitch Report recommends that by integrating the public employment and skills services, the UK commits to a compelling new vision of becoming a world leader in skills by 2020. This means increasing skills attainment at all levels by 2020 so that:

- 95% of working-age adults have basic skills in both functional literacy and numeracy - rising from 85% and 79% respectively in 2005;

- more than 90% of adults are skilled to GCSE level or to vocational equivalents - rising from 69% in 2005;

- the number of Apprentices in the UK is boosted to 500,000 each year, with improved quantity, quality and esteem for intermediate skills; and,

- more than 40% of adults are skilled to graduate level and above - up from 29% in 2005.

The Leitch Report was set against a background of economic strength and stability in the UK, with 14 years of unbroken growth and one of the highest employment rates in the developed world. In this situation, the UK has significantly improved the skills base with rising school and college standards and strong growth in graduate numbers. However, since early 2009 the UK has been in the throes of recession. It is forecast that unemployment will peak at 2.8 million in autumn 2010, and there is strong evidence that this recession is having a disproportionately greater impact on those aged under 25 (Prince's Trust, 2010). Part of the reason for this is that in this recession (unlike in

previous recessions) workforces and employers have proved more flexible in adapting working practices, and companies have saved money by halting recruitment. As a result, younger people moving from schools and colleges into the jobs market have therefore been hardest hit (ibid. 2010), and the number of NEETs (those not in employment, education or training) has increased. Following two years of falling NEET rates, the rate has increased in each of the last four quarters (up to October 2009) compared to the corresponding quarters in the previous year (DCSF, 2009c).

In spite of the changing economic circumstance since the publication of thie Leitch Report, its recommendation that in a rapidly changing global economy, with emerging economies such as India and China growing dramatically, the UK cannot afford to stand still, is even more relevant. Despite having made good progress over the last decade, aspects of the UK's skills base still remain weaker than those in other developed economies. For example, out of 30 OECD countries, the UK lies 17th on low level skills, 20th on intermediate level skills and 11th on high level skills. There are still 5 million adults in the UK who lack functional literacy, and 17 million who have difficulty with numbers. Finally, and perhaps not surprisingly in view of these statistics, more than one in six young people leave school unable to read, write or add up properly (Leitch, 2006).

The current position in 2009 is little changed from that reported in the Leitch Report. The UK is now ranked 17th on low level skills, 18th on intermediate level skills, and 12th on high level skills. In addition, too many people are in danger of being left behind: one in eight adults of working age have no

qualifications, more than a quarter are not qualified to level 2, and just under half are not qualified above level 2. Significantly too, other countries are improving their skills profile too, so the relative position of the UK has changed little (UKCES, 2009). Low skills levels can hold back productivity and growth and, if not addressed, will result in increasing inequality and the marginalisation of some groups within the labour market. The report projects that, even if current targets are met, by 2020 the UK's skills base will be inferior to that of many other developed nations. A radical step-change is necessary. The prize for achieving this new ambition is huge, that is a more prosperous and productive society, with higher rates of employment, and lower levels of poverty and inequality. The report estimates a potential net benefit of at least £80 billion over 30 years, equivalent to an annual boost of £2.5 billion.

One of the key problems within this scenario is how to engage more young people by creating a more motivating learning experience. This must have a high status vocational element at its centre; which combines work and education in a meaningful way, and as Hodgson and Spours (1999) have pointed out one of the major challenges for creating a learning age is increasing both the quality and quantity of work-based learning. They then go on to develop the concept of 'vocational specialisation', which embraces both theory and application: something that has been neglected in recently developed competence-based qualifications.

Indeed, there is a growing group of voices (Fuller and Unwin, 1998; Lee et al, 2004) that attach more significance to work-related learning and

apprenticeship and how it might be possible to combine theory and application within a real work curriculum model. Fuller and Unwin (1998) refer to the need to design a framework whereby apprentices have the opportunity to develop and apply their theoretical and conceptual knowledge in the work situation, and thus to further their capacity to think critically about practice. Following this, they go on to quote the work of Lave and Wenger (2003) and point to a number of theoretical positions, which can underpin the design, and development of effective and innovative learning programmes. These include the rejection of the formal and informal learning dualism; the rejection of the transmission model of teaching and learning which portrays the learner as passive recipient of knowledge; the recognition that new knowledge can be produced in practical as well as academic settings; that knowing is never context free; and finally recognition that learning is a social, collective phenomenon.

1.6 Background behind the Research

The genesis of this research lies with the background of the researcher, in relation to two roles. The first of these was as a teacher of Business Education in Further Education, and more recently as a teacher educator in Higher Education. The second role of the researcher lies with the Young Enterprise organisation. Young Enterprise is a National Educational Charity which aims to provide practical, hands-on business experience for young people aged 15 to 19. The researcher has worked with Young Enterprise on a voluntary basis, for over 10 years.

Whilst working across these two roles, the researcher also became involved

with some of the education work done by the Industrial Society (renamed the Work Foundation in 2002). This organisation emerged in the 1950s and developed into the UK's leading thinker and adviser on the world of work. It is a wholly independent, not-for profit body whose members include companies of every size, from every sector of the economy, along with public sector organisations, charities and trade unions. As part of its work with education, the Industrial Society developed and delivered its Challenge of Industry Conference. This was a two-day event designed for students at school or college, and most usually in the 16-19 age range. The event brought together business persons and students and provided a two day menu of experiential business activities designed to develop leadership, problem solving and team skills. For one of these conferences, held at a college of Further Education, the researcher was asked to participate in an advisory role. This involved facilitating a group, of approximately 12 students, over a two-day period as they engaged in a variety of business simulations and challenges. What the researcher was able to observe in this short period was a high level of involvement and motivation amongst students, as well as skills development in relation to teamwork, problem solving and leadership. The students also demonstrated considerable creativity and innovation in their approach to the activities presented. It was this experience, along with the work being done for Young Enterprise, which encouraged the researcher to try and investigate in more depth the potential of work related, experiential activities. Thus, the initial aim of the research was to try and make suggestions for improvements in educational practice and to see if it was possible to make learning more effective and relevant, in the light of the demands that will face young people

entering the employment market in the 21st century. Clearly from the outline given above, the position of the researcher and any impact this could have on the research needs to be discussed. The position of the researcher will be considered further in chapter 3 when, following a discussion of research ethics in section 3.1, section 3.2 will discuss the implications of insider and outsider research.

The other driving force behind the research was the publication of the two reports referred to earlier: the Howard Davies report 'The Review of Enterprise and Education in the Economy' (Davies, 2002), and the Leitch Report 'Prosperity for all in the Global Economy: World Class Skills' (Leitch, 2006). Put together both of these reports highlighted the need for a new culture of learning and greater flexibility and a wider range of employment skills amongst young people.

On this basis the researcher began an initial study. This aimed to investigate students in the 16-19 age range who were working and learning in different settings, including the classroom, Young Enterprise and whilst engaged in work experience. This then led to the formation of 2 general questions, which the initial study would attempt to answer:

1. How Experiential Learning might impact on business courses and student learning in the 16-19 age range.

2. The extent to which holistic whole business approaches could enhance the learning experience and how they might better prepare students for a rapidly changing world.

1.7 Objective of the Research

In addressing these two general questions above, six more specific research objectives were generated. Again, these were based upon the experiences of the researcher as a teacher educator and as an advisor to the Young Enterprise Programme, as well as being based upon the experiences gleaned during a short period as a facilitator to a group of students involved in a Challenge of Industry Conference. These more specific research objectives were as follows:

1. To investigate effective Experiential Learning in Business Education.

2. To investigate learning within holistic real business scenarios which operate within the business curriculum.

3. To investigate the impact of unplanned or incidental learning.

4. Within objectives one and two above- to investigate the concept of risk and the concept of failure as tools for effective learning.

5. To investigate employer perceptions of work-related Experiential Learning.

6. To consider if such approaches are realistic alternatives in terms of curriculum change; to evaluate whether they meet some key Government imperatives on curriculum reform; and if they can effectively address issues of harmonisation between vocational and academic approaches to Business Education.

Of course, in any research study, once a question or problem has been identified then the next step is to work out how to answer it. We may already

think we know the answer to the question or we may even think the answer is obvious or common sense. However, until the problem or question has been subjected to rigorous study any knowledge we have remains little more than guesswork. Verma and Mallick (1999) have summarised some of the essential characteristics of research. They describe research as an organised and deliberate effort to collect new information or utilise existing knowledge for a new purpose, and that research seeks to answer worthwhile and fundamental questions, by utilising valid and reliable techniques. They say that research is logical and objective, and uses the most appropriate tests to justify the methods employed, data collected and conclusions drawn, and that the final outcome of the research contributes to the gaining of new knowledge and a better appreciation of the issues involved.

Research can begin at different points. It may start with a theory, which is then tested by empirical observation. On the other hand it may start with an observation of a particular event, which is then investigated. We have to be clear on the purpose of the research, the objectives and the direction in which the research proceeds. According to Tashakkori and Teddlie:

"Research at any point in time often falls within a cycle of inference processes. The cycle may be seen as moving from grounded results (facts, observations) through inductive logic to general inferences (abstract generalisations or theory), then from those general inferences) or theory) through deductive logic to tentative hypotheses or predictions of particular events/outcomes".

(Tashakkori and Teddlie, 1998 p.25)

Tashakkori and Teddlie (2009) point out that this inductive-deductive research cycle may be seen as moving from grounded results (observations, facts), through inductive inference to general inferences, then from those general inferences, through deductive inference to predictions to the particular. Research can begin at any point in the cycle: some researchers may start from theories while others start from observations (although note that in this example the researcher has inserted numbers into the cycle, in order to help clarify the particular route that was taken in this research study). Tashakkori and Teddlie (2009) state that the research cycle involves both inductive and deductive reasoning processes. They also say that the order in which these processes happen depends upon where one is in terms of studying the phenomenon of interest. So in that respect, induction could come first, or deduction could come first.

In this study, the researcher started from point 1 (see Fig 1a). This began with observations of experiential activities. This then moved on to generalisation and the use of theory to support some of the observations. Then, as will be seen later on, this moved on to prediction, expectation and through the use of a number of key themes. In doing this both inductive and deductive reasoning was used. The purpose of the research is to try and integrate a number of relevant theoretical perspectives with field research in the area of learning: in particular, Experiential Learning; incidental learning; risk; failure; Government imperatives on education; and employer and management/organisational thinking on the changing nature of work and the consequent changing demands, which will impact on employees in the future. The research will investigate these issues in the field by examining individual and group responses to particular experiences. It is then hoped that suggestions can be made as to the teaching and learning strategies, which might inform the curriculum for Business Education in the 16-19 age range.

This research will consider students, working alone and in small groups, either in the classroom, engaged in work experience or running their own small business as part of the Young Enterprise Programme. The research will then seek to identify how elements of risk and failure, which are naturally part of operating a business, can enhance student learning. At the same time the study puts this within the framework of Government and employer demands on the most effective structure of the curriculum in order that those entering the employment market are better suited to the demands of the 21st century.

The initial aim of this study then was to consider student learning in Business

Education in the 16-19 age range. The study takes the position that within the Business Education curriculum holistic experiential approaches based on realistic business situations are possible and can effectively combine the vocational and academic elements of Business Education and thereby provide students with a more relevant learning experience. The aspects of the process which are focused on are as follows:

- how learning happens and how experience can facilitate learning;

- how students interpret their learning experiences;

- how one practical example, (Young Enterprise) might harmonise the contents of the academic and vocational curricula;

- how two aspects of this approach, the concepts of risk and failure, might be forces for advancing student learning; and,

- employer perceptions of links with schools and colleges and how a more work-related, experiential approach to learning might better prepare students for the world of work.

To the writer's knowledge there are no field studies focusing on how within Business Education programmes the aspects outlined above can be an effective means for student learning and motivation. There is considerable research into Experiential Learning, risk, failure, the vocational/academic divide and some empirical research on Young Enterprise. The theories and ideas from these studies will be used alongside a study of experiential approaches to Business Education in an attempt to contribute new knowledge about how the business curriculum might be more effectively organised. In so doing, light may be shed on the how real business situations might be a force

for change in how the curriculum is delivered and how the notions of risk and failure might well be given more prominence as being able to promote effective learning within the Business Education curriculum.

This study then intends to deal with students, teachers and employers in everyday situations, mostly, but not exclusively, within educational settings. This is unlike the more structured world of science with its established tradition of objective criticism, and consequently it will draw upon interpretation and feelings about particular situations. All parties involved in these processes (students; teachers; employers) are used as investigative sources. The overall aim of this study then is to contribute practical knowledge, which will be useful to the development of new and more effective ways of organising the curriculum.

1.8 Structure of the Thesis

Following on from this chapter, the thesis will proceed as follows:

Chapter 2: will review the literature relating to the area of research. The review will start by defining learning. This will be followed by a consideration of andragogy, pedagogy, formal, informal and incidental learning and finally situated learning. The literature review will then move on to the process of learning, which will include a consideration of behaviourist and cognitive perspectives. There will then be a consideration of the closely related areas of work related learning and enterprise education. A section will follow this on the Young Enterprise Programme, and a review of the concepts of risk and

failure. Finally, there will be a section on the political, economic and social context within which the research is set, in order to illustrate some of the key drivers in relation to the area of research, and to show its position in relation to government policy initiatives.

Chapter 3: is concerned with the research design and measurement techniques. This chapter begins with a section on research ethics and, given the position of the researcher in relation to the research, follows this with a detailed section on insider and outsider research. The chapter then considers the research objectives and themes for investigation. There follows a section on the sector and sample justification and then the epistemology and ontology underpinning the research are considered. Following this there is a section on research design and data classification. Issues surrounding validity, reliability and triangulation are then examined. The methods used to collect data (including interviews, surveys and observation) are then explained. This part of the chapter will also consider the concept of critical incident and protocol analysis. The chapter will conclude by considering the research themes for the main study and how these were informed and developed from the initial study and from the literature.

Chapter 4: will present the findings from the initial study. The instruments used to obtain these were a postal questionnaire to schools, Further Education, and Sixth Form Colleges, a postal questionnaire to employers, classroom observation, and observation of Young Enterprise Companies. At the end of this chapter there will be an analysis of the results with a further

focus on how they were used to help to inform the development of the themes for investigation for the main study.

Chapters 5, 6, 7, 8 and 9 will present the findings from the main study. The instruments used to obtain these were a student questionnaire, Young Enterprise interviews, Employer interviews, Teacher interviews, and Young Enterprise Company Reports. Throughout each of these chapters there will be comment made on the significance of the results in order to pinpoint any questions they raised.

Chapter 10: will provide a fuller analysis of the findings, and will bring together the findings from the previous five chapters and then use them to further analyse and evaluate the 6 key themes for investigation in the main study.

Chapter 11: following the analysis of data in the main study there were two themes, which emerged. This chapter will show how these new themes emerged from the findings, and will discuss these new themes as well as considering any implications for new or additional work.

Chapter 12: the final chapter will firstly revisit the context and aims of the study. It will then identify and discuss areas where the findings have implications for professional practice. Following this discussion, there will be a consideration of any implications for new or additional work. The chapter will then consider the limitations of the research and finally present a conclusion.

1.9 Summary

The reform of Vocational Education and attempts to broaden the curriculum for 14-19 year olds has a long history. As far back as 1982, Margaret Thatcher announced the Technical and Vocational Education Initiative (TVEI). The aims of this were to focus on and improve Technical and Vocational Education for 14-18 year olds in schools and colleges. The improvements would include planned work experience, and full-time programmes being delivered which combined general and Technical and Vocational Education.

In 1988, a committee was set up by the government under Dr Gordon Higginson to look at education in the 16-18 age range. The Higginson Committee came to the conclusion that the education provided by the current A Level system was too narrow, that students specialised too early and that the curriculum should be broadened to become more like the French Baccalaureate. Specifically, the Higginson Committee then went on to propose a 5 subject structure for A Levels. The argument was that that the A Level system was too narrow and specialised for the needs of a modern economy (the counter argument being that A Level is regarded as the gold standard which underpins the quality of education above and below it). The Higginson proposals were rejected. Mrs Thatcher favoured the A Level gold standard. However the idea proved popular in some circles, and although it was given fresh impetus by the publication of *A British Baccalaureate* (Keep et al, 1990), it never came to fruition until the reforms put forward in Curriculum 2000.

In a Green Paper in February 2002, Estelle Morris supported the view that for too long, vocational studies and qualifications had been undervalued. A year later, a White Paper was published which purported the view that there was a need to create a clearer and more appropriate qualifications framework for the 14-19 phase. In 2003 Sir Mike Tomlinson was formally commissioned to find a way of doing this. In the report, 18 months later, although many aspects of the Tomlinson proposals were accepted, the core principle of a single, over-arching qualifications framework for both academic and vocational courses was rejected.

Since then, and as outlined above, developments in this respect have moved ahead: there is renewed emphasis on the individual and on the importance and relevance of high quality Vocational Education delivered through strong local partnerships. It is recognised that individuals can be inspired and motivated by the enhanced work and life opportunities that lifelong learning can provide, have the confidence and skills to participate and succeed, and therefore invest more in their own learning and development (UKCES, 2009). The following chapter will now review the literature relating to learning, comment upon specific policies relating to curriculum reform and employability, and consider some further aspects of work-related learning and Enterprise Education. This final part of the chapter will provide an overview of the current political, social and economic context within which the research is set.

CHAPTER 2

Review of Literature

This chapter will review the literature relating to this research study. The chapter will attempt to provide an understanding of what learning is, and how the process of learning happens. It will also consider learning in an experiential sense and in the context of work and enterprise. There will also be a consideration of the Young Enterprise scheme along with the notions of risk and failure as related to learning. Finally, the chapter will refer to the political, social and economic context in which this research lies.

2.1 Learning

There is no single all encompassing theory of learning. According to Billett (2002) an individual's learning comes about by human cognition and through the process of interaction between the individual and the social world. This includes not just other individuals but also happens through interaction with artefacts, tools, and socially derived spaces. Learning utilises cognitive processes in conjunction with the interaction of individuals with others in social situations (Valsiner and Van der Veer, 2000). According to Hart et al (2004) some teachers refer to learning as being similar to going on a journey together with their students and that the journey is an uncertain one. It implies movement forward but not necessarily to a predetermined destination. Any preconceived ideas and outcomes that are held by the participants on the journey need to be tempered with the art of possibility and surprise.

Learning, according to Illeris (2007 p.3), can be defined as: *"any process that in living organisms leads to a permanent capacity change and which is not solely due to biological maturation or ageing "*. Learning is a term which is used very broadly and often with different meanings. In the quote above learning is distinguished as referring to the outcomes of the learning processes that take place in the individual. Learning can also refer to the mental processes that happen to individuals which in turn lead to the (learning) outcomes referred to above. Learning can also refer to the interaction between individuals and their environment, both material and social (Illeris, 2007). Learning describes the process by means of which behavioural changes result from either formal or informal experiences, distant, past, or recent experiences. It is perhaps impossible to observe directly the process that we call learning. The fact that learning has occurred can only be inferred from a comparison of an individual's behaviour prior to and, subsequent to experiences of specific kinds.

There is no doubt that learning is a complex phenomenon. Jarvis (2006) has noted that human learning comprises a complex set of processes that can be extremely difficult to understand. Not all individuals learn in the same way, and the conditions under which learning takes place will influence the extent to which individuals will derive anything from particular experiences. We are all social beings and our interactions with each other will influence the rate and depth of learning. In addition, individuals will have some knowledge and schemata when they are faced with new learning situations and they will then use these to attempt to make sense of any new learning opportunities.

Following from this, the simple fact that we need to communicate with each other demonstrates that each individual cognitive interpretation of those potential learning experiences will be different. Some writers have emphasised the importance of recognising that all learners have different experiences and that, therefore, they will experience the same learning experience differently (Boud et al, 1996).

Nor does success in learning always require the direction and control provided by a teacher/instructor (Whittaker, 1995). The ability to self-develop and grow intellectually is inbred within all of us. Even as infants we soon develop a range of skills, which we then use to influence and direct our own parents. Learning then is something that happens throughout our lives: it can be planned or unplanned; it does not have to take place in a formal situation (school/college) and neither does it need to be in the presence of an instructor (pedagogy). The science of helping people to learn is a significant consideration in the debate on how people learn, and relates to the earlier comment on potential learning experiences. Through cognition and pre-formed schemata and individual differences in learning styles, individuals can emerge from a learning opportunity with very different perceptions of what they have, or maybe have not, learned.

In the context of this study, it is helpful to consider learning when it is focused on real problems linked to students' educational experiences. When doing this, three outcomes can be highlighted as being of importance. The first of these is to do with motivation. The motivation of learners is an extremely

complex issue and is one which is multi-causal however, one can argue that in order to motivate students, it is important to problematise the knowledge that is presented to them (Gray et al, 1998). Teaching then becomes an activity that points to continuities and discontinuities between students' experience and bodies of literature, whilst discussion and debate become integral to the course. For students, understanding the changing nature of work, in conditions of rapid economic and technological change, can give a reality and legitimacy to academic study. Such an approach is emancipatory in the sense that one is not encouraging students to engage in ideas which have been identified in advance, and where education is envisaged as maximising the opportunity for self-expression and/or undermining ideological mystifications (Freire, 1970). To further illustrate this, Freire has referred to the banking concept of education and refers to students, as being the depositories, with the teacher as the depositor. He then goes on to contrast this to a problem solving model which he says involves a constant unveiling of reality and strives for the emergence of consciousness and critical intervention in reality.

Secondly, structuring teaching and learning in this way (that is, based on real problems) can effectively promote a deeper approach to learning. The conceptual framework of deep and surface learning shows the difference between trying to reproduce subject matter as opposed to understanding and applying that knowledge. In order to encourage a deep approach to learning, Gibbs (1998) highlights four key elements:

1. Motivational context: intrinsic motivation is crucial and is developed by students' learning something that matters to them. They are able to exercise choices in what they learn, and are allowed to plan their learning in a supportive environment.

2. Learner activity: engagement in activity; planning and reflection enables connections to be made with previous learning.

3. Interaction with others: meaning can be negotiated and ideas manipulated more easily with others in discussion than alone.

4. A well structured knowledge base: new concepts can be understood if previous learning has been well structured, clearly displayed and interrelated.

To be effective these elements need to be integrated thoughtfully into a programme of learning. Gibbs outlined nine strategies, which can foster a deep approach to learning:

- independent learning;
- personal development;
- problem-based learning;
- reflection;
- independent group work;
- learning by doing;
- developing learning skills;
- project work; and,
- fine tuning.

The third outcome when teaching and learning is problematised is that such approaches are cognisant with views on how employees need to perform in the future. Handy (2002) has used a military analogy to provide a vision of the future. In his view there will be fewer and fewer foot soldiers, those who respond almost mechanically to orders on how they should do their jobs. Instead, Handy refers to the need for everyone to have to undertake the role of an officer, who will be expected to be both competent and in command.

Employers want recruits who are going to be effective in a future, changing world; who can work on a range of tasks simultaneously; who are not resistant to change and who are quick to learn. Bayliss et al (1999) suggest that the future will be one where young people face working lives which will be characterised by uncertainty and which demand great flexibility from them as employees. At the same time they will have to become accustomed to frequent shifts between employers and a very high degree of adaptability. Indeed, adaptability is going to be one of the key qualities needed by all employees in the 21st century. An education, which simply focuses on narrow specialised areas, does not sit comfortably with the type of organisations that dominate in world markets. Companies such as Microsoft, Virgin, and Toyota are shifting the focus away from being highly specialised and towards the integration of different business disciplines and departments. The employee who will fit most easily in to this type of organisation will be flexible and will have some understanding of how different business disciplines interact with each other.

2.2 Andragogy and Pedagogy

Given that the selected age range for this study is between 16 and 19, and therefore the study relates to students making what might be referred to as the transition into adulthood, then it is pertinent to discuss differences in approaches to teaching students as opposed to teaching young adults. Knowles (1980) asserts that the education of adults has followed the assumptions of pedagogy, the art and science of teaching children, which is premised on an archaic conception of the purpose of education, namely the transmission of knowledge. He argues that the concept of pedagogy must be restricted to the teaching of children, and that a theory of adult education must specifically recognise the attributes and needs of adults in the learning situation. Principles of the type articulated by Knowles have crucial implications for the relationship between the teacher and the learner. Instead of being a transmitter of knowledge, the teacher becomes a facilitator and resource who works with learners as they undertake self-directed enquiry (Knowles, 1980).

A pedagogical approach may be described as a teacher-dominated learning situation. Often the teacher takes the lead in a session and does all or most of the talking, then this will dictate the pace of learning and as a result the students can become passive and uninvolved. According to Paraskevas and Wickens (2003), pedagogy can be described as an instructor-focused education where responsibility for making decisions about what is to be learned, how and when it will be learned, is the responsibility of the instructor. The relationship of the student to the teacher is one of dependency, whilst the

relationship of students to each other is one of competitiveness. Criticisms of this model of teaching (for example, Dewey, 1997) led to the development of a more learner-orientated approach, which was appropriate not only for children but also for adults. In considering the teaching of adults, Knowles proposes andragogy, which he defines as the art and science of helping adults to learn. The concept of andragogy makes four assumptions about the characteristics of adult learners that are different from assumptions about child learners. As a person matures, then the self-concept moves from being a dependent personality to one of being a self-directing human being. Secondly, adults accumulate a growing reservoir of experience that becomes an increasing resource for learning. Thirdly, their readiness to learn becomes oriented increasingly to the development tasks of their social role, and finally their time perspective changes from one of postponed application of knowledge to one of immediacy of application, and accordingly the orientation towards learning shifts from one of subject-centredness underpinned by an institutional commitment to employability, with strong leadership and resources to one of problem-centredness.

It must be emphasised that in andragogy, unlike pedagogy, all parts of the process involve the active participation of the learners. The actual relationship between the contribution of the teacher and that of the learners at each stage will depend on the nature of the programme, the availability of resources, and the constraints involved. Later on, Knowles did modify his understanding of the concept of andragogy and he noted that for many aspects of learning the richest resource was the learners themselves. Hence in Adult Education there

is greater emphasis given to experiential techniques and peer support. At the same time, Knowles also recognised that the experience of adult learners, whilst being a valuable resource, could also potentially limit thinking, and instill presupposition and bias (Knowles, 1989).

As has been mentioned, in this study, the focus is on students in the 16-19 age range. According to Gross (2005) this is the beginning stage of early adult transition and represents a developmental bridge between the pre-adult and adult worlds. A further criterion of this move into adulthood is the concept of maturity and being able to deal with failures, frustrations, triumphs and successes. Levinson et al (1978) pointed to a second theme of this stage as being the forging of initial attachments to the adult world: exploring its possibilities and participating in it in a limited way. Discussion of the factors, which demonstrate a move into adulthood, inevitably raises questions of degree, in the sense that the process is never complete. However, it is clear that young people aged 16-19 are moving into adulthood and as such the concept of andragogy, as an approach to teaching, is one which must be clarified within the context of this study.

2.3 Formal, Informal and Incidental Learning

Formal learning can be defined as that which takes place in a relatively structured, dedicated environment: it is planned learning that derives from activities within a structured learning setting. This is the type of learning with which many of us are most familiar. In contrast, a number of commentators have shown an interest in informal learning. Bentley (2003) has examined

learning beyond the classroom; Coffield et al (2008) the necessity of informal learning; and Marsick and Watkins (1999) informal and incidental learning in the workplace.

Informal learning, according to Coffield et al (2008), should not be regarded as an inferior form of learning whose main purpose is to act as the precursor of formal learning. Informal learning needs to be seen as fundamental, necessary and valuable in its own right, at times directly relevant to employment and at other times not relevant at all. McGivney (1999) described informal learning as learning that takes place outside a dedicated learning environment and which arises from the activities and interests of individuals and groups, but which may not be recognised as learning. It also includes non course-based learning activities (which might include discussion, talks or presentations, information, advice and guidance) provided or facilitated in response to expressed interests and needs by people from a range of sectors and organisations (health, housing, social services, employment services, education and training services, guidance services). Finally, informal learning can include planned and structured learning, such as short courses organised in response to identified interests and needs but delivered in flexible and informal ways and in informal community settings.

The central and defining feature of informal learning in this view is context, or more accurately administrative setting and sponsorship. Essentially, the learning that takes place in dedicated educational institutions, such as schools, is seen as formal, whilst that which occurs beyond the school walls is

seen as informal. Coombs and Ahmed (1974) used a similar distinction with regard to education. In their view, informal education needs to be seen as a lifelong process. As individuals go through this process they acquire and accumulate knowledge, skills, attitudes and insights from their daily experiences and from exposure to the environment. Thus, this informal learning can happen at home, at work, or at leisure. It can also happen by audio or kinesthetic means from the example and attitude of families and friends, or from travel, reading newspapers and books, or by listening to the radio or viewing films or television. In this scenario informal education is unorganised, unsystematic and at times random and unintentional. Yet at the same time, given its very nature, it accounts for yet the majority of any person's total lifetime learning, and this is the case whether they are formally schooled/educated or have relatively less exposure to the education system.

Thus, informal learning and incidental learning, which may or may not be in established settings, are likely to become more the norm as the 21st century progresses. The concept of incidental and informal learning is not new: as early as 1942 McGeogh defined incidental learning as that taking place without a specific motive in a non-formal setting. More recently, informal and incidental learning have been described by Marsick and Watkins (1999) as learning from experience that takes place outside formally structured, institutionally sponsored, classroom based activities They go to say that. informal learning can be planned or unplanned, but it usually involves some degree of conscious awareness that learning is taking place. Incidental learning on the other hand is largely unintentional, unexamined and usually

embedded in people's closely held belief systems. The key phrase here is learning from experience. Both informal and incidental learning are rooted in experience. Unlike deliberately designed experiential activities and action learning projects, informal and incidental learning take place when people see a situation as non-routine since if they do not they are more likely to respond in a habitual/routine manner and consequently find themselves not learning. This point is important since as Billett (2002) has pointed out, access to unexpected tasks brings with it the prospect of extending the individual's learning beyond what they have already encountered. Existing knowledge and schemata are applied to the task, which can then lead to an extension of that existing knowledge/schemata. Of course, as has been discussed previously, experience and learning do not go hand in hand: one does not guarantee the other unless there is an element of deliberate and conscious reflection; to actively make an interpretation, and then use this to subsequently guide decisions and action (Mezirow, 1991). Clearly then it is within a work-related context that such opportunities are more likely to arise. These opportunities are potent tools for learning as they go beyond our normal repertoires and procedures. They are more potent because they often occur in social situations where the help of others can help to extend our learning.

In this study, a great deal of emphasis will be on learning activities which are work-related and which take place in relatively unstructured conditions, and as such come under the category of informal learning. Finally, it should be noted in relation to formal and informal learning that this does not imply a typology but rather only refers to the context in which learning takes place (Illeris, 2007).

2.4 Situated Learning

Situated learning is a general theory of knowledge acquisition. Several theorists such as Clancey (1995) and Lave and Wenger (2003) have argued that the content of teaching if done in an abstract, out of context manner, can result in inert knowledge. It could be argued that the way students' learn many things in school or college produces inert knowledge, which is knowledge that can be used to answer items in a test or examination but which is not available to the student when he or she is trying to solve a problem that requires that knowledge. Situated learning is concerned with how learning occurs everyday (Clancey, 1995). It is not a recommendation that teaching be "situated" or "relevant." It is a theory about the nature of human knowledge, claiming that knowledge is dynamically constructed as we conceive of what is happening to us, talk and move: our conception of our activity within a social matrix shapes and constrains what we think, do, and say. That is, our action is situated in our role as a member of a community. The common idea in the literature that 'situated' means 'in a physical setting' or 'interactive' grossly distorts the psychological nature of the theory (ibid 1995).

Situated learning can be seen as involving participation in communities of practice. Lave and Wenger (2003) state that learning has to involve the whole person. This means that it is not only about a relation to specific activities, but a relation to social communities. So it implies becoming a full participant, a member, and a kind of person. In this view, the implication is that learning only partly (and often incidentally) about becoming involved in new activities or mastering new tasks. These activities and tasks do not exist in isolation but

are part of a broader system of relationships in which they themselves have meaning. According to this perspective, students will initially participate on the periphery but then gradually their engagement deepens and becomes more complex, until eventually, they will become full participants, and will often take on organising or facilitative roles. Knowledge is, thus, located in the community of practice. Furthermore, in this view it makes no sense to talk of knowledge that is decontextualised, abstract or general (Tennant, 2005).

The theory of situated learning claims that knowledge is not a thing, or set of descriptions, or collection of facts and rules. We model knowledge by such descriptions, but the map is not the territory, as human knowledge is not like procedures and semantic networks in a computer program. Human knowledge should be viewed as a capacity to coordinate and sequence behavior, to adapt dynamically to changing circumstances. Situated learning is the study of how human knowledge develops through activity, and individuals' interpretation of that activity. Clancey (1995) has explained this by saying that practice is not the same as theory. What people actually say and do is different from how one would describe what people say and do. In that sense it is impossible to give a definitive description of peoples' actions, and one, which can perhaps act as a set of rules or guidelines, which can be used to ensure membership of a community. Telling or describing cannot accomplish learning. Rather learning is embodied in roles and ways of interacting.

Thus, expertise is not merely knowing the rules, but knowing how to make

good interpretations in social situations. In relation to this, Stinson and Milter (1996) have stressed the need for a number of basic principles, which should underpin educational projects/problems. They postulate that problems should mirror professional practice and that content is learned in the context of practice so that, when needed for practice, the content can be more readily recalled and used. Following from this they say that learning outcomes should be holistic, and not divided by narrow disciplinary boundaries: for example, in practice there is no such thing as a marketing problem or solution, in the sense that other functional areas within a business will also be affected by and will contribute to that problem or solution. Machuca (1992), when referring to Business Education taught programmes, has noted that very often in teaching about business the firm is broken down into its basic parts. As a result many interactions between the component parts are not taken into consideration and thus there is a loss of global perception, or of how the whole organisation operates. As the parts interact with each other there is a synergy and simply considering the performance of the different parts will not indicate the performance of the whole. Young (1998) has referred to this as the abstractness of knowledge and its structuring and compartmentalising independently of the learner, and that because of this the curriculum as taught in schools and colleges does not mirror everyday experiences and indeed can even be at odds with those experiences.

The concept of situated learning, and communities of practice, is something which is a key part of the background to this study. According to Wenger (2003) a community of practice is something more than a group or network of

friends or colleagues. It has its own identity, which is defined, by a shared domain of interest, and membership of that community implies a commitment to the realm of activity, and therefore a shared competence that distinguishes members from other people. One of the main areas of investigation here is the Young Enterprise Programme. As mentioned previously, this is a National Educational Charity, which is locally supported by Area Boards, usually at a regional level. Young Enterprise aims to provide practical, hands-on business experience for young people aged 15 to 19. As opposed to a business simulation or business game, Young Enterprise companies are real companies; financed by the raising of share capital. The Young Enterprise mission is:

"To inspire and educate young people to understand and value the role of business through practical business projects which develop attitudes and skills for personal success, lifelong learning and employability."

(Young Enterprise Area Board Members Handbook, 2008: P 1)

2.5 The Process of Learning

Huczynski and Buchanan (2007) suggest that learning is acquiring knowledge through experience, which then leads to an enduring change in behaviour. This change in behaviour should also be fairly permanent (Gross, 2005). Significant learning however, is more than the accumulation of facts, it is learning which makes a difference in the individual's behaviour (Whittaker, 1995). According to Mezirow (1981) learning is seen as a process of adjusting

and acclimatising to the world, and is the means by which people come to perceive, interpret, and transform the worlds in which they live. This view is supported by Van der Meer and Mastik (1993), who argue that learning is about acquiring modes of thinking which in turn are applied, in a sensible and not random manner, in different or new situations.

Mumford (1999) has said that learning has at least two meanings: the process by which we acquire knowledge, skills or insight; and the end result of the process, achieved knowledge, skills or insight. Mumford also comments that that learning has happened when people can demonstrate that they know something that they did not know before (insights and realisations as well as facts) and/or when they can do something they could not do before (skills). Senge (2006) has stressed the difference between adaptive and generative learning. The impulse to learn is an impulse to be generative, to expand our capability, whereas adaptive learning is about coping. Unlike adaptive learning, generative learning requires new ways of looking at the world, whether in understanding customers, or in understanding how to better manage a business. Stevenson and Palmer (1994) identified implicit learning as occurring without our being aware of it, whereas explicit learning requires a conscious and deliberate effort. Implicit learning, they point out, results in implicit knowledge, knowledge that we use in our daily activities but that we cannot describe, whereas explicit learning requires conscious and deliberate thought. Significant learning, which leads to understanding, goes beyond the simple addition of new material. Saljo (1981) interviewed adults and asked them what they understood by learning. Their responses, when analysed,

gave five qualitatively different conceptions of learning. The adults interviewed saw learning as an increase in knowledge; as memorising; as acquiring facts or procedures to be used; as making sense; and as understanding reality.

The last two of these (making sense and understanding reality) are concerned with a deeper approach to learning, with understanding new information and using it to develop and change existing ideas. Similarly, when considering deeper approaches to learning, Bateson (2000), although with a slightly different perspective, has identified four levels of human learning:

1. Zero learning: based on predictable responses and not signifying any capacity to reflect.
2. Learning 1: which implies a change as a result of trial and error; or a move from stimulus/response to stimulus/response/reinforcement.
3. Learning 2: which implies flexibility in actions and a shift towards learning how to learn.
4. Learning 3: which implies a shift in the underlying belief systems, and the development of the ability to challenge the paradigm within which the action is based.

Learning through understanding involves deliberate attempts to make sense of new material by using prior knowledge, and then attempting to rethink one's ideas in the light of the new material. Sotto (2007) supports this by stating that learning is not what happens when we are fed information, but

learning is what happens when we realise we do not know something which we consider worth knowing, form a hunch about it, and test that hunch actively. Learning happens because of experience and learning is significant when, because of those experiences, we change our future behaviour (Whittaker, 1995). Effective learning (Harkin et al, 2001) involves a process where learners 'come to know' through engagement with and investigating the world, creating and developing their own sense of meaning, assimilating new understandings with what is already known and experienced. It is these two aspects of effective learning: the development of personal meaning and how learning is constructed and linked to personal experience, which will now be considered.

2.6 Behaviourist and Cognitive Perspectives

On one level, learning may be thought of as the reproduction of information, facts or behaviours; whilst on another level learning is the processing of that information, facts and behaviours into a more transformational set of repertoires (Bateson, 2000). The former restricts learning to bringing about an increase in knowledge through memorising and the acquisition of facts. The latter makes sense of information, constructs meaning, relates information to everyday life and comes to an understanding of the world by transforming knowledge.

Explanations of these two aspects of learning referred to above, have their roots in psychology. The acquisition of facts and knowledge, and the repetition of certain behaviours, is the basis of behaviourist psychology. Behaviourism suggests that particular behaviours will be repeated if they are rewarded,

whilst other behaviours will be avoided if they are punished. In the early 20th century, the chief exponents of behaviourism were John B. Watson and Edward L. Thorndike. Watson's psychology was known as behaviourism and his studies focused on the relationship between a stimulus and a response. Thorndike's psychology was sometimes referred to as 'connectionism' but it too, in the broadest sense of the term, was behaviouristic. The essence of the behaviourist paradigm is that learning consists of a change to behaviour measured in terms of a change in the response to a stimulus (Askew and Carnell, 1998).

Skinner (1953) advanced the ideas of Watson, and Thorndike to produce a theory of operant conditioning. Using experiments on animals, Skinner proved that a response would be learned when the animal associated the behavioural response to a reward, or *reinforcement* as Skinner termed it. This principle has also influenced practice with humans. For example, Huczynski and Buchanan (2007) give an example of an American factory in Mexico where management decided to reward good timekeeping with extra pay. Lateness fell from 15 to 2 per cent, at minimal additional cost to the company. In many secondary schools, a 'three strikes and out system', utilising ticks on the blackboard, is commonly used to try and encourage positive behaviour in the classroom. The success of such techniques is of course variable, but it is clear that they have as their genesis the ideas put forward by behaviourist theorists. Such approaches however, do need careful planning and where the relationship between reinforcement and the appropriate behaviour is less clear, the applicability of the technique is less certain (ibid.).

The findings of the behaviourist school are that learning requires some reinforcement and that this should follow the desired behaviour as quickly as possible; that learning proceeds in steps and is strengthened by success; and that we are more likely to remember what we have experienced frequently and recently. Behaviourism (Huczynski and Buchanan, 2007) distinguishes between positive reinforcement, or reward for particular responses, to encourage the preceding behaviour; negative reinforcement which removes undesirable consequences and thus encourages the preceding behaviour; and punishment which discourages the preceding behaviour. Thus, according to the behaviourists, human behaviour can be shaped by environmental forces (reinforcement) and is a collection of learned responses to external stimuli (Gross, 2005). It is here, as will be seen later, that there are links with Experiential Learning.

One of the problems with behaviourist theories is that they fail to view the organism as creating, and choosing between options and problem solving. There may not be a simple relationship between stimulus and response. The theory is limited in the way in which learning is measured in terms of observable changes in behaviour rather than by, for example, personal reflection on the part of the learner (Askew and Carnell, 1998). In the early 1990s General National Vocational Qualifications (GNVQs) were developed as an alternative pathway to jobs and higher education. Criticism of GNVQs, with their tick list approach focused on performance criteria have been likened to a Taylorist-Fordist approach where the syllabus is broken down into narrow tasks. The links between this and a behaviourist approach to learning led to

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the qualification being strongly criticised as students simply, almost ritualistically, expressed the procedural requirements with little embedded learning (Boreham, 2002).

The behaviourist view was challenged by cognitive psychologists who have postulated a number of arguments with respect to the limitations of the behaviourist school. Early cognitive theorists argued that education should concentrate on teaching learners concepts, relationships, creative thinking, problem solving and other thinking skills, and should not simply teach facts. Gross (2005) suggests that cognition refers to knowing, and so cognitive (or mental) processes refer to all those ways in which knowledge of the world is attained, retained and used. This includes attention, memory, perception, language, thinking, problem-solving, reasoning and concept formation. These are what might be termed the higher order mental activities.

These are also the *how* aspects of learning which the behaviourist school tend to ignore. Individuals have goals and plans not readily observable, whilst personality, perception and motivation also play a part in learning. Behaviour modification is an insufficient criterion of learning as the latter implies acquisition of concepts and cannot be explained merely by changes in behaviour. Past learning experiences might also impinge on learning: Van der Meer and Mastik (1993) have referred to repertoires or integrated sets of ways of thinking and acting, as a result of interaction and experiences in the past. They go on to say that repertoires are used to make sense of what is happening and will shape actions and reactions accordingly. New phenomena

are then reinterpreted in terms of existing repertoires and in turn they become part of the repertoires and by doing so change those repertoires. Observing changes in behaviour then is only part of the learning process. Cognitive theorists believe that rather than simply committing facts and procedures to memory, education involves developing thinking ability, or in other words cognitive skills.

The debate on the *how* of learning can now be taken one step further. Clearly for learning to happen then one has to have an experience of some sort. Furthermore, the experience (behaviours) needs to be interpreted and used to inform future actions/behaviours. The key word here is interpret, and here there are links between cognitive theory and Experiential Learning. Furthermore, this *interpretation* (whether individually, or with the assistance of a tutor) can be considered as a form of external reinforcement and as such has leanings towards behaviourism. Although the cognitive approach proper began in the late 1940s there were several psychologists who developed cognitive ideas prior to this and as such can be considered as forerunners. A number of these come under what is known as Gestalt psychology. This originated in Germany during the early part of the 20th century and which was to subsequently influence the development of the theory of Experiential Learning. For Gestalt theorists, learning is a process of gaining or changing insights, outlooks, expectations or thought patterns. In learning, Gestalt theorists take into consideration both the person (and learner) and the environment. The concept breaks free from the idea that learning consists of either linking one thing to another according to certain principles of

association or building behaviours in a deterministic, mechanistic fashion. Instead, the learning process is identified with thought or conceptualisation, and it is a non-mechanical development or change of insight.

These early cognitive theorists again used investigations on animals as the basis of their investigations. Kohler (1925) argued that chimpanzees were able to solve a problem through the use of insight. He placed fruit out of reach of the chimpanzees but with a stick within reach. He believed that the chimpanzees actually worked out what to do and that the process of learning was more complicated than a simple stimulus-response association. Tolman (1948) showed that rats were capable of cognitive behaviour when he cited that rats had learned an image of a maze, which they would use at a later time. Piaget et al (1969) directed interest and attention to human learning and showed through a series of careful observations that childhood is made up of four major stages of intellectual growth: Sensory Motor Period (birth to 2 years); Pre-Operational Thought (2 to 7 years); Concrete Operations (7 to 11 years); Formal Operations (11 to 15 years). Although there may be differences in the time that children may take to pass through all the stages, Piaget's theory offers a tight coherent perspective of the maturation of intellectual thought and development, and his two major ideas are that of centration and egocentrism (Askew and Carnell, 1998). The former refers to the ability to deal only with single aspects of a situation whilst egocentrism refers to a lack of conscious awareness of the separate existence of others.

In thinking about the learning process, these theorists prefer the terms person

to organism, psychological environment to physical environment, and interaction to either action or reaction. As such, there is a conviction that the terms person, psychological environment and interaction are highly advantageous in describing the learning process, and that they enable a teacher to see a person, the environment and interaction with the environment, all occurring at once.

Whilst behaviourists place their focus on the task and the notion of stimulus-response, cognitive theorists place their emphasis on the students and how they gain and organise their knowledge. Reece and Walker (2007) have explained this by saying that students are not mere receptacles of information but they actively create a pattern of what that information means to them. This then implies that within a class of say 20 students, all with their own different existing mental structure, then there will probably be 20 different understandings of the information that has been presented.

The thinking of theorists such as Dewey, Bruner and Ausubel focus on the active engagement of the mind and the processes, which are involved in generating responses to certain subject matter. Thus feedback and reflection become essential parts in the process of learning, and existing cognitive structures will influence how information is processed. To summarise this, it can be inferred that cognitive theorists view learning as a form of information processing with three stages. The first of these is an active perception stage, which gives attention to stimuli from the environment. There is then a mentally active stage, which makes sense of the information, and finally there is a restructuring and storage phase.

These approaches to learning, that is Behaviourism, Gestalt theory and Cognitivism, tend to have little or no regard for the emotional and social aspects of learning. For example, the cognitive approach has been criticised for ignoring the importance of emotional development. Novak and Gowin (1984) suggest that human experience is more than simply thinking and acting but it is also about feelings. Consequently, all three of these need to be considered together in order that individuals can make full meaning of their experience.

Humanistic psychology, which emerged in the 1950s, sees people as conscious agents (Askew and Carnell, 1998). It was developed as a reaction against behaviourism, as its proponents saw the latter as demeaning the concept of the human being. Humanism emphasises individual experience and the attempt to understand personal motivation. For example, using an analogy with Maslow's hierarchy, if a student is tired and cold then it is unlikely that they will be able to learn, or at least the quality of their learning will be reduced (Maslow and Frager, 1987). Humanism explores the possibilities for action and the potential for change and personal growth. Humanistic psychologists attempt to do justice to a person's conscious experiences of themselves and their role in directing their lives. It stresses the sense of self-awareness and the capacity to reflect. Humanism is an orientation toward study of mental life rather than a school of psychologists adopting common modes of research or a coherent set of ideas and theories. Instead of studying people as a natural scientist might, humanist psychology starts with the experience of being a person. Vygotsky (1962, 1978) took a

sociocultural approach to the workings of the mind, and put the emphasis on learning as a social event. His suggestion was that educators should aim to determine the actual development level and the zone of proximal development. The former being the most difficult task an individual (child) can accomplish independently, and the latter the most difficult task that can be accomplished with assistance. As such it is the role of the teacher/educator to provide the scaffolding/support blocks in order that an individuals can maximise their learning. For Vygotsky, the foundation of learning is co-operatively achieved success, with the potential for learning being achieved in interactions with more knowledgeable others/adults. In a similar fashion, Bruner (1966) emphasised learning as a social function and stated that learning is developed and reinforced by revisiting ideas, concepts and knowledge (spiralling); each spiral matching with the learner's past experiences and new experiences since the last visit. This 'construction' of knowledge has been referred to by Fox (2001) as being not simply the passive taking in of any stimulation, but rather an active process through which we interpret and then make use of our knowledge and expectations. In doing this, we thus make perceptual sense of the world.

Clearly, it is not a major conceptual leap to link these ideas with the notion that learning is a cyclical process, and that it is focused on interaction with the environment and with other learners. Askew and Carnell (1998) have argued that learning is normally experienced as a seamless whole. They say there is a large degree of continuity between all our experiences even while we label them as different, and that learning is a result of interaction and experiences.

Experiences enable us to reinterpret new phenomena, which are then reinterpreted in terms of existing repertoires and in turn they become part of the repertoires and by doing so change those repertoires (Van der Meer and Mastik, 1993).

The work, which follows, will contain references to the three broad theoretical perspectives referred to above (the behaviourist; cognitive and humanist approaches) in the sense that all three interlink in some way and provide a basic underpinning for understanding the learning process. However, it is the aspects, which follow (Experiential Learning; Action Learning; Work-Related Learning, and incidental learning linked to risk and failure) that are quite specific to this research study and will provide the keystone in terms of theoretical reinforcement, and discussion of the findings.

To summarise from what has been discussed so far, it would appear that the key to effective long-term learning is based on the following features: personal involvement; feeling and thinking; self-initiation and self-evaluation; and active learning by doing (Reece and Walker, 2007). Experiential Learning, which has these characteristics at its centre, will now be discussed.

2.7 Experiential Learning

As Brookfield (1983) has commented, writers in the field of Experiential Learning have tended to use the term in two contrasting senses. On the one hand the term is used to describe the sort of learning undertaken by students who are given a chance to acquire and apply knowledge, skills and feelings in

an immediate and relevant setting. Experiential Learning thus involves a, direct encounter with the phenomena being studied rather than merely thinking about the encounter, or only considering the possibility of doing something about it (Borzak, 1981).

The second type of Experiential Learning has been referred to by Houle (1980) as education that happens to people because of direct participation in the events of life. This participation may or may not be within an educational institution, it may be planned or unplanned, or it may be an unforeseen by-product of more formal learning activities. It is the learning that is achieved through everyday activity and then the subsequent reflection upon those everyday experiences. This is the way that most of us do our learning. It was Dewey who said that learning in a formal educational setting should not be isolated from learning which takes place elsewhere. Increasingly, organisations are demanding more and more from their employees: deregulation; increased competition; the need to constantly innovate and show more flexibility all mean that employees have to be constantly learning in order to keep pace. As a result organisations have to work and learn in very different ways (Marsick and Watkins, 1999). Often, formal instruction and training is not sufficient to enable employees to meet the new demands being placed upon them.

Experiential Learning, according to Burnard (2002) focuses on the centrality of human experience as a valued source of learning. Burgoyne (1995) has pointed out that the concept does not relate to one particular type of learning

and that experience can be a flexible term. It is relatively simple to conceive of experience as something concrete, for example when a person is fixing a broken fence. However, experience can also mean the most personal and subjective awareness. In this case then it is not difficult to broaden the definition of learning from experience to encompass all learning. Neither is the idea of Experiential Learning particularly new: in the 17th century, John Amos Comenius, emphasised learning by doing, when he spoke about craftsmen putting their apprentices to work without delay so that they could learn by undertaking practical activities rather than studying theories.

The meaning of experience is not a given, it is subject to interpretation. It may not be what at first sight it appears to be. When different learners are involved in the same event, their experience of it will vary and they will construct (and reconstruct) it differently. One person's stimulating explanation will be another's dreary lecture. Dewey (1997) called this miseducation. What learners bring to an event, for example their expectations, knowledge, attitudes and emotions, will influence their interpretation of it and their own construction of what they experience. In general, if an event is not related in some fashion to what the learner brings to it, whether or not they are conscious of what this is, then the event it is not likely to be a productive opportunity (Boud et al, 1993).

Dewey (1997) emphasised the value of experience and the student's own theorising in order to make sense of that experience. It is the acquisition of knowledge (Burgoyne, 1995) through the active interpretation of experience

rather than through the passive assimilation of pre-formed knowledge that is the central tenet of Experiential Learning. Burnard (2002) has further dissected the concept and has referred to it as learning through experience and learning from experience, and as such it involves reflecting on past situations in order to construct new meanings.

New experiences of course, happen every day and are potentially a source of learning: however, the point here is that it is not sufficient to simply have an experience in order to learn. What is vital for the cognitive process is being interpretive and reflective in order to help guide future actions. Without thinking about or reflecting on the experience (Senge, 2006) it may be quickly forgotten. Dewey also recognised this when he pointed out that the truly educative experiences are those that promote the continued growth and development of the individual and thus provide momentum for future learning opportunities (Dewey, 1997). It is only from reflection that new generalisations can be formulated which can then be tested out in new situations. There is an element of cognition in that we need to notice what we do and to be aware of what is happening and that means, according to Burnard (2002), that we need to be both reflective and reflexive. In addition, this process needs to be undertaken conscientiously since our minds move at lightning speed and ironically (Senge, 2006), this often slows our learning because we leap to generalisations so quickly that we never think to test them. Indeed, within an organisational setting (Garratt, 1994) where people are paid to do things, then there may well be resistance to taking time to think. Thus, in order for learning to actually take place, it is necessary to actively make an interpretation, and

then use this to subsequently guide decisions and action (Mezirow, 1991).

Kolb (1975, 1984) has been a key contributor to the theory that effective learning concerns the reinterpretation and reshaping of experience. Kolb's ideas are based on the assumption that people learn best by doing things; thinking about how they have done them; and then considering both the details of the experience and the thoughts feelings and perceptions which emerged during the experience. Kolb (1984) created the experiential learning model out of four elements: concrete experience, observation and reflection, the formation of abstract concepts and testing in new situations. Thus, a situation is set up which enables learning through experience of that situation: by looking back at the situation we glean new meanings from it (Burnard, 2002). Effective learning is seen as happening when an individual progresses through a cycle of four stages. The first of these is when an individual has a concrete experience. Secondly, there is the observation of and reflection on that experience which leads to the formation of abstract concepts (analysis) and generalisations (conclusions). Finally, these are then used to test hypotheses in future situations, resulting in new experiences.

Kolb and Fry (1975) argue that the learning cycle can begin at any one of the four points and that it should really be approached as a continuous spiral. Although a more likely scenario is that the learning process often begins with a person carrying out a particular action and then seeing the effect of the action in this situation. Following this, the second step is to understand these effects in the particular instance so that if the same action were taken in the same circumstances it would be possible to anticipate what would follow from the action. In this pattern the third step would be to understand the general principle under which the particular instance falls.

Generalising may involve actions over a range of circumstances to gain experience beyond the particular instance and suggest the general principle.

Understanding the general principle does not imply the ability to put it into words. It implies only the ability to see a connection between the actions and effects over a range of circumstances. Thus, an individual who has learnt in this way may well have various ideas about what to do in different situations: they will then be able to say what action to take. There may thus be difficulties about the transferability of their learning to other settings and situations. When the general principle is understood, the last step, according to Kolb is its application through action in a new circumstance within the range of generalization. In some representations of Experiential Learning these steps, (or ones like them), are sometimes represented as a circular movement. In reality, if learning has taken place the process could be seen as a spiral. The action is taking place in a different set of circumstances and the learner is now able to anticipate the possible effects of the action.

This model emphasises learning as an integrated process with each stage being mutually supportive of and feeding into the next. Hence, it is possible to enter the cycle at any stage and follow it through its logical sequence; however, effective learning only occurs when a learner is able to execute all four stages in the model. No stage in the cycle is effective as a learning procedure on its own. However, as Kolb discovered, people rarely draw on all four abilities because in reality individuals form preferences for certain abilities over others and habitually use the successful strategies and tactics arising from them to interact with the world.

The Kolb model has been the basis of many modifications but it serves to

highlight the importance of action, reflection, conceptualisation and then learning in order to undertake new activities more successfully. For example, In order to help teachers/lecturers design appropriate teaching and learning activities for vocational programmes the Business and Technology Education Council or BTEC (1995) pointed out that students tend to fall into 4 broad categories.

1. Students who like new experiences, problems and opportunities from which to learn. They often throw themselves in at the deep end to find ways of solving problems, get engrossed in practical exercises, and then move on.

2. Students who like to reflect on things: they discuss problems before beginning a task, and prefer to get things right rather than meeting a deadline.

3. Students who like to explore things methodically. They are interested in concepts and theories, and like to understand the abstract ideas underpinning issues before drawing conclusions.

4. Students who like things to be practical and prefer examples from the real world. They try things out and check them with others before moving on to the next stage.

It is then argued that, in order to meet the learning needs, strengths and preferences of all these students, programmes of learning should provide a good balance of three types of learning: that is, teacher-directed learning, workshop activity and directed self-learning. As BTEC states:

"Ideally, a structured learning programme will provide opportunities for experiences which develop underpinning knowledge, skills and understanding; opportunities for structured review and reflection, to draw out learning points; further exploration to conceptualise and practise the underpinning knowledge, skills and understanding; application of the new learning through...activities which demonstrate a drawing together (synthesis) of knowledge, skills and understanding".

(BTEC, 1995, p12)

Again, it is clear that such statements are informed by the theoretical principles, which underpin the Kolb model of Experiential Learning. Kolb also recognised the point that effective learning entails the possession of four different abilities (as indicated on each pole of the model): concrete experience abilities, reflective observation abilities, abstract conceptualisation abilities and active experimentation abilities. Few of us can approach the 'ideal' in this respect and, Kolb suggested, that people can develop a leaning or preference to one of the poles of each dimension. As a result he developed a learning style inventory, which was designed to place people on a line between concrete experience and abstract conceptualisation, and active experimentation and reflective observation. Using this model Kolb identified four basic learning styles: the converger (*act*); the assimilator (*reflect*); the diverger (*conceptualise*) and the accommodator (*experiment*).

Other writers have developed these ideas on learning styles, notably Honey

and Mumford (1992). They point out that effective learning for individuals also requires recognition that one of the reasons why individuals do not learn fully from any particular experience is that it may not match the way in which they like to learn. For example, upon leaving a lecture some students may comment that they have had a significant learning experience, whilst others may state that they learned nothing. Honey and Mumford have suggested that we oscillate haphazardly between different approaches to learning from experience. At certain times we may be complacent as our job ticks over; a sudden crisis might force us into learning; sometimes we might review our experiences; whilst at other times we may try out different approaches. These different styles are consistent with the four stages of the learning cycle; activist, reflector theorist, or pragmatist. Each style equips you to carry out a different stage in the learning cycle. Having all four styles comfortably within your repertoire thus equips you best for the total process of learning from experience. Activists learn best from relatively short here-and-now tasks; reflectors learn best from activities where they are able to stand back, listen and observe; theorists learn best when they can review things in terms of a system, a concept, a model or a theory; pragmatists learn best when there is an obvious link between the subject matter and the problem or opportunity on the job (ibid).

A modification of the Kolb model, and perhaps one, which better illustrates how it might operate in an educational setting, has been produced by Dennison and Kirk (1990), as seen in Fig.2b.

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Most Experiential Learning starts with tutors' organising an experience (doing); which is then discussed as part of the review stage. Thus, the first two steps of the cycle have been constructed. In the final two stages (learn and apply) of the cycle the tutor's role is more tangential and is changed dramatically. No matter how well organised the experience and the review steps, the processes of learning and application are internal to the individual student, and well beyond the control of a tutor. While a group experience and

review have been offered, every student will take individual and, probably, idiosyncratic perceptions from these experiences. There are no certainties during these stages since human learning involves extremely complex processes, few of which we have totally understand. We are aware that learning occurs as a result of doing mainly because we can observe changes in behaviour and attitudes, and identify greater knowledge following experience. However, even the most gifted tutor can only claim limited credit for what students learn, or how much or how quickly (ibid. 1990), and behavioural and cognitive processes clearly contribute to the process.

Overall, it would appear that the learning cycle does provide an analytical tool which enables students to recognise that experience can be "unpacked" and that this can enhance the learning to be derived from experience (Davies, 2000). As Tennant (2005) points out, the model provides an excellent framework for planning teaching and learning activities and thus it can be usefully employed as a guide for understanding learning difficulties, and how to give academic advice.

However, it should be noted that the concept of Experiential Learning and the learning cycle is not without its problems. Davies (2000) has pointed to the problems of legitimacy (is it right to rely on my experience?) and practicality (how do I learn from judgement/can I trust my judgement?). Also, cycles of learning (Askew and Carnell, 1998) may not take the total picture into account. Within the cycle there may be an emphasis on cognitive processes; emotional and social aspects of learning may be less prominent; the learning

process may be viewed as a conscious and rational process; making connections between past, present and future does not always follow in a linear fashion; the cycle may play down the difficulties of 'unlearning' old patterns, and 'letting go' established and safe structures. As Dewey (2005) has said in relation to reflection a number of processes can occur at once, stages can be bypassed. The Kolb model also pays insufficient attention to the process of reflection: for example, researchers (Marton, 1975; Saljo, 1981; Entwistle and Ramsden, 1983) have identified approaches to learning, which they classify as either deep or surface approaches. When we adopt a surface approach we tend to memorise information. If discovering meaning, we attempt to understand the semantic content - a deep approach, concerned with meaning. The deep approach is one in which students' seek an understanding of the meaning of what they are studying, relate it to their previous knowledge and interact actively with the material at hand. This implies that people go about learning in different ways, some more effective than others. Entwistle and Ramsden (1983) describe the deep approach as an integration of formal learning with personal experience, the formation of relationships between parts of knowledge, and a search for meaning. They describe the surface approach as treatment of tasks as unrelated, an emphasis on memorisation and an attitude of unreflectiveness.

Boud et al. (1985) attempt to tackle some of these difficulties by including the affective as well as cognitive aspects in their analysis of the process of reflection. The model put forward here identifies three stages: returning to the experience attending to the feelings and re-evaluating the experience. Illeris

(2007) has noted that for learning to be described as experiential then it must refer to a totality of the concept of experience in relation to learning. In that sense it comprises all aspects of learning including the psychological processes as well as social, content and incentive related aspects. For Experiential Learning to achieve this then it must, according to Illeris, fulfill five conditions. Firstly, the learning must be of subjective significance regarding content, incentives and interaction. Secondly, it must be part of a coherent process that is rooted in the context of previous experiences. Thirdly, the interaction between the individual and their surroundings must be such that the individual is a part of the process and not simply passive. Fourthly, the experience requires a social context, and finally *"the influences from the environment that the interaction is concerned with must be such that they reflect or exemplify societal, material and/or social structures."* (Illeris, 2007 p. 129)

To summarise, the characteristic that consistently emerges from the theory and practice of Experiential Learning is that there is an emphasis on action. As noted by Burnard (2002) students are encouraged to reflect on their experience, whilst the facilitator adopts a clarifying approach. Overall there is an accent on personal experience, and human experience is valued as a source of learning.

To take this analysis of Experiential Learning one step further this review will now consider situations where individuals are involved together in an Experiential Learning process. In the Kolb model, the relationship of learning

processes to knowledge is problematic. For example, Kolb tends to focus on processes in the individual mind, rather than seeing learning as situated. This integration of an individual approach to learning with a participative, collective approach can be referred to as action learning. Although this will be dealt with separately here, it should be noted that it can be fitted into Illeris' notion of the five conditions required for Experiential Learning, referred to previously.

2.8 Action and Collaborative Learning

The originator of Action Learning (Revans, 1998) has elevated the observation that we learn by doing into a structured case that learning is most effective when linked to real problems, and with the help of other people facing similar problems. Similarly, Margerison (1988) has observed that Action Learning is not just about learning from experience, but sharing that experience with others. This involves taking and implementing advice, accepting criticism, and then reviewing with colleagues the action taken and the lessons learned. McGill and Beaty (2001) note that Action Learning can be seen as a continuous process of learning and reflection, which is supported by colleagues, and has the intention of getting things done. When engaged in a process of action learning, then individuals learn with and from each other by working on real problems, and then reflecting on their own experiences.

Revans (1998) formulated the equation L=P+Q, or in other words that learning (L) occurs when programmed knowledge (P) meets questioning insight (Q). He then went on to stress that behaviour change is more likely to occur as a result of reflection on experience (questioning insight) than on the acquisition

of programmed knowledge. The most effective way to achieve this is, rather than deal with problems individually, to share them amongst learning sets, or groups of individuals. Action Learning is the link between accidental learning through experience and learning experiences, which are designed specifically. Revans explained this in a very concise manner by stating that there is no learning without action and no action without learning. Action Learning then is based on reality; it develops new understanding within a realistic framework, and fosters the ability to cope with change and positively benefit from change. Action Learning is unique since it does not prescribe any one solution as best, and it aims to create conditions where people can learn the best way to achieve results within the constraints, which are imposed. It is basically the difference between learning in order to know and learning in order to be (Whitaker 1995).

Action Learning is about groups working together, reflecting on past experience, and using that to understand current problems, developing new solutions and ultimately changing their behaviour. Within this scenario, the group is a catalyst for learning as well as a source of learning feedback from others. It is a valuable part of the learning process as different points of view, perspectives and experiences enrich learning, and learners have support and encouragement to take risks and make changes, which can be dependent, independent and interdependent (Askew and Carnell, 1998). Action Learning can be seen as the integration of an individual approach to learning with a participative, collective approach. It is to do with perception, change, and communication which, according to Abercrombie (in Nias ed, 1994), are at the

heart of the teaching and learning process. Looking at this from a behavioural perspective there is reinforcement/external stimuli provided by the other members in the group. Free or associative discussion is a useful way of enabling each individual to contrast their habitual ways of thinking and behaving with that of several others and change them if they think fit (Nias, 1994). Action Learning is experiential, but it is Experiential Learning, which is based on real problems.

Considering Action Learning from the perspective of involvement with other learners, Lave and Wenger (2003) refer to learning as an aspect of participation in socially situated practices, and then go on to say that knowing is never context free, and that learning is a socially collective phenomenon rather than an individual psychological one. Fuller and Unwin (1998), point to evidence of people learning and interacting with a range of more experienced others in 'communities of practice'. They say that the motivation to learn is stimulated by recognition of the gap between oneself, and more knowledgeable and skilful colleagues, and an awareness that increased learning can bring benefits in terms of the development of an adult identity, which is often associated with occupational status. Engestrom (2008) also recognises the extent to which people learn in social situations and through interaction, whilst at the same time suggesting that their knowledge and understanding can be further advanced through structured teaching and learning. The key then to the development of learners (Fuller and Unwin, 1998), is seen to be the quality of interactions, which accompany the undertaking of authentic tasks.

Learning links the individual to the social world and is both a personal and a social experience. The meaning, which is constructed by an individual does not exist on its own, as it is influenced by, and influences the external environment, including the behaviour of others. Consequently, learning has its basis in the relationships, which exist between people (Harkin et al, 2001), and successful learning contexts must actively engage the learner and are facilitated by social interaction. Nias (1994) has suggested that learning and innovation are intrinsically unsettling and full of challenge and are therefore best undertaken in a social environment, which gives security and emotional support, while fostering self-reliance and risk taking.

2.9 Vocational and Work Related Learning

Vocational Education is clearly a key element of the government's vision for a high quality education system. The Government view for the future of the 14-19 curriculum sees schools having greater flexibility to use a more varied approach to the curriculum that will meet the needs and aspirations of individual learners (DCSF, 2009d). The over-arching philosophy is that schools and colleges should be encouraged to develop a greater focus on vocational pathways from the age of 14-19. Accordingly, there is a statutory framework for the delivery (and inspection) of Work-Related Learning (Ofsted, 2000; 2004; 2005; 2007). Centres of Vocational Excellence (CoVEs) have been established in order to develop high quality vocational provision and training in order to meet the current and future needs of local areas. Many are based at colleges and offer vocational courses to students from local schools. A report by Ofsted in 2007 found that these were able to provide a wider

range of good quality courses and more specialist equipment for students than was possible in their schools. Within schools many students are becoming re-engaged with learning as schools offer a broader choice of vocational programmes at Key Stage 4 that are better suited to student needs. An inspection of Business Education provision in colleges (Ofsted, 2008) found that colleges often had strong links with local businesses to enhance students' understanding and their application of theory and a wide range of employers and students' experiences of work were used to enhance courses and provide up to date and realistic business examples.

All of these principles and activities aim to secure for young people on vocational pathways the opportunity to maximise their learning and achievement through coherent programmes, and develop the knowledge, skills, understanding and personal qualities essential to their employability. They should also enable all young people to attain at least a threshold of qualifications, and in so doing become equipped for a range of progression opportunities in employment, education and training. The principles also aim to add value to vocational programmes by establishing an entitlement to learning that will maximise success in national qualifications and enhance employability, both prerequisites for successful progression. A priority is that the resulting programmes should be attractive to 16-19-year-olds, stimulating to their teachers or trainers and acceptable to employers and higher education. Vocational and work-related learning is appropriate for all learners at all stages of education (Ofsted, 2007)). Wide ranges of vocational qualifications are accredited to the National Qualification Framework and are

offered by various a warding bodies. In line with the more flexible school curriculum many more vocational qualifications are also now available for students in schools and sixth forms.

The phrase work-related learning is widely used. It is not restricted to learners in specific vocational areas but in fact should inform all learning contexts. In that sense it covers any activity that uses work as a context for learning: for example, economic awareness, employment skills, and citizenship (Donovan, 2005). Within the 16-19 age range, in both schools and colleges, there are a number of initiatives which attempt to bridge the gap between education and work and which aim to give students an opportunity to apply their theoretical and conceptual knowledge in the work situation. The government supports some of these, and others are supported by the private sector, where examples include Young Enterprise, Enterprise Pathfinder Schools, and Business and Enterprise Colleges. Much of the underlying philosophy behind these schemes includes th e rejection of the formal and informal learning dualism; the rejection of the transmission model of teaching and learning which portrays the learner as passive recipient of knowledge; the recognition that new knowledge can be produced in practical as well as academic settings; that knowing is never context free; and finally recognition that learning is a social, collective phenomenon (Lave and Wenger, 2003).

Hodgson and Spours, (1999) have argued that in order to create a learning culture, then a major challenge is to increase both the quantity and quality of work-related learning. Work-related learning enables pupils to make a

successful transition from school to adulthood, and according to the DCSF (2009a) it is absolutely vital in helping young people to develop a full understanding of the world of work and how the economy functions. At the same time it raises their awareness of the employability skills they need to build successful careers and in so doing allows them to make informed career choices. Examination groups have also pointed out the importance of work-related learning, and schools and colleges are strongly recommended to form effective links with industry as an integral part of the curriculum offer when delivering. Often these links and partnerships with industry can be in the form of work experience (Edexcel, 2000).

The key definition of work-related learning provided by the DCSF (2009a) is that it relates to any planned activity that uses work as the context for learning, to develop knowledge, skills and understanding useful in work, including learning through the experience of work, learning about work and working practices, and learning the skills for work. The term describes a broad range of activities for learners and includes awareness of the broader and local economy, applications of work to the national curriculum and other subjects, and careers education. It connects learners' understanding of the role of the active citizen with awareness of the economy. Work-related learning enables students to gain the experience, which will enable them to cope with the constant change that they will meet throughout their adult lives. It is an essential part of fully preparing for an adult life in which they (students) can contribute to the country's economic well-being.

Ensuring high quality provision of work-related learning is an established part of Government policy and has been articulated in the DCSF document 'Building on the Best: Final Report and implementation plan of the review of 14-19 Work-Related Learning' (DCSF, 2009b). In this report, work-related learning is seen as being essential for progression and for personal development such that all young people should undertake some work-related learning, which is designed to develop employability and to help prepare young people for working life. It involves gaining experience of work, working practices and environments, developing skills for working life and learning through activities and challenges set in work-related contexts (DCSF, 2009b). The report also notes that Enterprise Education is also a part of work-related learning so that young people have opportunities to develop their enterprise capability, enabling them to handle uncertainty, and make reasonable risk/reward assessments and act upon them. Enterprise Education is defined as enterprise capability, supported by better financial capability and economic and business understanding. It embraces future employees, not just future entrepreneurs, and social enterprise (ibid. 2009b).

Work-related learning describes a broad range of activities for young people. These activities help them to learn about the world of work by experiencing and preparing for it. Work-related learning takes place in the context of the world of work, to help students develop knowledge, skills and understanding that will be useful in that world. Work-related learning develops students' employability and helps to prepare them for life in the increasingly complex and changing world of work. It improves motivation by helping students see

how their studies relate to the world of work. It also prepares students for further education and training and to make informed decisions about courses and careers. Work-related learning is as important for students who are going straight on to higher education as it is for students who are going straight on to the world of work (for example, to a modern apprenticeship placement).

Work-related learning comprises three strands. The 'for work' strand is about developing skills for enterprise and employability (for example through problem-solving activities and work simulations). The 'about work' strand is about providing opportunities for students to develop knowledge and understanding of employers, employment and enterprise. Finally, 'through work' is about providing opportunities for students to learn from direct experiences of work, including developing the employability skills and 'can-do' attitude that employers value (DCSF, 2009a). Different students can acquire work-related learning in different ways. The experiences of students will differ according to their individual learning programme. It can take place in four ways: firstly, across the curriculum, with different subjects and courses providing students with experiences, opportunities education and work experience; thirdly in courses that lead to vocational qualifications; and finally in extended work-related learning programmes with further education colleges, training providers or employers (DCSF, 2009a).

The importance of contextualising work-related learning has been highlighted by a number of writers. Singh (2008) for example has noted that it is possible to use productive enterprises as tangible instruments in order to reinforce and

enhance systematic and reflective learning. At the same time this can also improve the relevance of education for later employment and self-employment. Similarly, Ryan (1998) speaks about a curriculum which is able to contextualise knowledge to the workplace, in turn will be able to increase the scope for learning as well as impacting positively on student motivation.

Engestrom (2008) points to learning being most effective when it combines theory and practice in such a way as to give purpose to the learning. Thus, work-related learning can be seen not only as giving realism and relevance to the curriculum but it can also help to improve student motivation. Furthermore, it can go hand in hand with learning about becoming an independent adult and consequently work-related learning should be recognised as a transforming as well as functional process (Fuller and Unwin, 1998). Work placement does not always provide a meaningful and consistent experience (Cameron-Jones and O'Hara, 1992; Kemp and Seagraves, 1994). Further weaknesses in using work placement have been pointed out by Bourner and Elliker (1998), who go to suggest that in order to be effective, work placement should be integrated with other academic work.

Also, with regard to the new 14-19 proposals there are concerns being raised by professionals and employers about the nature and robustness of the arrangements that will govern learners in new contexts. Significantly, there have been claims (Donovan, 2005) that although learning does take place at work, it is only an appropriate environment for those already prepared and more mature. There are then disadvantages as well as advantages, and as Donovan has pointed out:

"Where educational institutions prioritise the learner at all times, the workplace will put other things first: profit, delivery to deadline, product quality, line-management discipline, to name a few. Early exposure to this environment may well have some positive effects but failure within it could be very damaging."

(Donovan, 2005 p.109)

2.10 Enterprise Education

Britain has a long history of inventiveness and entrepreneurship, which can be traced back to at least the 18th century. Thomas Savery, for example, demonstrated an atmospheric fire engine to the Royal Society before 1700. Subsequently, he collaborated with Thomas Newcomen and they soon had a commercially useful steam engine, which they put to work in a colliery in 1712 (Mathias, 2001).

In the 21st century, the need for inventiveness and entrepreneurship in people's personal lives has never been greater. It is estimated that the average person starting their working life in 2020 will face 19 job changes compared to 13 today, that is an extra job per decade worked compared to now. Increasingly, enterprise is not only critical to productivity and wealth generation, but it is becoming an essential life skill (DFES, 2007). Traditionally, enterprise has tended to refer to starting a new business or organisation. In today's environment enterprise is permeating into very diverse areas of society and enterprising people emerge through all sorts of routes and come from diverse backgrounds. In the 21st century, enterprise can be

defined as having a can do attitude, and as something, which enables people to take more control of their work and personal lives, and in so doing provides them with more opportunities and life choices.

The Government is keen to promote an enterprise culture. It wants to see stronger links between business and schools giving pupils a better understanding of their future role and responsibility in the economic community. Enterprise Education is viewed by the government as a key component in improving the economic well-being of the nation and individuals. Private and public sector businesses need employees with a 'can do' attitude, a willingness to take on responsibility, a creative and innovative approach to solving problems, and the ability to cope with uncertainty and change and make reasonable risk/reward assessment. (CBI, 2004).

The importance of enterprise and developing enterprise skills has been noted by Ofsted (2005) who have stated very clearly that not only do enterprising skills and attributes help in the creation of new business, but they also enable individuals to manage themselves effectively and be successful in their personal lives. Ofsted also identify enterprising skills and attributes as being a key output of work-related learning. The Howard Davies Review was commissioned by the government and reported in 2002. This review took the position that the education system plays a crucial role in preparing young people for the world of work and employability and sought to investigate how well is it adapting to these changes, and how effective are schools and colleges in developing an understanding of the economy, and of enterprise,

among their students. The research undertaken by Davies came to four main conclusions:

1.   Whilst young people recognise the challenges and rewards involved in starting and running a business, many are unsure of their own ability to meet the challenges successfully. They lack the skills and confidence to turn positive attitudes into action during their future careers. Davies then concluded that those confidences, and those skills, are more likely to be developed through involvement in enterprise activities, such as mini-company schemes or enterprise projects undertaken as part of a curricular course.

2.   The world of work has changed significantly over the past two decades. Overall, there are more opportunities than ever before, as the total number of jobs in the UK has increased by 11% since 1981. However, the pattern of growth has not been even. The number of public sector jobs has fallen by almost two million, offset by four million new jobs in the private sector. The fastest growth has been amongst small businesses, which now account for over 4 in 10 of business jobs, and in self- employment, which accounts for almost one in eight jobs in the economy as a whole. International experience suggests that these are likely to be the most dynamic areas of the economy in the foreseeable future.

3.   It is also likely that young people in education now will face greater

4.   economic uncertainty and more frequent change in their future working lives than did their predecessors. Against that background, all young people will need more enterprising skills and attitudes, not just to set up businesses (or enter self-employment), but also to build their own careers and to stay employable. In addition, enterprise may be seen as a set of skills, attitudes and capabilities, which can help weaken the link between economic uncertainty and social exclusion.

5.   With the decline of the state pension and other benefits as a proportion of retirement income, and the diversification of personal saving options, young people will also need to make more personal provision for their own financial futures. Education therefore has a responsibility not only to contribute to the preparation of young people for the world of work, putting them in touch with the range of opportunities open to them, but also to develop their financial literacy and ability to make choices and manage risk.

Following the Howard Davies Review in 2002, 151 pathfinder projects were established and which embraced nearly 400 secondary schools. Following this, a new Enterprise Education entitlement from 2005/06 has provided all pupils with the equivalent of five days enterprise experience by the end of Key Stage 4. The funding provided by government amounts to about £17,000 each year for an average sized secondary school. In addition, the Learning and Skills Council (LSC) has funded enterprise advisers to support 1,000 schools in socially deprived areas. The Learning and Skills Council exists to make the

workforce better skilled and more competitive, and aims to ensure that young people develop into a workforce that is of world-class standards. The Connexions Service aims to offer information and advice to all 13-19 year olds in order that they can make more informed decisions and choices. Note that from April 2008, funding for Information Advice and Guidance services currently held by Connexions were devolved to Local Authorities who are now responsible for commissioning and providing services. Also, from 2010, two new bodies will replace the Learning and Skills Council: the Young People's Learning Agency (YPLA) working to DCSF, and the Skills Funding Agency working to DIUS. Both of these agencies will have a national and regional capacity. From April 2010, Local Authorities will become strategic commissioners and funders of 14-19 provision ensuring entitlement.

In a further enhancement and development of the Davies initiative, the establishment of the Enterprise Network is helping to facilitate the DCSF strategy to support Enterprise Education across the 5-19 age range. Its purpose is to add value to existing enterprise initiatives; support all sectors 5-19 re: quality and quantity of Enterprise Education; and support the enterprise agenda from primary, through to, and including, the FE phase. A further example of this is the Enterprising Colleges programme which aims to develop enterprise in the curriculum and business activity of further education colleges in the South East of England. The programme is fully funded by NESTA (National Endowment for Science, Technology and the Arts) and SEEDA (South East England Development Agency), and there is no charge for eligible organisations to participate.

Beresford (2009) has noted that the UK Enterprise Education policy, across secondary, tertiary (and university) sectors, aims to develop broad enterprising capabilities for all, as a preparation for working and living in the 21st century. To achieve this broad goal, enterprise needs to be embedded right through the subject curriculum and other educational activity, and across all phases of education. Within the secondary sector, despite the fact that the majority of Enterprise Education is focused in specialist Business and Enterprise Schools, there is some evidence of a wider enterprise agenda, which is attempting to develop individuals who have enterprising capabilities. Enterprise Education in this sector is also linked to employability initiatives and the broader work-related learning agenda. However, Beresford goes on to note that this interpretation of Enterprise Education is not maintained as students progress through further and higher education, and is not part of the approach to teaching and learning in those sectors.

There are examples of enterprise initiatives outside of the secondary sector. For example, the Northern Way Enterprise in FE initiative aimed to demonstrate how colleges might help to meet the enterprise needs of the economy. The initiative operated between September 2006 and March 2008, and was designed to introduce and pilot enterprise through professional development for lecturers and college managers, facilitating the teaching and learning processes and ensuring the creation of systems to sustain and embed good practice. In the HE sector also the provision of Enterprise Education has increased over recent years. However, much of this provision is located within business studies departments and is not widespread across

the curriculum. There are then pockets of good practice but there is no consistent provision from one stage of education to the next. Indeed as Beresford (2009) suggests there is a degree of inconsistency in provision. Enterprise Education is widely taught and understood in secondary schools, and has the aim of developing broad enterprising capabilities such as creativity, the ability to cope with uncertainty, and a can-do attitude. However, as students progress on from secondary school and through the UK education system this broad capability is very often ghettoised within business and vocational studies. Often too it is then more narrowly defined as business start up skills. Consequently, the policy, that postulates enterprise for all, is somehow lost as students progress through the UK education system.

2.11 Young Enterprise

Young Enterprise is the UK's leading Business and Enterprise Education charity and in 2008/09 more than 5,500 schools and colleges participated in its programmes. The Young Enterprise Mission is to inspire and equip young people to learn and succeed through enterprise. The accompanying vision is that all young people will have the opportunity to gain personal experience of how business works, understand the role it plays in providing employment and creating prosperity, and be inspired to improve their own prospects, and the competitiveness of the UK. Young Enterprise offers a range of programmes, based on the principle of learning by doing, which brings volunteers from business into the classroom to work with teachers and students. Some of the programmes provided enable students to work together to run their own real company. Others use games, hands on activities and role play to develop

skills and capabilities for business and enterprise (Young Enterprise 2008).

Young Enterprise operates a range of programmes (team programme, project business, learn to earn, and the graduate programme) however the focus for this investigation is what is known as the Company programme. This is aimed at students aged between 15-19 who are currently studying in school or college. The programme operates by giving students the opportunity to gain practical experience of business and enterprise through setting up and running their own *real* company. This is usually run over one academic year. In their weekly meeting the students have the support of a volunteer from business. Students raise share capital to finance the company. The company designs and makes a product or service to sell to the public. This then helps to deliver aspects of work-related learning.

2.12 Risk and Failure

It would seem obvious to suggest that success is something to be embraced whilst failure is to be shunned and avoided. In an educational context success in terms of public examinations, school league tables and Ofsted inspections is something, which is celebrated and is indicative of things being done correctly. On the other hand, poor performance in these respects can dent self-confidence and bring fear and trepidation. Success, in whatever form, is an important part of learning and the process of education; yet at the same time one should not ignore the proposition that failure can bring its own benefits in terms of learning, and that success may not always bring the benefits we expect.

However, success, according to Sitkin (1992) tends to encourage the

According to Sitkin (1992) success tends to encourage the maintenance of the status quo; it sends a reinforcing sign that no corrective action is necessary; and that there is more likely to be the risk of blame associated with trying something new, whereas sticking to the old ways of doing things can pose little risk of incurring any personal liability for resultant problems. Success then is not necessarily always a good thing in terms of learning new ways of doing things, of being innovative, or of challenging the status quo. Senge (2006) has stressed the difference between adaptive and generative learning. Here impulse to learn is an impulse to be generative, to expand our capability, whereas adaptive learning is about coping. Unlike adaptive learning, generative learning requires new ways of looking at the world, whether in understanding customers or in understanding how to better manage a business. Continual success and staying with the established way of doing things can mitigate against generative learning. Trying to focus on success all the time can easily lead us down a pathway of avoidance of those experiences, which can lead to new understanding and new modes of thinking. Yet failure can be a powerful stimulus for learning simply because it something that we wish to avoid. Consequently, when failure does happen it tends to be an event, which is reflected upon more deeply and more carefully as we are well aware that a repeat can jeopardise our future progress or career. Again, as with all experiences it is this reflection, which helps us to make sense of any failure and consequently learn from it.

The above comments are not suggesting that one should encourage large scale/continual failure. Success is important from a motivational perspective and generates a feeling of well-being and a sense of personal achievement: it

is part of self-actualisation. However, modest levels of failure as Sitkin (1992) suggests can promote willingness in individuals to take greater risks and even foster resilience-enhancing experimentation. It can of course often be easier for individuals to identify how they have been ineffective or failed in a particular undertaking, and this, along with large-scale failure is something to be avoided since because of its impact it can reinforce the desire of failure-avoidance and decrease the desire to take risks and innovate. Small-scale failures, and failure which happens in a supportive environment, are less threatening and can be dissected, reflected upon and turned into a positive learning experience. Sitkin (1992) has referred to this as intelligent failure and has pointed to the five main characteristics of this as being that it results from carefully planned actions, it has uncertain outcomes, it is of modest scale, it is executed and responded to with alacrity, and it takes place in domains that are familiar enough to permit effective learning.

Clearly, learners must feel that they are in a safe environment in order for learning to be enhanced (not always easy in an education system focused very heavily on examination results). Furthermore, they must also perceive their own learning organisation as one in which risks are possible (Marzano, 1992). Covington (1983) points out that learners must believe that their ideas will be honoured and valued and their failures will not be met with ridicule. Combs (1981) argues that closely related to a sense of psychological safety is a sense on the part of learners that they are accepted by their teacher and peers. In a successful collaborative group, learners have support and encouragement to take risks and make changes, be dependent, independent and interdependent.

If we continue to do what feels safe, we will experience little growth and will eventually come to feel stuck in our lives. Making a positive decision to take a risk is different from self-destructive risk taking behaviour, which is likely to lead to deterioration in the quality of our lives. However, taking a risk often feels frightening and the support and encouragement of others is often welcome. The collaborative learning group can be a place where we can take risks by practising new roles and behaviours. Perkins (1991) points out that creative people take risks and that they live on the edge of their competence, testing their limits. Costa and O'Leary (1992) also pay attention to the possibility of greater creativity in collaborative groups; where learning in a group leads to a feeling of social identity and belonging; where conduct and controversy are essential aspects of learning; and where learners learn about relationships by being in relationships. They suggest that working in groups causes greater stimulation of ideas and thus provides a setting in which to generate creative thought. Students will want to pay attention to how their ideas flow more freely when they listen to and 'bounce off others' ideas in a freewheeling atmosphere.

Being able to take controlled risks then is important in learning. Botkin et al (1979) distinguish between maintenance and innovative learning. Maintenance learning is associated with conventional, analytical-based management, including rules for dealing with the known and problem solving. It is designed to maintain an existing system, and is indispensable to the stability of society. Innovative learning brings change, renewal, restructuring and problem-reformation to individuals and organisations. In turbulent times,

learning of this kind is essential for long-term survival (Botkin et al, 1979). Innovative learning requires anticipation, considering trends, making plans and participation. This is more than sharing decisions, but cultivating an attitude of cooperation, dialogue and empathy. Learning in organisations has often been associated with Botkin's concept of maintenance learning.

Unless we take risks we become stuck. Growth and change require that we take a risk to do things differently, to try something new. Zinker (1977) writes about learning as a creative process requiring risks, and sees creativity as something akin to an act of bravery. According to this viewpoint, the creative individual is someone who is willing to risk ridicule and failure so that they can experience each day with newness and freshness. This is the person who dares to create, breaks boundaries, and sees each day as a new opportunity to bring forth the unexpected. This then can be referred to as generative learning. Unlike adaptive learning, generative learning requires new ways of looking at the world, whether in understanding customers, or in understanding how to better manage a business.

What all types of enterprise share is an element of risk. By its nature, enterprise involves trying something which, if it succeeds, carries high rewards in personal or organisational satisfaction, wealth creation or service provision but which could fail and leave the individual or organisation worse off than before the entrepreneurial venture. At this point it may be useful to return to one of the findings from the Howard Davies Review. In order to gain an understanding of young people's perceptions, the Davies research team

asked them to assess a number of occupations based on a range of job-related characteristics. The findings showed a mismatch between the characteristics young people associated with enterprise and what many of them were looking for in their own career. Davies found that young people attach varying levels of desirability to attributes of jobs, roughly into three tiers:

1. A top tier: (more than 92% of respondents see attribute as essential or important in choice of career): have secure jobs; do interesting work; work hard; valued and trusted; pleasant work colleagues; and receive good pay.

2. A middle tier: (75-87% of respondents see attribute as essential or important in choice of career): responsibility; control over own work; make important decisions; work directly with clients; be creative / innovative; and contribute to society.

3. Bottom tier: (less than 60% of respondents see attribute as essential or important in choice of career): take risks; routine work; and work set hours / nine-to-five.

The Davies research team also discovered that relative to the other occupations, careers in large business were not thought to offer particularly interesting work, nor the opportunity to work directly with clients. They were also perceived as being relatively routine, and as making least contribution to society. On the other hand, they were seen as well paid and secure, both attributes to which young people attached a high level of importance when

thinking about their own careers. In contrast, the Davies research team found that running your own business scored relatively well on many of the middle tier attributes. For example, entrepreneurs are reckoned to have a higher than average degree of control over their own work, to do interesting work that also involves being creative and innovative, and have the opportunity to work directly with clients. However, young people did associate lack of job security, working long hours, and risk taking as features of running ones own business. These are the areas where there is the greatest mismatch between what young people want in their own careers, and what they perceive to be the characteristics of an entrepreneurial role.

The conclusion was that these distinctive attributes associated with running your own business are relevant to a wide range of occupations and roles, and suggest that there are significant barriers to be overcome if more young people are to translate positive attitudes into the confidence and ability to take on entrepreneurial roles, and to be more enterprising in their careers. For example, while young people think job security is important, it appeared to the Davies research team that given the wider trends in the economy, this preference will be increasingly to difficult to fulfill. Equally, they noted that risk taking (and the ability to manage risk) is likely to increase in importance in all jobs, even for the many young people who do not at present seek roles associated with this characteristic. The best businesses, particularly smaller ones, are often the most enterprising. They are where young people can see the relevance, excitement and challenge of enterprise brought to life. Entrepreneurs have a highly developed set of enterprise skills and when

working with educational professionals they can use these skills to inspire, coach and nurture similar abilities in young people. In areas such as work-related learning, real business problems can provide ideal opportunities for young people to apply what they have learned within education, often with outstanding results for their development and confidence. We judge risks every hour of every day, whether we are aware that we are doing so or not. Examples that we might cite include, when crossing the road, making certain financial decisions in our personal lives, or through activities in the workplace. Sometimes these judgements can be trivial, whilst at other times they can have significant consequences.

The question that needs to be asked is how do individuals judge risks and if this is a skill that can be developed According to Gardner (2009) one very clear finding is that we routinely get risk wrong. The result of this is that we can end up worrying about what we should not, and then conversely do not worry about what we should. One good example of this came in the wake of the 9/11 terrorist attacks on the World Trade Centre, when American citizens abandoned air travel by the millions. They believed that flying was too dangerous and so they took to their cars and drove instead. They did this even though the statistics clearly showed that flying was far safer than driving, that even a wave of fatal aeroplane attacks would not shift the balance in favour of cars. Then as if to prove the point, the increase in car travel was followed by an increase in road fatalities. By one estimate the shift from flying to driving took the lives of almost 1500 people.

There are of course many reasons why we get risk wrong. One of the most important reasons for incorrectly assessing risk can be explained by looking at cognitive psychology (Gardner, 2009). We process information not with one mind but with two. The first of these is the conscious mind, which is able to understand statistics, and is capable of careful reasoning. The second is the unconscious mind, which knows nothing of numbers and logic, although it is fast and using heuristics (or simplifying rules of thumb) it churns out judgements instantaneously. We experience these as intuitions, hunches or emotions. We then feel that something is true even if we may not be able to explain why. Although often right, the unconscious mind's shortcuts can produce terrible mistakes. It then falls to the conscious mind to gather evidence, muster logic, and correct the unconscious mind's errors. The question of course is will this happen as people will often trust a plausible judgement that quickly comes to mind. This is the critical error. If we are to get risk right, we must first accept that we are subject to the foibles of psychology and that what feels certain may not be. In relation to students in the classroom then they need to appreciate the workings of risk taking by realising that some judgements may come to mind quickly but without any logic. Then they have to learn that they have to get accustomed to thinking hard with their conscious mind in order to correctly assess risk.

2.13 Political, Economic and Social Context

It is the intention of this final section of the literature review to provide a context for the research by outlining some of the key political, economic, and

social forces that add further impetus to the need to drive skills development and vocational education to higher levels.

In 2001, the government published the White Paper *'Schools - achieving success'*, starting the debate on developing a coherent 14-19 phase. This was followed in February 2005 by the 14-19 Education and Skills White Paper.
In brief the White Paper proposed:

- retention of GCSE and A levels as cornerstones of a new system;

- a new general diploma for 5 GCSE grades A*-C (including English and Mathematics);

- GCSE English and Maths to include a compulsory functional skills test;

- new specialised Diplomas in 14 subject areas, with apprenticeships entering the framework; and.

- diplomas to be designed with employer input.

As a whole the White Paper puts strong emphasis on individuals and personalised, tailored learning. The aim was to:

- tackle low post-16 participation, and increase participation at age 17 from 75% to 90%;

- provide better vocational routes, which equip young people with the knowledge and skills needed for further learning and employment.

- stretch all young people; and,

- re-engage the disaffected.

The package would be delivered depending upon local need, and would evolve as local partnerships responded to national policy. The new learning would then be a result of team efforts, and schools, colleges and workplaces are, at the same time, expected to develop into professional learning communities (DfES, 2007). In the longer term the aim is that learning partnerships (non-statutory voluntary groupings including schools, Further Education Colleges, HEIs, employers, trade unions, faith groups, voluntary providers and local government, will work together to provide a cohesive high quality offering in the 14-19 age phase (ibid.).

On 27 March 2006 the Department for Education and Skills published the FE Reform White Paper, which focussed on Further Education as being central to transforming the life chances of young people and adults and to the prosperity of the nation. This White Paper builds on the existing 14-19 Education and Skills White Paper to set out a series of reforms, which will raise skills and qualification levels for young people and adults to world standards. The proposed changes will offer more choice, tailor services to meet individuals' needs, encourage new, innovative providers to enter the market, and promote action to tackle poor quality combined with more autonomy for the excellent. These reforms aim to equip learners with high-quality skills for productive, sustainable employment and personal fulfilment; and they will ensure that employers have the right skills for their business to succeed in a competitive global economy (DfES, 2007).

Since mid-2009 of course the UK economy has been in deep recession, and

along with the increasing pace of globalisation this means that the UK is facing the dual challenge of restoring the economy and boosting international competitiveness. At the same time young people aged 16-24 have borne the brunt of unemployment in the recent economic recession, and compared to almost every other EU country, there is a higher proportion of young people in the UK who are not in work, education or training. Two recent reports will further indicate the scale of the challenge and the pressing need to improve skills development and vocational education in the UK. In early 2009, the UK Commission for Employment and Skills (UKCES) published its report 'The National Employer Skills Survey for England 2009'. This survey is carried out every two years and it covers the incidence, extent and nature of skills needs facing employers. It examines skill-shortage vacancies, skills gaps and also reviews employer training activity. As part of the survey, all employers who had recruited a young person aged under the age of 24 direct from education were asked how prepared they considered these recruits to be for work. The key findings were that:

- 66% of employers that had recruited a young person who had completed only compulsory education found them to be well or very well prepared for work; and,
- 74% of employers that had recruited 17 or 18 year old college or school leavers found them to be well or very well prepared for work.

Crucially, the 'well prepared' figures have remained the same since 2007. Furthermore, over half of employers referred to poor understanding of the

working world as the most common reason why young people were poorly prepared for work. Particular concerns were expressed over poor attitude and lack of motivation, as well as people focussed skills such as customer handling, problem solving, teamwork and written communication skills. With many companies moving to more productive, high-skilled industries, then one might surmise that this skills gap is set to become more acute.

The report goes on to argue that publicly-funded education and training should help 'recession-proof' learners by making them more employable. After examining the approaches and experience of more than 200 different learning providers, the report found that, although some schools, colleges, universities and training providers prepare their students well for the workplace, too many do not. As a result, many employers have to spend time and money on new recruits to provide them with everyday skills, such as how to take a telephone message or write a report. The challenge posed by the report is that publicly-funded providers of education and training need to put employability at the heart of everything they do. The report also urges government and funding bodies to encourage learning providers to assign the development of employability skills a higher priority. The report identifies six key features which it believes distinguish the most successful learning programmes. Accordingly it states that the most successful learning programmes are:

1. Based on real workplace practice – ideally with real employer involvement or the involvement of people from outside the learning environment.

2. Practical and applied in nature – based around genuine work-place experiences or high quality work simulations, with learners progressing by learning through doing things well – or wrongly.

3. Personalised – to reflect individual needs, strengths and weaknesses and preferred learning styles.

4. Serious and disciplined - incorporating clear feedback and real consequences for success or failure, just as in the workplace.

5. Reflective – providing continuing opportunities for individuals to reflect upon their own, and each other's, actions and learn from them.

6. Underpinned by an institutional commitment to employability – with strong leadership and resources.

(UKCES, 2009)

Secondly, further evidence of the skills gap, has been provided by a recent Confederation of British Industry report. 'Ready to grow: business priorities for education and skills' (CBI 2010), publishes the results of an employer survey of 694 employers. The report notes that demand for highly skilled people will intensify during the recovery, and employers fear they will not be able to find people with the skills they need to fill high-level jobs. Approximately one third of those surveyed do not believe it will be possible to fill intermediate level jobs, requiring skills equivalent to A level, whilst half of employers are troubled by employees' basic literacy (52%) and numeracy (49%) skills. The report goes on to say that in the past year alone, one fifth of employers have arranged remedial training for young people they have recruited from school or college, in literacy (18%), numeracy (18%), and IT (22%). Just over two

thirds of employers (70%) want the government to ensure all young people leave school with the employability skills they need to succeed in the workplace. The report highlights the importance of creating a clear strategy for vocational education and training which links the development of basic employment skills all the way through to the achievement of high level technical, professional and managerial qualifications. Crucially, and of significance to this research study, it states:

"In particular, there is clear evidence that more practical, experience-based teaching programmes better suit the learning styles of many young people, especially those who are likely to continue their education and development through vocational opportunities. The findings also suggest that there would be real benefits from improving the guidance given to young people on the options available to them, and simplifying the contribution of employers to work experience and apprenticeship programmes."
(CBI, 2010, p11)

In the UK, improving social mobility along with educational attainment have for a long time been a focus of debate and discussion. A report by the Office for Fair Access (Offa) shows that intelligent children from the richest 20% of homes in England are seven times more likely to attend a high-ranking university than intelligent children from the poorest 40%. In 2003/03 when the data begins, 5.4% of students from Cambridge and 5.8% at Oxford came from 'low participation' neighbourhoods. By 2008/09 the proportion had fallen to 3.7% and 2.7%. This has happened despite 13 years of a Labour government

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that spent millions of pounds on outreach and encouragement (Harris, 2010). The newly elected Conservative and Liberal Democrat coalition government has recently published a report entitled 'State of the Nation Report: poverty, worklessness and welfare dependency in the UK' (Cabinet Office, 2010). The report sets out a comprehensive assessment of poverty and social immobility in the UK in 2010. The Government will use it to inform policy decisions as it advances its aim of ensuring that everyone has the best possible chance to fulfil their potential. The report points out that social mobility in the UK is, in terms of son's earnings relative to their fathers', worse than the USA, France, Germany, Spain, Sweden, Canada, Finland and Denmark (Cabinet Office, 2010). When this finding is combined with rising levels of youth unemployment there comes the possibility of other forms of unrest. For example, following the British National party's poor showing in recent local and national elections there is some evidence that far-right activists may be turning away from the ballot box and returning to violent street demonstrations. The English Defence League, which started in 2009, has become the most significant far-right street movement in the UK since the National Front in the 1970s, and there is a chance for major disorder and a major political shift to the right (Taylor, 2010). In this respect government plans to tackle the deficit, raise employment levels among the young, and unlock social mobility will be significant. In relation to this research study the items of particular relevance are how the new government will go about seeking ways to support the creation of apprenticeships, work pairings, and college and workplace training places as part of a wider programme to get Britain working. Also of significance will be the attempts to improve the quality of vocational education, including

increasing flexibility for 14–19 year olds.

2.14 Summary

Learning has been defined as a process, which leads to a permanent change in behaviour. Saljo (1981) has used the phrase significant learning whilst Mumford (1999) refers to effective learning. Jarvis (2006) sees learning as beginning with the transformation of experience. Senge (2006) describes significant or effective learning as generative in the sense that it expands one's capability, whether in understanding customers or in running a business more effectively. How learning comes about has been the subject of some debate and controversy. Indeed, Jarvis (2006) has postulated that we will perhaps never fully understand human learning. The differences between behaviourist and cognitive perspectives are significant in terms of considering how each individual's mental processes accommodate new information and experiences: how they are absorbed and how they are translated into a permanent change in behaviour. Cognitive theorists see learning as a form of information processing where new experiences are interpreted in the light of past experiences, ideas are restructured, events are reflected upon and learning takes place. This latter view is important in highlighting the role of a cyclical process in learning.

Experiential Learning focuses on the student and the cyclical nature of learning through experience. Based on his model of Experiential Learning Kolb (as did others) went on to investigate learning styles. Further investigations by Honey and Mumford pointed to the fact that we all use a

mixture of learning styles, and, by extending their learning styles, students have the chance of learning in a wider variety of situations. For teachers of course the challenge is to try to appeal to as wide a range of learning styles as possible. When Experiential Learning is undertaken in groups and is focused on real problems then it becomes more effective (McGill and Beatty, 1992). Revans (1998) has termed this approach Action Learning; and it is when an individual approach to learning is combined with a more collective and participative approach (Nias 1994). Learning in this way can be conceived as collaborative Experiential Learning, which is based on reality. There is a focus on heuristic methods: that is finding out and the art of discovery. It is the method advocated by Comenius and Rousseau. At the same time however it leads to the fostering of what Miller and Leroux-Demers (1992) refer to as clinical ability, or that judgement and expertise which can be applied in realistic situations.

Evers and Rush (1996) have pointed to the importance of four base competencies-mobilizing, innovation and change, managing people and tasks, communicating and managing self- and which constitute generic skill sets necessary for advanced level corporate jobs. Significantly, they state that these competencies are required by all advanced-level employees and not just managers, when they note that administrative and production structures are changing through a variety of strategies, including total quality management, participatory management, employee empowerment, teams and many others. These strategies change the traditional decision-making process. Most result in far fewer managers within the organisations; whilst at

the same time employees are empowered to make more of the decisions.

Running a small business enterprise whether in the marketplace or within an educational setting, has risk and failure as inherent elements: problems and crises are seen as important opportunities for learning and development. Failure is seen as an event to be learnt from, rather than to be depowered by. This chapter has tried to show how learning happens and with particular relevance to this study how, in the context of business teaching, learning can be made more effective if it is experiential and based on real problems and business issues. In this respect the literature review gives some initial insights into new ways of learning in Business Education.

Employer organisations are changing rapidly. Globalisation and rapidly changing market environments are leading to delayering, downsizing, and innovation, and are fostering a revolution in organisational operations. The emphasis in this situation of rapidly developing technology, deregulation, global market forces and rising expectations on quality and service is on individual learning and flexibility. West (1994) has said that initiatives such as Investors in People and Total Quality approaches now focus on the principles that people are the only sustainable source of competitive advantage within a complex environment; that employing their skills, knowledge and experience to better advantage will benefit not only the organisation but the individual; and that investment in peoples' learning and development is essential so that they are equipped to take on the greater responsibilities which the future of work organisation demands. How individuals learn in these situations is vital.

Coping effectively with change and being able to take measured risks will be crucial skills for all employees. Linked in with this is the need to ensure that young people can achieve within an educational framework that motivates and inspires them. This will ensure that they are more able to secure meaningful employment and improve their opportunities and choices throughout the rest of their lives. This research project is aiming to try and make a contribution to this agenda by investigating new ways of learning for 16-19 year olds.

In the next chapter, the design of the research will be considered along with the measurement techniques that were used in the collection of data. There will be a consideration of the two generally defined types of research methodology that use quantitative or qualitative techniques to collect and analyse data. Qualitative research is used to help us understand why people feel how they do, or why they act in particular ways or, in the case of this study, if acting in a particular way or undertaking a particular experience is more beneficial in terms of their effective learning. Quantitative research usually involves the observation of some phenomenon. Then an idea of a possible explanation is put forward, known as the hypothesis. Following a discussion of these two techniques, the chapter will explain how the methodology used in this research is underpinned by a pragmatist paradigm in terms of the choice of methods, which has led to the use of a mixed methods or 'blended' approach. Finally, the chapter will discuss how the themes for investigation in the main study were formulated.

CHAPTER 3

Research Design and Measurement Techniques

This chapter will explain and discuss the choice of methodology and measurement techniques and how these link to the themes for investigation. The chapter begins with a consideration of research ethics and the position of the researcher in relation to the participants in the research. There will then be an explanation of how the methodology and measurement techniques provided evidence for the themes for investigation. Of course, no methodological approach and subsequent measurement techniques are ever perfect and free from any drawbacks. Once the project has been completed it may become clear that things could have been differently and/or that there are caveats to the findings, which need to be taken into account. Therefore, being clear on the methodology and measurement techniques will engender confidence in the project itself and will also provide a basis on which to critically evaluate the methodology, measurement techniques and the findings once the project has been completed.

3.1 Research Ethics

Shamoo and Resnik (2009) refer to a number of ways in which ethics can be defined. The first is the norms for conduct that distinguish between acceptable and unacceptable behaviour. Another way of defining ethics is to focus on the disciplines that study standards of conduct, such as philosophy, theology, law, psychology, or sociology. One may also define ethics as a method, procedure

or perspective for deciding how to act and for analysing complex problems and issues. Different disciplines, institutions, and professions have norms for behaviour that suit their particular aims and goals, and which enable them to coordinate their actions and to establish the public's trust of the discipline. Shamoo and Resnik then go on to give 5 main reasons why it is important to adhere to ethical norms in research. These are to:

1. Promote the aims of the research, such as knowledge, truth and the avoidance of error.
2. Promote the values that are essential to collaborative work.
3. Ensure that researchers can be held accountable to the public.
4. Help build public support for research.
5. Promote a variety of other moral and social values.

(Shamoo and Resnik, 2009).

Clearly, a consideration of ethics is important for the conduct of research, and different professional associations, government agencies, and universities, academic societies and individual research institutions have adopted specific codes, rules, and policies relating to research ethics. The guidelines that have been used to inform this research study are the Revised Ethical Guidelines for Educational Research published by the British Educational Research Association (2004). The aim of these guidelines is to enable educational researchers to assess all aspects of the process of conducting educational research within any given context and to reach an ethically acceptable position in which their actions are considered justifiable and sound (BERA,

2004). In following these guidelines, the researcher aimed to ensure that the research undertaken was done so with an ethic of respect for the participants. Underpinning the whole project was also a responsibility to the community of educational researchers and to this end the researcher, within the context and boundaries of the chosen methods and measurement techniques, will subsequently make reference to the extent to which the data collection and analysis techniques, and the inferences to be drawn from the findings, are reliable and valid.

The main participants in this research study are students (either as individuals or as part of a Young Enterprise group), teachers, and employers. In all cases the researcher aimed to operate within a context of respect regardless of age, sex, race, political beliefs or any other significant difference between such persons and the researcher. In all cases, participants understood and agreed to their participation, it was made clear why their participation was necessary, and how information gained would be used and how it would be reported. Once the research was underway, participants were also given the option, if they so wished to withdraw from the research at any time. In the case of students in schools or colleges who took part in the research, written permission was sought and obtained prior to any of the research being undertaken. In all cases the best interests of the young people involved was the primary consideration. For all participants, attention was paid to the bureaucratic burden of the research, and every attempt was made to minimise the impact of the research on participants' normal workloads. Whenever possible the researcher evaluated the perspectives of the key participants, the

relationships between them, and how might they might welcome or resent the observation, interview, survey or whatever particular instrument was being administered. According to Barnard (1998) this is an important aspect of ethical research, and undertaking a consideration of participants in this way enabled the researcher to be more sensitive to the needs of the participants, when explaining procedures and processes.

All participants in the research were assured of confidentiality and anonymity in the reporting of findings. The storage and use of any personal data has complied with the legal requirements set down by the Data Protection Act (1998). All data obtained has been kept securely. To further protect confidentiality and anonymity all participants in the research have been referred to as students, teachers or employers. Any schools, colleges or other organisations who participated, or gave permission for students to participate, have been referred to anonymously as school A, college B, and so on.

3.2 Insider and Outsider Research

When research is undertaken in an organisation or culture to which the researcher belongs (referred to as insider research), then this inevitably poses specific problems for the design and conduct of a research study. In cases such as this, the researcher needs to take account of the influence their connection with the culture has on the results and how they are interpreted. In relation to this the researcher had two roles, which could potentially impact on the research study. The dual role of the researcher primarily as a teacher educator but also as a supporter of the Young Enterprise Programme

necessitates consideration of the implications of this in relation to insider and outsider research, and how this could impact on the study.

The insider is someone whose gender, race, social class, or employment status for example, can give a familiarity with the group being studied (Griffith, 1998). This distinction though is not absolute. Griffith goes on to say that as we undertake our research we all move back and forth across different boundaries. This is because situations arise which involve, for example, different statuses. To illustrate from this research study when the researcher undertook surveys with students involved in the Young Enterprise Programme, this involved a different status position from say when the researcher interviewed teachers. In this respect, some features of the researcher's character are unchanging (gender for example) whilst others change in relation to the group being studied. Similarly, some aspects of the research itself may promote a greater degree of *insiderness* than others. This can even happen with the same subject group. For example, when interviewing students on the Young Enterprise Programme the researcher was well known to at least one of the groups due to the researcher having undertaken other work in the school where those students were based.

Merton (1972) has identified a schema of two opposing positions, referred to as the outsider and insider doctrine. The outsider doctrine is that which identifies the neutral stranger as the person who can only be truly objective due to their distance and detachment from the research subjects. By contrast the insider is more familiar with the social norms, or culture, of the research

group and as a result has more of an empathic understanding. However, Merton then goes to reject this outsider/insider schema on the basis that individuals cannot be easily categorised. The fact that the researcher may share some common traits with those being researched does not necessarily make the data richer. Thus, there are no overwhelming advantages to being an insider or an outsider. Each position has advantages and disadvantages, though these will take on different weights depending on the particular circumstances and purposes of the research (Hammersley, 1993). Hockey (1993) maintains that insiders are able to more easily blend in and less likely to alter the research setting. This was certainly the case with some of the classroom and Young Enterprise observation that was undertaken as part of this project.

Of course, greater familiarity can make insiders more likely to take things for granted, develop myopia, and assume their own perspective is far more widespread than it actually is; something vital may not be noticed; the obvious question might not be asked and assumptions might not be challenged and because of this data might become less valuable (Hockey 1993). On the other hand Hannabus has pointed out that:

"The researcher knows the environment well, knows by instinct what can be done and how far old friendships and favours can be pressed, just when and where to meet up for interviews, what the power structures are and what taboos to avoid"
(Hannabus, 2000, p. 103)

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Hockey (1993) has also noted that insider researchers often have credibility and rapport with those being researched, that in turn this can engender confidence between both parties and may encourage greater openness than would otherwise be the case. On the other hand, insider researchers may enjoy easier access and greater rapport, but they also have to contend with the fact that their informants have known them that much longer, and have had much more time to form preconceptions about them and their research. In that sense one might surmise that they could be less willing to share information (ibid.).

The perspective that has been taken by the researcher is that whether one is an insider or outsider, then one should recognise that each has its own advantages and disadvantages, and what is important is to try and recognise the potential strengths and weaknesses of both. Almost obviously, but how people respond to your questions, and, in the case of some younger students, how they behave and conduct themselves is influenced by who they think you are. If one takes that view then whether the researcher is an outsider or an insider really does not matter. For example, in the Young Enterprise interviews the subjects (students) were well aware that the researcher (an insider in this case) was known to their supporting teacher and this may have impacted to distort the information they provided either in the sense of them tempering the truth, attempting to conform to a stereotype, or even deliberately twisting the truth. It could be supposed that had the researcher been an outsider then such distortions would still have been possible.

Interviews have been an important instrument in this project and have been used with employers, teachers and students. Some authors (such as Brenner, 1981) argue for a highly structured interview approach, insisting that the interviewer keeps strictly to the exact wording and order of each question in an attempt to achieve a standardised prompt. The advantage here is that all questions get asked, and that analysis of the questions is more seamless. Of course, this can be constricting (for both the researcher and the researched), and a semi-structured approach is usually preferred, although it is debatable how far one should stray from the standardised question structure. The researcher took the view that semi-structured interviews enabled a more relaxed atmosphere, less suspicion and engendered a greater level of conversation.

At the same time it is important for the researcher to be neutral and avoid putting forward his/her own opinion, and generally keep out of the interview process (Holstein and Gubrium, 2003). As far as possible the researcher attempted to do this and did not put forward analogies or stories about (his) own experiences, which may have resulted in eliciting the answers that one wants to get. The key thing of course was trying to achieve a balance in this and not to be too distant and thus impact on the levels of trust, which the participants were prepared to give. The use of body language was important in this respect and by smiling and having a pleasant disposition the researcher attempted to achieve openness and candour from the participants but without trying to manipulate them. This can be an effective technique, as Henning, et al have pointed out:

"Explain (though only if it is true) that the information will be anonymous, and will be reported in ways that conceal the identity of the individual respondent. Indicate clearly what use will be made of the information, and who will have access to it".

(Henning, et al, 2009 p.10)

Finally, in relation to the advantages and disadvantages of insider or outsider research, it was the case that at times access was easier and data collection less time consuming. Travelling time was reduced and there was greater flexibility with regard to interview times. There was often a better understanding of the setting due to an understanding of the context and the links between individuals and events. On the other hand, in cases where the researcher was more of an outsider then this brought its own advantages in terms of distance and independence from the subject being studied. The key thing throughout the study was to try and maintain a balance and not allow data to be influenced unfairly because of the insider and/or outsider relationship.

3.3 Sector and Sample Justification

The research aimed to focus on approaches to teaching about business in the 16-19 age range. Within this particular age phase there is a high level of awareness among stakeholders of the need for improved performance and raised standards. Many new initiatives and improved processes have been and continue to be established: these include the changes brought by Curriculum 2000 and subsequently further developed by, for example, the

Qualifications and Curriculum Authority, which has developed a draft single framework for personal, employability, learning and thinking skills for all learners aged 11 to 19. This single framework, together with functional English, Mathematics and ICT, will equip young people with the skills they need to be employable and achieve success in life (QCA, 2005).

In March 2003, the government established the Tomlinson Group in order to examine the provision of education and training for 14-19 year olds and, where appropriate, make recommendations for improvement. The Tomlinson Group published a progress report in July 2003, setting out the key elements of a 'more balanced' curriculum for 14-19 year olds. The final report appeared in 2004. Subsequently, on 23 February 2005 the Government published its 14-19 Education and Skills White Paper. The White Paper built on the Tomlinson report published on 18 October 2004, and responded to the challenge - how to fulfil the needs and aspirations of every young person - set out in that report. The White Paper then went on to set out clear proposals for reform, which build on the strengths of the existing system, and aimed to secure the basics, stretch every pupil to their full potential, offer a high-quality vocational route, re-motivate the disengaged and, prepare all young people for the world of work.

These proposals have now been formalised in the 14-19 Diplomas. This is a new qualification that combines theoretical study with practical experience and is part of the 14 to 19 reform programme being rolled out from 2008 to 2013. This new Diploma qualification is designed to educate young people for the

fast changing world they are growing up in; and the study pattern and content of the Diploma offers a broad menu of choices and opportunities to equip young people for adult life and to help them to cope in what will be a more uncertain future.

This research (both in the initial study and in the main study) has attempted to identify some of the key stakeholders in this age phase of education and to use these as the focus of the study. The key stakeholders identified are the students themselves; educational institutions (schools; Further Education and sixth form colleges); teachers; employers; and the Young Enterprise Programme, which aims to improve an understanding of business and enterprise in the 16-19 age range. Brief details of the sample(s) used in both the initial study and the main study can be seen in table 3a. The table aims to show what samples were used and at what stage of the research they were employed. In this respect, it should be noted that items 1 to 4 were part of the initial study, with items 5 to 9 being part of the main study.

Sample Description and Stage of Research

Sample Description	No	Stage of Research
1. Schools and Further Education Colleges: questionnaire	40	Initial Study
2. Employers: questionnaire	50	Initial Study
3. Classroom observation of students	3	Initial Study
4. Young Enterprise Company Programme: observation	9	Initial Study
5. Students: questionnaire	100	Main Study
6. Young Enterprise Company Programme: student interviews	33	Main Study
7. Employer interviews	10	Main Study
8. Teacher interviews	10	Main Study
9. Young Enterprise Company Programme: trading reports	9	Main Study

Table 3a: Sample Description and Stage of Research

Collection of information and data was carried out throughout the course of the research. As data and information was collected this impacted on the themes, and in particular it informed those themes on risk and failure.

3.4 Epistemology and Ontology

Prior to considering the research design, it is now pertinent to review the underpinning philosophy behind that design, the choice of methodology, and how the researcher decided upon specific strategies and approaches. In particular, it needs to be made clear as to what particular paradigm guided the researcher. Bassey (1999) describes a paradigm as a set of ideas about the function of researchers and the nature of the world. In turn, this conditions the thinking patterns of those researchers and underpins their own research actions. Coglan and Brannick (2009) state that researchers' epistemological and ontological perspectives legitimise their way of undertaking research and hence determine what they consider as a valid, legitimate contribution to knowledge. Thus, it is the researchers' own personal paradigm or belief system, which guides their interpretation of knowledge and how they undertake research.

Traditionally, some methodological strategies (survey, correlation etc.) have been designated quantitative and others (ethnography and condensed case study) as qualitative. In a similar way some methods (structured interviews, questionnaires) are seen as quantitative whilst the unstructured interview, participant-observation are deemed qualitative. The assumption that these represent two distinct and opposed approaches has been challenged. This is not to deny that differences exist; but it is to suggest that the two methods do not belong within opposing research paradigms and thus can sensibly be used within the same investigation (Scott and Usher, 1996). Indeed, there are good reasons for doing this: the strength of almost every measure is flawed in

some way or other, and therefore research designs/strategies can be offset by counterbalancing strengths from one to another. Increasingly, researchers are using both qualitative and quantitative research for their studies. The quantitative and qualitative schema can be used to classify modes of enquiry, and within each of these two major categories one can make further distinctions. Within quantitative modes, experimental and non-experimental approaches can be specified; whilst within qualitative modes, interactive and non-interactive approaches can be specified. Research in the hard sciences was originally the genesis for the development of quantitative modes of enquiry, where a positivist philosophy of knowing was adopted and which emphasised objectivity and quantification of phenomena. Consequently, these research designs make an attempt to maximise objectivity by using numbers, statistics, structure and experimenter control. In an experimental mode of enquiry the researcher will manipulate what the subjects will experience, and at the same time has some control over what will happen to the subjects by controlling specified conditions. Non-experimental modes of enquiry refer to something that has occurred or examine relationships between things without any direct manipulation of the conditions that are experienced.

At this point it is useful to consider a schema put forward by Tashakkori and Teddlie (1998), which illustrates and contrasts four important paradigms used in the social and behavioural sciences. In table 3b, the main tenets of these paradigms can be seen: ranging from positivism on the one hand through to constructivism on the other. The positivist paradigm underlies what are labelled quantitative methods, while the constructivist paradigm underlies

qualitative methods. Coglan and Brannick (2009) explain this contrast by stating that a positivist approach is defined primarily by the view that an external reality exists and an independent value-free researcher can examine this reality. The constructivist approach on the other hand (which they refer to as the hermeneutic tradition), argues that there is no single knowable external reality, and that the researcher is integral to the research process.

The rationale of the approach taken will be outlined here and which is based on ideas put forward by Tashakkori and Teddlie (1998, 2009). It is a paradigm, which is distinct from positivism, post positivism or constructivism. It has been labelled pragmatism, and allows for the use of mixed methods in social and behavioural research. What Tashakkori and Teddlie (1998) argue when considering these paradigms (positivism through to constructivism), is that it is important to see them, not as black and white, but as shades of grey and thus as part of a continuum. As part of this continuum the paradigms exist alongside each other. Tashakkori and Teddlie give 5 practical reasons as to why this should be the case:

1. Both paradigms have been used for many years.
2. Many evaluators and researchers have urged using both paradigms.
3. Funding agencies have supported both paradigms.
4. Both paradigms have influenced policy.
5. So much has been taught by both paradigms.

They (ibid.) then go on to say that there is a common set of beliefs (or

paradigm) that many social and behavioural scientists have, that underpin a

paradigm which is distinct from positivism, post positivism or constructivism,

and which has been labelled pragmatism. This allows for the use of mixed

methods in social and behavioural research. In table 4b, the pragmatist point of view is illustrated as rejecting the forced choice between positivism and constructivism with regard to methods, logic and epistemology. In each case, pragmatism rejects the either-or choice and embraces both points of view.

In a later work (2009) Tashakkori and Teddlie label the two paradigms associated with mixed methodology as pragmatism and a transformative perspective, and they portray them as an overarching approach in relation to positivism and postpositivism. In doing so this enables a rejection of the forced choice between positivism and postpositivism and constructivism with regard to methods, logic, and epistemology. Also then, pragmatism and the transformative perspective embrace features associated with both points of view, that is positivism/ postpositivism, and constructivism. They also point out that there is an aspect of equality associated with this approach and that transformative researchers often have another agenda in relation to the creation of a more just society for oppressed groups. It is this, which dictates the approach, to be used and transformative researchers will use whatever research method, or combination of methods, which they feel is appropriate in order to promote greater social justice and equality.

It is this paradigm (pragmatism/transformative perspective), which has guided the approach of the researcher: it is a paradigm, which allows for the use of mixed methods. Similar to the position taken by Tashakkori and Teddlie (1998, 2009), the researcher has, based on personal experience and interest, decided on the area of research, which has been guided by the researcher's

own personal value systems. The research study has then been approached in a way that is congruent with these values, including variables and units of analysis that it was felt are the most appropriate for finding an answer to the research question.

Thus, in this research study a pragmatist paradigm underpins the choice of methods and this has led to the use of a combination of methods- a mixed methodology. As a further illustration of this, a consideration of some other perspectives on the quantitative versus qualitative issue, plus the practical implications of the two approaches, will clearly indicate how this pragmatist paradigm has been put into practice in choosing the research methodology. As has been seen previously, researchers are faced with a choice of methods when undertaking research. At the two ends of the continuum are quantitative or qualitative methods. On one level these refer to how one understands the nature of knowledge and the world; and on another level they refer to research methods and how data is collected and analysed. Looking at the latter and considering some of the practicalities of this, Lichtman (2009) has provided a useful schema on the practical differences between qualitative and quantitative methods. This is shown in table 3c.

Qualitative and Quantitative Methods

It can be seen by comparing table 3c with the summary of instruments used that the approach taken in this research study is a pragmatic mixed method approach, which contains elements of both the quantitative and qualitative approaches. A further example will illustrate this by referring to the category entitled 'types of data collected' in table 3c. Here, according to Lichtman, an emphasis on numbers is associated with a quantitative approach to methodology, whereas a qualitative approach is associated with an emphasis on words.

3.5 Research Design and Data Classification

Oppenheim has stated that:

"The term research design refers to the basic plan or strategy of the research, and the logic behind it, which will make it possible and valid to draw more general conclusions from it"

(Oppenheim, 1992, p.6).

He then goes on to say that good research design should enable the researcher to draw valid inferences from the data (ibid.). With regard to data, it is important to stress at this point that whilst one needs to ensure as far as possible the accuracy of data, one also needs to be certain of its value in terms of relevance to the particular study. Information and data are often not difficult to obtain; however, it is important for the researcher to select what is appropriate and relevant to the study.

In conducting research one needs to proceed systematically and follow a number of steps. McMillan and Schumacher (2000) suggest that the research process typically involves several phases. Very often these phases are not in sequence, and nor are they in an orderly step-by-step process. As a result, research is more an interactive process between the researcher and the logic of the problem, design and interpretations. They (ibid.) provide a summary of the steps in the research process, thus:

1. Select/decide on a problem or issue.

2. Undertake a literature review: this allows the researcher to gain an improved understanding (both practical and theoretical) of the subject area, and to begin to focus on specific issues within that area.

3. Define the specific research problem and objectives and then build the hypotheses.

4. Determine the instruments to be used and the methodology.

5. Collect the data: once the method and instruments have been chosen, then the data is collected from the nominated sample (s).

6. Data analysis and presentation of results: this involves developing links between the review of literature, the data itself and the analysis.

7. Interpret the findings, draw conclusions, and raise questions to inform future research.

As can be seen, according to McMillan and Schumacher (2000) the research design is something, which describes the procedures for conducting the study, including when, from whom, and under what conditions the data will be obtained.

The steps shown above were certainly not so logical and easy to follow in practice. The initial stimulus for the study was twofold and came firstly from the researcher's involvement in practical/experiential classroom activities, and secondly from involvement in the Young Enterprise Programme. In the first case the researcher (whilst working permanently as a teacher educator in Business Education, within higher education) also worked for one day per week as a classroom teacher of business, in a secondary school. In the second case it related to the researcher's professional involvement with the Young Enterprise Programme: both at Area Board (in this case north Merseyside) and Strategic Board level (covering all of the Merseyside area). The project initially began as piece of small-scale research, which was aimed at trying to improve classroom practice in the teaching of business. Following this a review of literature was started, and this was a process that continued throughout the period of the research. New research, Government publications and initiatives; changes to the curriculum; and the influence of new stakeholders were included over the period of the research, so that the literature review was constantly updated and amended.

The data, which was available to the researcher, came from both primary and secondary sources. Primary sources are first hand, original data, which can be obtained, for example, through surveys, interviews, questionnaires and experiments. Secondary data includes reports of events not written by an eyewitness: this obviously has limited value because of the distortion of facts, which can take place in the transmission of information. This research study has made extensive use of both types of data, which has provided a useful way to corroborate evidence.

3.6 Methods used to collect data

According to McMillan and Schumacher (2000), the techniques used to collect data can be either classified as quantitative or qualitative. One fundamental difference here is that quantitative approaches use numbers to describe phenomena, while qualitative techniques use narrative descriptions. While most of the techniques can be used with any modes of enquiry, more specific research design is closely related to technique. McMillan and Schumacher (2000) have put forward a useful overview of the types of methods that fall under the category of either quantitative or qualitative. This can be seen in table 3d.

This research study used methods that can be seen as a combination of both approaches and these included: surveys at one end of the continuum (objective/quantitative) and accounts, interviews, participant observation and personal constructs at the other end (subjective/qualitative). A more detailed list of the methods used to collect data can be found in table 3e.

3.7 Interviews

In-depth interviewing is perhaps the most important of all qualitative methods, as it can provide more comprehensive insights into the participants thinking than surveys. Conducting interviews with participants, either single or in small groups, also enables the researcher to establish personal contact with the participant(s) and this can provide a crucial opportunity to ask follow-up questions, when information provided is not always clear (Henning, et al, 2009).

Interviews can be highly formalised and structured, or they can be akin to a free ranging discussion. The former 'positivistic' approach is where the interview follows a fairly standardised set of questions, whilst offering some flexibility, and allowing the views of the interviewee to become known. The label 'qualitative' interview has been used to describe a broad range of different types of interview from those that are supposedly totally non-directive, or open to those where the interviewer takes to the interview a prepared list of questions, which she/he is determined to ask. Burgess (1985) has described the main reason for conducting qualitative interviews as trying to understand how individuals construct the meaning and significance of their situations from the complex personal framework of beliefs and values, which they have developed over their lives in order to help explain and predict events in their world.

Group interviews in a similar way can take the form of a loosely directed debate or discussion. The person organising the group interview clearly needs

to be particularly skilled. Initially the organiser needs to initiate the discussion and create a rapport within the group; secondly, he/she then needs to ensure that things move in the right direction. Even so this approach can clearly be problematic depending on the dynamics of the group; with social/peer group pressure to conform being one example. It may take several interviews before group members feel relaxed enough to speak and make effective contributions. In this research study, interviews have been undertaken on both an individual and a group basis where the interviews were both semi-structured and unstructured. These are appropriate methods when it is necessary to understand the constructs that the interviewee uses as a basis for their opinions and beliefs about a particular situation. One aim of the interview is to develop an understanding of the respondents' world so that the researcher might influence it, either independently or collaboratively.

Interviews were conducted with 3 separate groups: the aim of this was to try and discover how individuals and groups perceived the significance of their situations (interpreted in terms of their own framework of beliefs and understanding of the world they are in). By choosing three separate groups it was hoped that the information gained from each of the groups could be triangulated, not only with that from the interviews with other two groups, but also with information gleaned from questionnaires and observation.

The 3 groups who were interviewed were first of all students aged between 16 and 19 years, who were taking part in the Young Enterprise Programme. 33 students were interviewed in a semi-structured format. The 30 students were

divided into 5 groups (5, 6, 4, 8, 3) and 4 individual interviews. Of this sample, 4 of the group interviews took place during, or shortly after, the students had been involved in a Young Enterprise activity. In that respect the interviews were very much part of the approach outlined under protocol analysis (this is further explained in section 3.10). The final group interview took place in a school setting, as did the 4 individual interviews. Creating rapport with both the groups and individuals was straightforward due to the researcher's profile within the Young Enterprise Programme and consequently being already known to the students. Groups and individuals were relaxed and contributed readily. The information gained was triangulated with information from other interviews, questionnaires and observation. Secondly, 10 individual employer interviews were conducted. The sample chosen came from employers who had employed/worked with young people through a work experience programme either linked with a school or with a Further Education college. In order to facilitate this, the researcher had access to a database of employers involved in work experience programmes, and was also able to make further contact with employers through the Young Enterprise Programme. The interviews took place either in the employers' place of work or, if more convenient, when employers were attending work experience liaison events, or Young Enterprise events. The information gained was triangulated with information from other interviews, questionnaires and observation. Finally, 10 individual teacher interviews were conducted. The sample chosen came from teachers who had either coordinated work experience programmes for young people aged 16-19, or had had a significant involvement in such programmes. Access to this group came via the researcher's own involvement in work

experience programmes, and contact made with teachers through work with Young Enterprise and through the researcher's own job role in teacher education.

3.8 Surveys

The survey is one of the most commonly used methods in educational research. According to Henning, et al:

"Surveys have an advantage over interviews because they reach more participants and therefore can give ...a much larger view of the issue.... researchers can be confident that the findings are representative of a larger group of people than interviews"

(Henning, et al, 2009 p. 29)

Typically, surveys gather data at a particular point in time with the intention of describing the nature of existing conditions, or identifying standards against which existing conditions can be compared, or determining the relationship that exists between specific events. Whether the survey is large-scale or small-scale the collection of information typically involves one or more of the following data-gathering techniques: structured or semi-structured interviews, self-completion or postal questionnaires, standardised tests of attainment or performance, and attitude scales.

Once the purpose of the enquiry is established, consideration has to given to the most appropriate ways of collecting items of information. The second pre-requisite to design the survey, whilst considering the specification of the

population to which the survey is addressed, affects decisions that researchers must make about sampling and resources. Due to factors of expense, time and accessibility, it is not always possible or practical to obtain measures from a population. Researchers endeavour therefore to collect information from a smaller group, or subset, of the population in such a way that the knowledge gained is representative of the total population under study. This smaller group or subset is a 'sample.' For example, by cluster sampling, one can randomly select a specific number of schools and test all the children in those selected schools.

The size of a sample is often a matter for some discussion. A sample size of thirty is held to be the minimum number of cases if researchers plan to use some form of statistical analysis on their data. As well as the requirement of a minimum number of cases in order to examine relationships within subgroups, researchers must obtain the minimum sample size that will accurately represent the population under survey. Frequently, the postal questionnaire is the best form of survey in an educational enquiry, although a low level of response can often be a drawback.

Questionnaires are a method used widely to collect research data. Questionnaires can be difficult to create in order to get the desired information and they are liable to misuse. In administering a questionnaire the researcher never can be certain that the questions being asked will actually bring forth the right information. The answers given to a questionnaire on a particular day may not be the same as those given on another day. The selection of

questions and how they are phrased can be crucial; if questions are asked that the respondent is unsure of, then the responses may involve guesswork and consequently the production of invalid information. In this research study, questionnaires have been used on 3 separate occasions (items 1, 2 and 5 in table 3e).

3.9 Observation

Observation is probably the most effective way to see what people do and to hear what they say (Robson, 2002). According to Lichtman (2009) using observation as a data gathering technique has its roots in anthropology. Observations usually occur in already established situations, rather than in contrived settings. The groups that can be observed usually fall into the category of formal groups, which exist on a regular basis (for example a class of students); informal groups where members may move in and out and do not meet regularly (for example, a group of card players); and finally occasional groups which have come together for a specific project (for example, as in this research study the groups of students who came together to undertake their Young Enterprise project).

Other issues regarding observations include gaining access, having a clear idea of what to observe and the frequency and length of observations. Finally, there is both the role of the observer/researcher, and the effect, which the observer/researcher has on the situation. In the first case, it is important that in order to recognise phenomena which are worth analysing, then the researcher needs to give an account of the situation as impartially as possible (Mason, 2002). In the case of observer impact on the situation this may

include: concern by the subject(s) being observed who then in turn do not behave normally; particular foci of the meeting or class being avoided during the observation as it is not felt to be appropriate; and subjects conforming to what is 'required' or perhaps wanting to be seen to be like others (Briggs and Coleman, 2007). Taking these points into account then it can be said that observation is more effective when it is combined with other methods of data gathering, and when used in this way, it offers the opportunity for findings to be validated through triangulation. This is the approach, which has been taken in this research study.

3.10 Critical Incidents/Protocol Analysis

One method proposed by Flanagan (1954) of teasing out information, which may not be so readily expressed, is critical incident and protocol analysis. By *incident* Flanagan meant any observable human activity that is sufficiently complete in itself to permit inference, or prediction to be made about the person performing the act. Respondents might for example be asked to track back to particular instances in their work lives and to explain their actions and motives with specific regard to those instances. Teddlie and Tashakkori (2009) refer to something similar when they describe abduction or abductive logic. They note that this occurs when a researcher observes a surprising event and then tries to determine what might have caused it. It can be further defined as the process of working back from an observed consequence to a probable antecedent or cause. Clearly, one of the main difficulties with this approach is that past experiences can be easily rationalised and re-evaluated, and especially so if the incident is one of long standing. Protocol analysis,

which seeks explanations immediately after the event, can overcome this difficulty. Protocol analysis was used in research undertaken by Burgoyne and Hodgson (1983) and which had the objective of describing and understanding managerial action and how managers learned. Protocol analysis aims to get managers to talk: the immediacy of the process is a check against too much retrospection and the technique, providing trust can be developed, appears to facilitate open statements and descriptions.

The use of protocol analysis has been an important aspect of this research study. The first example of this is classroom observation, which has been undertaken both when the researcher was working as a teacher and more recently as a teacher trainer. Both of these roles have enabled the researcher to question and discuss particular happenings and events with students, almost immediately after they have taken place. Secondly, the researcher's role at a professional/consultative level in the Young Enterprise organisation has provided a unique opportunity to observe and then talk to students who have been involved in the day-to-day challenges of running their own business activity. Items 3 and 4 on the list of instruments in table 4e encompass the use of protocol analysis.

3.11 Choice and construction of Instruments

For information, it should be noted that the first four instruments formed part of the initial study, and the remaining five were used in the main study.

1. Postal Questionnaire: Schools/Colleges (initial study)

The sample group in this case comprised schools, Further Education and

Sixth Form Colleges. A survey, via postal questionnaire, of Schools, Further Education Colleges and Sixth Form Colleges in the North West was undertaken between November 2001 and February 2002. A total of 56 institutions were included in the survey (40 schools and 16 Further Education/Sixth Form Colleges). These institutions comprised a broad range in terms of inner city/suburban and covered a range of socio-economic backgrounds.

A response rate of 29 out of 56 questionnaires (a 52% return) was obtained. This was encouraging and can partly be accounted for by the researcher's professional links with a number of the institutions surveyed. Of those questionnaires returned 16 were from schools and 13 were from Further Education and Sixth Form Colleges.

Prior to the main survey, ten pilot questionnaires were administered (7 to schools and 3 to Further Education /Sixth Form Colleges). Pilot questionnaires were also administered to 2 members of staff/teacher colleagues, at the researcher's own place of employment, to obtain a critical evaluation of the questions asked. Based on the responses to these pilot questionnaires some amendments were made, in particular:

- the wording of questions;
- the inclusion of sizes of group on the background information as this can affect the feasibility of group work; and,
- reference to GNVQ intermediate courses was removed from the survey as

- these are (usually) one year programmes at GCSE level and would not realistically compare with the two year A-Level and the two year vocational courses.

The basic principles underpinning the construction of the questionnaire were as follows:

- as it was not known which sub-areas would have the most powerful correlations and which were more peripheral, the majority of questions dealt with attitude statements; and,

- a Likert scale was used as this tends to perform well when it comes to a reliable, rough ordering of people with regard to a particular attitude. Hopefully this would reveal some interconnections between various aspects and in so doing would generate future research questions.

The final questionnaire comprised 20 questions, which were broadly analytical/relational, although question 12 was enumerative/descriptive. The questionnaire was divided into two broad categories:

- the underpinning principles on Business Education courses and the extent to which they might encourage risk taking; and,

- the skills developed by students whilst undertaking a Business Education course.

2. Postal Questionnaire: Employers (initial study)

The sample group in this case comprised employers who ranged from small and medium enterprises up to larger private and public companies. The survey of employers was undertaken between March and July 2002. Out of a total of 52 postal questionnaires, there were 20 responses: a 38% response rate.

The questionnaire was divided into two broad categories:

- questions 1 to 11 dealt with the main principles which might underpin projects/problems on a Business Education course in the 16-19 age range and the extent to which they might encourage risk taking; and,

- questions 12 to 18 related to the development of skills (important to potential employers) and therefore which might be considered important in terms of their development in Business Education courses for 16-19 year olds.

Similar to the questionnaire to schools, Further Education and Sixth Form Colleges, as it was not known which sub-areas would have the most powerful correlations and which were more peripheral, then the majority of questions dealt with attitude statements. Also, once again a Likert scale was used, as this tends to perform well when it comes to a reliable, rough ordering of people with regard to a particular attitude.

3. Observation of classroom activities (initial study)

The sample group in this case comprised two schools and one college of Further Education. The observations of classroom activities were undertaken between September 2001 and April 2002.

Robson (2002) identifies possibly 2 main types of observation. The first of these is in participant-observation, when the observer has a role in the observed group. A tutor for example may observe a group of students. Secondly, as was the case in the observation of classroom and Young Enterprise activity, there is structured observation, which is carried out by a detached observer. It is important that observation is as objective as possible, and at all times the researcher tried to remain aware of own interest and bias so that the information gained was as valid and reliable as possible. Reliability of observation will come from observer consistency. Observers must make sure that they make similar decisions about similar events on different occasions. They must also make the same decisions about the same events if they see or hear them again (Robson, 2002).

For all of the observations undertaken the researcher devised a checklist of items, which focussed around the process of experiential learning, opportunities for students to reflect, problem solving, teamwork, and student motivation. Notes were also kept to complement the observations so that any additional or unusual events could be noted. In order to ensure accuracy, full notes were written as soon as possible after the observation had taken place.

Observations were undertaken in two schools and one college of Further Education. Access to all three institutions came via the researcher's own professional contacts. According to Barnard (1998) the classroom is a territory whose cultural boundaries have been defined and negotiated jointly by the teacher and the students. The researcher was aware that the observer can be seen as an intruder into this culture and that the intrusion can affects the psychological and social rapport between teacher and students. Accordingly, every step was taken to try and reduce this disruption by explaining the purpose of the observation and sharing feedback with students and the teacher after the lesson.

Details of the classes and class sizes, which formed the main focus of the observation, were as follows:

- Further Education College 1st year Vocational course, 15 students;

- School 1: 1st/2nd year sixth form (combined group) Vocational course 13 students; and,

- School 2: 2nd year sixth form Advanced Level Business Studies 8 students.

4. Observation of Young Enterprise activities (initial study)

The sample group in this case comprised 5 Young Enterprise companies who were based in both schools and Further Education colleges. These were investigated from late 2001 to early 2002.

In order to gain a comprehensive a picture of the Young Enterprise activities, the researcher sought to obtain information from as many sources as

possible. In addition to observing the Young Enterprise companies, and talking to the young people running them, the researcher accessed written records (in this case company reports submitted at the end of the academic year). The activities and progress of the Young Enterprise companies was also discussed with link teachers (a facilitator of the Young Enterprise process within a school/college); and advisers (person from industry/commerce who helps to facilitate the Young Enterprise process). To further help in the gathering of information use was also made of protocol analysis (Easterby-Smith et al, 2002) in order to gain information, which may not be forthcoming in the initial observations or meetings. In this way, students were asked to track back and reflect on particular incidents and then explain their actions and the actions of the whole group.

As with the classroom observations, similar guidelines were used in terms of recording information. All steps were taken to explain the purpose of the observation and share feedback with students.

5. Student Questionnaire (main study)

The sample group for this instrument comprised 100 students aged between 16 and 19, who were studying Business on either a Vocational or Advanced Level course, in school. A further 20 questionnaires were administered to students studying Business in a Further Education College. The questionnaire to schools was undertaken between late 2005 and early 2006. The questionnaire to students in the Further Education College was undertaken in late 2006.

Typically, surveys gather data at a particular point in time with the intention of describing the nature of existing conditions, or identifying standards against which existing conditions can be compared, or determining the relationship that exists between specific events. In deciding how to administer the questionnaires consideration was given to the most appropriate way of collecting items of information. Due to time and accessibility constraints, it is not always possible, or practical, to obtain measures from a population; and certainly in this case the whole population was national and obviously too large. The aim therefore was to collect information from a smaller group in such a way that the knowledge gained was representative of the total population. In order to try and achieve a 100% response rate the questionnaires were personally administered to whole class groups who were studying business. The groups represented a range of students across both academic and vocational courses in Business Studies. All of the students involved had undertaken a period of work experience as part of their studies. The questionnaire was titled as Work-Related Learning and Business Education in the 16-19 age range. In administering questionnaires, the researcher was aware that if questions are asked that the respondent is unsure of, then the responses might involve guesswork and consequently the production of invalid information. In order to avoid, or at least minimise this, and prior to administering the questionnaire, students were given an explanation and brief background to the purpose of the questionnaire. In addition, the presence of the researcher enabled the participants to ask questions and clarify any ambiguities.

Initially, the researcher personally administered 20 of the questionnaires to a group of students. This served as a way of piloting the questionnaire, which is important as it enables the researcher to test how long it takes to complete the questionnaire. It also enables the researcher to discover if any questions are ambiguous, that the instructions are clear; and finally it allows the elimination of any questions that do not yield usable data. Pilot questionnaires were also issued to the researcher's teacher and employer colleagues. Following this, the questionnaire was amended.

The questionnaire itself was divided into 4 sections entitled: Work Experience and your Learning; Work Experience and Risk Taking; Work Experience and Failure; and Risk and Failure in Business Studies Lessons. The broad aim of the questionnaire was to get students to think about 2 key aspects, which the research study is trying to address. Firstly, the importance of unplanned or incidental learning and secondly how experiencing risk and failure might contribute to student learning. Thus the questionnaire was focused on experiencing failure and undertaking risks in two environments, the workplace and the classroom, and comparing the learning impact in the two settings.

Questions 1 to 6 were concerned with work experience and learning, and how students thought that learning had happened. Students were asked to think about categories of learning (formal, informal and incidental) and then comment on these in relation to their own experiences. Questions 7 and 8 asked students to consider if they took risks on work experience and how these might have impacted on their learning. The concept of risk within such a

context was explained, prior to students answering the questions. Questions 9 and 10 similarly asked students to consider any failures they had whilst on work experience and again how these might have helped their learning. The concept of failure within such a context was explained, prior to students answering the questions. Questions 11 to 18 then took the concepts of risk and failure and asked students to consider these in relation to their time spent in business studies lessons. Finally, question 19 asked about collaboration and social interaction in business studies lessons, whist question 20 was left as an open question on the components of a good business studies lesson.

6. Student Interviews: Young Enterprise (main study)

The sample group in this case comprised 33 students, aged between 16 and 19, who were interviewed in a semi-structured format. The 33 students came from three secondary schools (group sizes being 11, 8 and 7) and one Sixth Form College (group size 7). All of the students were, or had been, part of a team involved in the Young Enterprise Company Programme. The interviews took place during or shortly after the students had been involved in a Young Enterprise activity. In that respect the interviews were very much part of the approach outlined under protocol analysis. The final group interview took place in a school setting; as did the 4 individual interviews. Creating rapport with both the groups and individuals was straightforward due to the researchers own profile within the Young Enterprise Programme and consequently being already familiar to the students. Groups and individuals were relaxed and contributed readily.

In order to help with the collation of information after the interviews, students were given a written copy of the interview questions and asked to note down their responses as they progressed through the interview. The focus of the interview questions was on the key aspects of this part of the study, namely student learning and how it happens, work-related learning, and how students might learn through risk and failure. This approach, linked to the questions in the student questionnaire (instrument 5) was also chosen in order to aid the process of triangulation.

Questions 1 to 12 focused on Young Enterprise and Learning; if a pre-existing knowledge base was important to that learning; and how important help and advice was in facilitating learning. Questions 13 and 14 asked students to compare their Young Enterprise experiences with work experience. Questions 15 to 17 focused on Young Enterprise and learning through risk taking; and questions 18 to 21 asked students to consider any links between Young Enterprise and learning through failure. A final section gave students the opportunity to make any further comments.

7. Employer Interviews (main study)

The sample group in this case comprised 10 employers from a range of businesses. Employers were chosen on the basis of accessibility and willingness to take part. Mostly the contacts for this came through the researcher's involvement in employer networks and links with teachers involved in arranging work experience. In addition, and prior to arranging the interview, it was also determined by telephone as to whether the employer

had worked with a school or college and 'employed ' students on work experience or a work-shadowing basis. These interviews can be labeled as qualitative in that they comprised a range of different types of interview in that parts of the interview were totally non-directive or open, whilst in other parts the interviewer referred to a prepared list of questions. The interview comprised 17 questions, which were divided into 4 sections. In order to aid the process of triangulation the questions had a similar focus to those used in other instruments. The first part of the interview asked the employer to consider work experience and student learning. 2 sections then followed this on work experience and risk taking, and work experience and failure. Finally, employers were asked to comment more broadly on the business curriculum and how they thought risk and failure might be incorporated into the business curriculum, or if there was any benefit in doing this.

8. Teacher Interviews (main study)

The sample group in this case comprised 10 teachers. Similar to instrument 6 the interview questions were divided into 4 main areas. Section 1 of the interview asked teachers to consider work experience and student learning. Section 2 then asked questions about work experience and risk taking. Section 3 asked questions about work experience and failure. Then finally, teachers were asked to bring all of the concepts together and consider them within the context of teaching business within the classroom.

9. Young Enterprise Company Reports (main study)

At the end of the Young Enterprise trading year (this usually runs from September to early May) each Young Enterprise Company produces a formal written report. This report is produced by the students themselves and essentially comprises a summary of their year's activities. Reports are usually about 16 pages in length. In this research study 9 Young Enterprise company reports were used.

A summary of the instruments used and their relationship to the research can be seen in table 3e

Summary of Instruments used and Relationship to Research

INSTRUMENT	No	Mode	Linked to theme	ASPECT
1.POSTALQ/S Schools Further Education	40 (16)	Qualitative Quantitative	1, 3, 4	Teaching and learning; use of EAL; collaborative learning; limits imposed by syllabus; comparison of A level and AVCE; realism in the curriculum; risk taking.
2. POSTAL Q/S EMPLOYERS	50 (19)	Qualitative Quantitative	2	Teaching and learning; importance of groups and collaborative learning; realism in the curriculum; risk taking; importance of EAL.
3. CLASSROOM OBSERVATION	3	Qualitative	1, 3, 4	Student response to experiential activities; practicalities of EAL in the classroom
4. YE COMPANY OBSERVATION	9	Qualitative	5, 6	Work related EAL; real work in the curriculum; links with AVCE programmes; motivation; comparison with work experience; risk taking.
5. STUDENT QUESTIONNAIRE Schools Further Education	100 20	Qualitative Quantitative	1, 3, 4, 5, 6	Broader survey to triangulate: A level and AVCE students on how they regard practical work; risk taking and failure; exploration of work experience.

Table 3e: Summary of Instruments used and Relationship to Research

Summary of Instruments used and Relationship to Research

6. YE STUDENT INTERVIEWS	33	Qualitative	5, 6	Effective learning about business; comparison with Work experience; impact on motivation; risk taking; collaborative learning.
7. EMPLOYER INTERVIEWS	10	Qualitative	2, 6,	Role in YE process and role of businesspersons in school/college based activities; importance of risk taking; teaching and learning.
8.TEACHER INTERVIEWS	10	Qualitative	1, 3, 4,	Apprenticeship; real work in the curriculum; risk taking and failure; linking vocational and academic approaches; new qualifications framework.
9. YE COMPANY REPORTS	9	Qualitative	5	Evidence of student learning; impact on motivation; importance of risk taking;

Table 3e: Summary of Instruments used and Relationship to Research

Notes:

For questionnaires the number of responses is given in brackets.

The classroom observations involved 3 classes, with approximately 15 students in each.

3.12 Research themes and links to measurement techniques

The research themes for the main study will now be listed. These themes were developed following the initial study and the findings that emerged from that study. Aspects of the literature also informed the themes for investigation in the main study. It should be noted that chapter 4, section 4.7, will discuss in more detail how the themes were developed from the initial study and from the literature. However, it is appropriate at this point to list the research themes, and after each theme, to indicate the specific measurement technique, which was used to investigate the theme. Following this there will be a section on the links between the research objectives and the themes for investigation. This will be followed by further discussion of the methods chosen, their appropriateness and why they were selected to investigate particular themes. The research themes and the associated measurement techniques are shown below.

Theme 1: Work-related Experiential Learning is an effective mechanism for student learning in Business Education. Investigated by:

Instrument One: Postal questionnaire to schools and colleges.

Instrument Three: Classroom observation.

Instrument Five: Student questionnaire.

Instrument Eight: Teacher interviews.

Theme 2: Employers consider work-related experiential approaches to Business Education as being of most value. Investigated by:

Instrument Two: Postal questionnaire to employers.

Instrument Seven: Employer interviews.

Theme 3: Experiential Learning requires particular conditions, which may be limited by organisational constraints. Investigated by:

Instrument One: Postal questionnaire to schools and colleges.

Instrument Three: Classroom observation.

Instrument Five: Student questionnaire.

Instrument Eight: Teacher interviews.

Theme 4: Experiential Learning enables students to contextualise and evaluate theoretical perspectives in a practical setting, and at the same time provides them with a social and interactive learning process, which will involve integration between theory and practice. Investigated by:

Instrument One: Postal questionnaire to schools and colleges.

Instrument Three: Classroom observation

Instrument Five: Student questionnaire.

Instrument Eight: Teacher interviews.

Theme 5: Theory and application can be effectively combined within a real work curriculum model and that operating realistic business activities can enhance student understanding in a more effective way than work experience. Investigated by:

Instrument Four: Young Enterprise Company observation.

Instrument Five: Student questionnaire.

Instrument Six: Young Enterprise student interviews.

Instrument Nine: Young Enterprise Company reports.

Theme 6: Risk taking and failure, which are integral aspects of running a small enterprise/business activity, are powerful forces in student learning. Investigated by:

Instrument Four: *Young Enterprise Company observation.*

Instrument Five: *Student questionnaire.*

Instrument Six: *Young Enterprise student interviews.*

Instrument Seven: *Employer interviews.*

3.13 Research Objectives and Links to Themes for Investigation

Research is a combination of both experience and reasoning. Mouly (1978) has perhaps given one of the most definitive statements on research and states that it is a process of arriving at dependable solutions to problems through the planned and systematic collection, analysis, and interpretation of data. Research advances knowledge, promotes progress, and enables man to relate more effectively to his environment, to accomplish his purposes, and to resolve his conflicts. Mouly then goes on to say that theories constitute an attempt to make sense out of what we know concerning a given phenomenon. Theory identifies critical areas for further investigation: it is a source of new hypotheses and hitherto unasked questions. Bassey (1999) similarly refers to research as something, which is systematic, and at the same time is a critical and self-critical enquiry, which aims to advance both knowledge and wisdom.

The main objectives of this research study, and how they link to the themes for investigation, are as follows:

1. To investigate effective Experiential Learning in Business Education: this links with theme one *'that work related Experiential Learning is an effective mechanism for student learning in Business Education'* and theme two *'that employers consider work related experiential approaches to Business Education as being of most value'*.

2. To investigate learning within holistic real business scenarios which operate within the Business Education curriculum: This links with theme two *'that employers consider work related experiential approaches to Business Education as being of most value'*; with theme three *'that Experiential Learning requires particular conditions which may be limited by organisational constraints'*; and with theme four *'that Experiential Learning enables students to contextualise and evaluate theoretical perspectives in a practical setting, and at the same time provides them with a social and interactive learning process which will involve integration between theory and practice'*.

3. Within objectives one and two above, to investigate the concept of risk and the concept of failure as tools for effective learning. This links with theme six *'that risk taking and failure, which are integral aspects of running a small enterprise/business activity, are powerful forces in student learning'*.

4. To investigate employer-perceptions of work-related Experiential Learning. This links with theme five *'that theory and application can be*

5. *effectively combined within a real work curriculum model and that operating realistic business activities can enhance student understanding in a more effective way than work experience'.*

3.14 Rationale for Methods Chosen

In this research study four main groups have formed the focus of the investigation. These were students in schools and FE and sixth form colleges; students taking part in the Young Enterprise Programme; teachers and finally employers. Most of the information and data that was obtained from these groups was primary data. Only in the case of the Young Enterprise Company Reports was secondary data utilised. In conducting primary research with these four groups, the choice facing the researcher was the following:

- Questionnaires
- Interviews
- Observation

There were three main considerations in deciding which of these methods were selected to investigate the themes. The first of these concerned practicality. Time and cost of the methods chosen was an important consideration. For example, interviews and observations can be both costly and time consuming. However, in the case of this research study the researcher was in a favourable position in that his dual role, as a teacher educator and as an advisor for the Young Enterprise Programme, enabled relatively straightforward access to students, groups of students operating

Young Enterprise Companies, and teachers. Often, interviews and observation of students were conducted whilst schools or colleges were being visited for other purposes, linked to the researchers other roles. Similarly with employers, contact and subsequent access to these was arranged through the Young Enterprise Programme. The second aspect of practicality related to personal factors. In choosing individual and group interviews of students the researcher was confident of being able to relate to this particular age group, and ensuring that they were cooperative. Similarly with teachers and employers, the researcher was able to utilise some existing networks and contacts in order to facilitate meetings. Clearly there are implications here in respect of insider/outsider research (see chapter 3, section 3.2) and the researcher was careful to take account of these when working with all of these groups. The final aspect of practicality that needed to be considered was the actual topic for research and what methods would be most suitable. With the Young Enterprise Companies the aim was to try and find out about the workings of these groups and how they might facilitate student learning. With individuals (students, teachers and employers) the aim was to gather personal opinion and information on aspects of learning in classrooms and the workplace, and learning as individuals and as part of a group. Interviews (see chapter 3, section 3.8) were chosen here as they can provide more comprehensive insights into the participants thinking than questionnaires. They can also provide an opportunity to ask follow-up questions, when information provided is not always clear. Questionnaires (see chapter 3, section 3.9) were also used in order to give greater breadth to the information collected as they can reach more participants. The other advantage here is

that they are easier to repeat if necessary (which may have been the case with students, if a large number of questionnaires had been spoiled) Observation (see chapter 3, section 3.10) was also used, again to add breadth to the information collected, and because it is probably the most effective way to see what people do and to hear what they say.

The researcher aimed to combine a number of methods in order to increase the reliability of the research. Hence, whenever possible against each of the themes chosen for the main study a number of methods were used to obtain information. This use of different methods and data sources is known as triangulation, and the more agreement there is of different data sources on particular issues, then the more reliable the interpretation of that data will be. According to Briggs and Coleman (2007) there are 2 main types of triangulation: the first one uses several methods to explore the same issue (methodological triangulation) whilst the second asks the same questions with different participants (respondent triangulation). Using many data sources enables corroboration of evidence and can enable the researcher to move closer to "truth". Robson (2002) has said that triangulation is particularly valuable in the analysis of qualitative data where the trustworthiness of the data is always a worry. It provides a means of testing one source of information against other sources. Once the research was underway this approach proved its value. One example being an apparent contradiction from employers in their responses to the value of students working in groups (see chapter 4, section 4.3), and here the use of different sources enabled a more balanced judgement to be made about the evidence presented.

The second consideration, in deciding which methods were selected, related to ethics. This has already been discussed in some detail (see chapter 3, section 3.1) and the researcher is confident that the methods chosen did not contravene any ethical guidelines. Indeed, the researcher was fortunate in that permission to undertake interviews and surveys was obtained relatively easily and none of the methods chosen had to be rejected because of ethical difficulties. Also, once the research was underway there were no instances where methods proved to be unsuitable or caused distress to participants.

The final consideration in deciding which methods were selected, relates to the theoretical considerations and the perspective, which the researcher was operating in. The epistemology and ontology underpinning the research has been discussed already (see chapter 3, section 3.4) and the paradigm that has guided the researcher is that of a mixed methods approach. Using a combined or mixed method approach when undertaking research does not of course necessarily provide a balance between the shortcomings of one approach and the strengths of another. The key issue is to ensure that the approach chosen is one that best addresses the questions asked.

In addition, although research methods chosen should be determined for the most part by the aims and context of the project, they should also have regard to quality criteria (Briggs and Coleman, 2007). The concepts of validity, reliability and triangulation are important in this respect. These concepts were originally developed with quantitative research in mind, although they are still important for qualitative approaches. Validity refers to the appropriateness of

the methods used in undertaking a research study, whilst reliability refers to issues about the quality of the data. It is important to consider validity and reliability as early as possible in the research process: this is in order that the data gathered is both relevant and of high quality. Validity can be defined as the extent to which the explanations of phenomena match reality. For a valid result the researcher has to ensure accurate measurement of the phenomenon under study. To help achieve validity it is important that the researcher continually assesses assumptions, revises results, and reappraises the limitations that have been set for the study (Symon and Cassel, 1998). Reliability is concerned with the accuracy of the data produced by the research methods and techniques, and relates to how certain the researcher can be that any other person using the same research instrument will not influence the answers of the respondents. Reliability in this respect is less of an issue when the instruments used are quantitative. However, when the methods used are qualitative, then interpretations are bound to be subjective, as it is not possible to separate one's own feelings and opinions from the research. However, in cases such as this and in order to increase reliability, the researcher tried not to misinterpret data or be careless in recording. Also, Briggs and Coleman (2007) have pointed out, in single-handed research (such as in this study), the interviewer and the researcher are the same person although they do point out that the key to reliability is a highly structured instrument.

To summarise this section, in choosing the methods the researcher attempted to meet the practical, ethical and philosophical considerations faced in any

research study. At the same time, the aim was to investigate each theme in the main study in a thorough and systematic way.

3.15 Summary

If the design of a research study is sound then it will produce results, which are deemed to be credible, and at the same time it will eliminate or at least reduce sources of error (McMillan and Schumacher, 2000). The design chosen has been arrived at after a long process, which initially began with a small piece of research: this was reassessed in the light of a literature review, and then subsequently provided the genesis for the formulation of a more precise set of themes for investigation, and measurement techniques. The researcher is confident that this approach has enhanced the quality of the project and minimised any potential sources of error and distortion.

Once the research design and measurement techniques had been decided upon, then the research proceeded in two phases. These will be referred to as the initial study, and the main study. The initial study had four specific objectives, along with four instruments designed to gather information and provide an insight into those objectives. Subsequently, the findings from the initial study were used to inform the development of the themes for investigation for the main study. Thus, the following chapter will consider the results from the initial study and will explain how they helped develop the themes for the main study.

CHAPTER 4

Results from Initial Study and Link to Main Study

This chapter will consider the results from the initial study, and show these led to the development of the main study. The chapter begins by looking at the sample(s) used and their context. The chapter will then consider the objectives of the initial study. This is then followed by a presentation of the findings from the 4 main areas of the initial study. Finally, those findings are summarised and it will be shown how they linked to, and helped inform the research themes in the subsequent main study. The information presented here formed the initial study, and because of this then only the most significant findings are dealt with. This has been done to contextualise what follows in terms of the main study, and also to save the time of going into unnecessary detail about the initial study.

4.1 Context and Sample

In the initial study, four specific objectives were distinguished, along with four instruments designed to gather information and provide an insight into those objectives. The first objective was to survey approaches to Business Education in the 16-19 age range in a number of institutions in the North West, with regard to experiential approaches to teaching and learning. It was decided to use a postal questionnaire to schools, further education and sixth form colleges to provide information on this. The second objective was to survey employers as to what they perceive should be the vital components of Business Education courses in the 16-19 age range. Again, it was decided to

use a postal questionnaire to obtain this information. Thirdly, and to provide more detail to the survey of schools and colleges, it was decided to observe and describe the work of three institutions involved in delivering Business Education, with specific reference to experiential approaches. The information for this objective was gathered by observation of classroom activities. The final objective was to observe and describe the work of the Young Enterprise Scheme in at least five institutions.

Information on the samples for these 4 instruments is as follows.

a. Schools, Further Education and Sixth Form Colleges Survey

A survey, via postal questionnaire, of Schools, Further Education Colleges and Sixth Form Colleges in the North West was undertaken. A total of 56 institutions were included in the survey. (40 schools and 16 Further Education and Sixth Form Colleges) These institutions comprised a broad range in terms of inner city/suburban and covered a range of socio-economic backgrounds. Prior to the main survey, ten pilot questionnaires were sent out (7 to schools and 3 to Further Education and Sixth Form Colleges). Pilot questionnaires were also issued to 2 members of staff at Edge Hill University to obtain a critical evaluation of the questions asked. The final questionnaire comprised 20 questions, which were broadly analytical/relational, although question 12 was enumerative. The questionnaire was divided into two broad categories:

- the underpinning principles on Business Education courses and the extent to which they might encourage risk taking; and,

- the skills developed by students whilst undertaking a Business Education course.

The main survey secured a response rate of 29 out of 56 questionnaires (a 52% return), with 16 responses from schools and 13 responses from Further Education and Sixth Form Colleges.

b. Employer Survey

A survey, via postal questionnaire, of employers on Merseyside was undertaken. A total of 52 employers were included in the survey and they ranged from SME (Small and Medium Enterprises) up to larger private and public companies. Prior to issuing the main questionnaire a small pilot was undertaken with a group of employers who were involved as advisers on the Young Enterprise Programme. The final questionnaire was divided into two broad categories:

- questions 1 to 11 dealt with the main principles which might underpin projects/problems on a Business Education course in the 16-19 age range and the extent to which they might encourage risk taking; and,
- questions 12 to 18 related to the development of skills (important to potential employers) and therefore which might be considered important in terms of their development in Business Education courses for 16-19 year olds.

The main questionnaire secured a response rate of 20, out of a total of 52 postal questionnaires issued (38% response rate and about the norm for a postal return).

c. Classroom and Young Enterprise: Observation and Description

Details of the classes and class sizes, which formed the main focus of the observation, were as follows:

1. FE College 1st year Vocational Business: 15 students
2. School 1: 1st/2nd year (combined group) Vocational Business: 13 students
3. School 2: 2nd year Advanced Level Business: 8 students

The methods used in this part of the project were: observation (twice for each class which gave a total of 6 observations), and some discussion with teachers who taught the classes. The topics covered in the lessons were as follows:

1. FE College 1st year Vocational Business. Lesson title: Break-even analysis.
2. School 1: 1st/2nd year (combined group) Vocational Business. Lesson title: promotion and advertising.
3. School 2: 2nd year Advanced Level Business. Lesson title: teams and team motivation.

For the observation of Young Enterprise Companies, similar guidelines were

followed in respect of the methods used and the ethical considerations. Five Young Enterprise Companies were investigated: these Young Enterprise companies were based in both schools (3) and FE colleges (2).

4.2 Results: Schools, Further Education and Sixth Form Colleges Survey

Three of what are considered to be the most important findings will now be discussed. In analysing the results of this aspect of the survey, groups of questions were singled out as having a more experiential and practical bias: these were questions 1, 2, 5, 8, 10 and 11. Respondents were asked similar questions for both Vocational and Advanced Level courses in Business Education, and were asked to respond on a five point scale of very strongly agree, strongly agree, agree, disagree of strongly disagree. In table 1 (schools only) and table 2 (Further Education and Sixth Form Colleges) the cumulative percentages of respondents who very strongly agreed or strongly agreed with similar statements have been shown.

In table 4a, which shows the responses to practical questions for schools only, it can be seen that when questioned about incorporating practical activities as part of the teaching programme, there was a trend in favour of Vocational programmes as compared to A-Level programmes. This was most marked on questions 1, 2, 5, and 8. Question 10 (working in groups) brought a response, which was similar for both Vocational and A level. Question 11 (case studies) brought a response in favour of A Level rather than Vocational courses.

Table 4a Responses to practical questions for schools only.
Cumulative % for very strong or strong agreement
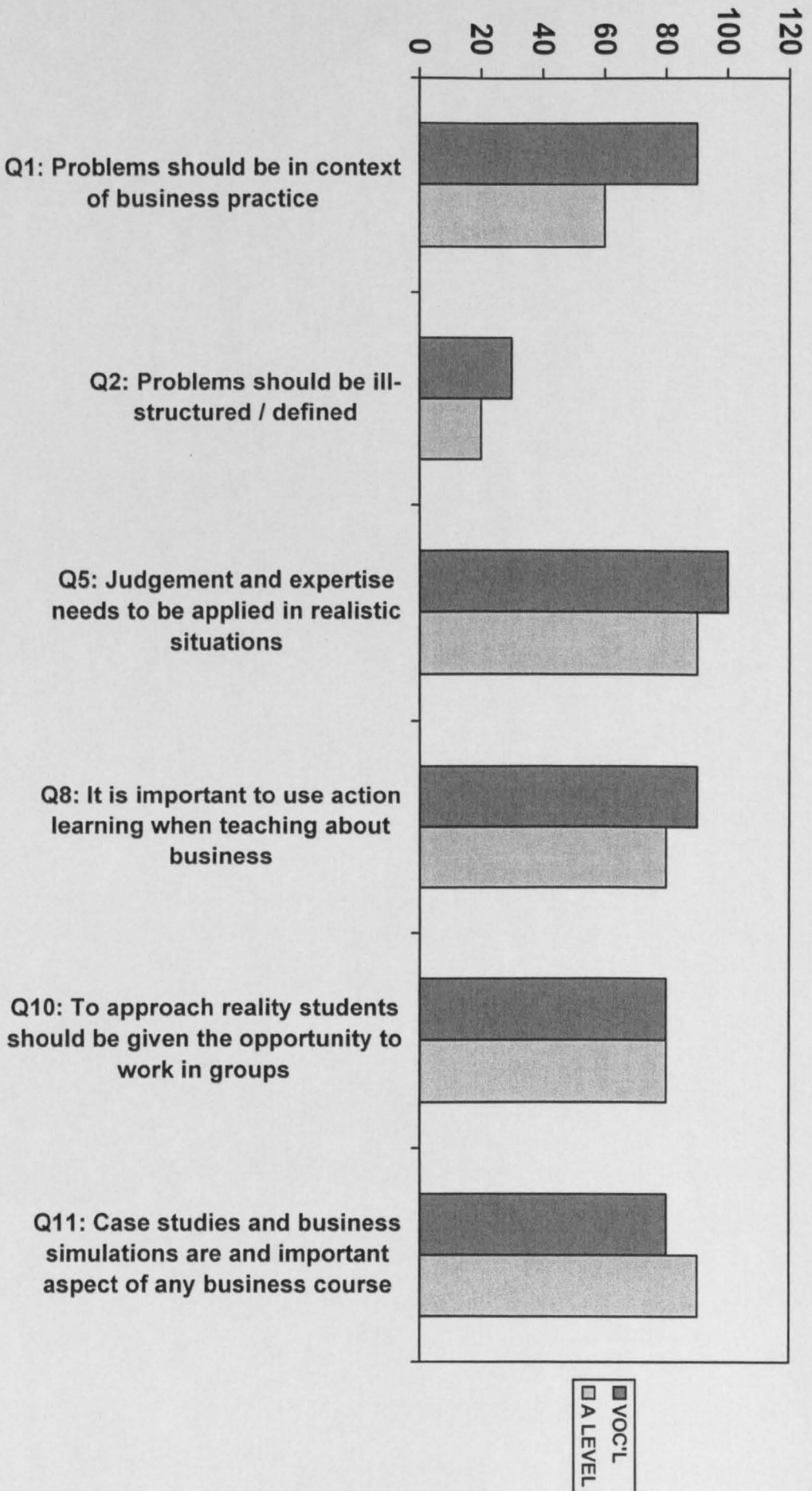
In table 4b, which shows the responses to practical questions for Sixth Form and Further Education Colleges only, it can be seen that when questioned about incorporating practical activities as part of the teaching programme, again there was a trend in favour of Vocational programmes as compared to A-Level programmes. This was most marked on questions 5 and 10. Questions 1, 2 and 8 (problems should be in the context of business practice; that problems should be ill-structured/defined; and it is important to use action learning when teaching about business) brought a response similar for both Vocational and A level. Similar to the response from schools, question 11 (case studies) brought a response in favour of A Level rather than Vocational.

Table 4b Responses to practical questions for FE/Sixth Form Colleges only. Cumulative % for very strong or strong agreement

Q1: Problems should be in context of business practice

Q2: Problems should be ill-structured /defined

Q5: Judgement and expertise needs to be applied in realistic situations

Q8: It is important to use action learning when teaching about business

Q10: To approach reality students should be given the opportunity to work in groups

Q11: Case studies and business simulations are an important aspect of any business course

■ VOC'L
□ A LEVEL

Table 4c Combined responses to practical questions for Schools, FE/Sixth Form Colleges. Cumulative % for very strong or strong agreement

Q1: Problems should be in context of business practice

Q2: Problems should be ill-structured /defined

Q5: Judgement and expertise needs to be applied in realistic situations

Q8: It is important to use action learning when teaching about business

Q10: To approach reality students should be given the opportunity to work in groups

Q11: Case studies and bsuiness simulations are an important aspect of any business course

■ VOC'L
□ A LEVEL

Table 4c shows the combined responses to practical questions for schools, Sixth Form and FE Colleges. Here it can be seen that there is a trend in favour of Vocational for all questions except question 11. Question 11 asked if case studies and business simulations should be an important aspect of a Business Education course. The responses to this question went against the trend (as noted on questions 1, 2, 5, 8 and 10), which had indicated a stronger practical bias on Vocational business courses. Case studies and business simulations are certainly long established methods of teaching and learning on Advanced Level Business courses, whilst in the case of Vocational Business courses it can be more of a challenge to use these as teaching tools.

The more interesting finding concerned question 2, which asked whether problems should be loosely structured and that similar to managers, students need to confront ambiguous, ill-defined situations and make sense of them. The responses to this averaged just 17.5% for both schools and Further Education and sixth form colleges (very strongly agreed or strongly agreed). This was seen as a low response and was somewhat surprising in view of the fact that one would expect business courses to try, as far as possible, to mirror the activities of the business world where managers are constantly faced with uncertainty. It could also indicate that teachers were taking a very structured approach to lessons and perhaps not giving students opportunities to solve problems using heuristic methods as well as logic. As will be shown shortly, the response to this particular question was important in helping to inform the themes for the main study.

Question 12 asked what percentage of time was spent on the activities referred to in questions 1 to 11. The results for schools showed a stronger trend in terms of Vocational Business in this respect; with a higher mean value for Vocational Business than Advanced Level Business (57 compared to 43). The results for Further Education and Sixth Form Colleges also showed a stronger trend in terms of Vocational Business: with a higher mean value than Advanced Level Business (68.8 as opposed to 50.5). It should be noted that these mean values in Further Education and Sixth Form Colleges, as compared to schools, are higher for both Vocational Business and Advanced Level Business (with mean values of 68.8 to 57 and 43 to 50.5 respectively). Combining the mean values for schools, Further Education and Sixth Form Colleges clearly indicates the overall trend in favour of Vocational Business.

Overall, what the postal survey was appearing to indicate was a difference in the approaches that were being used on Vocational Business courses as opposed to Advanced Level courses. There were also some very interesting contrasts in some of the answers given. For example, the question, *judgement and expertise needs to be applied in realistic situations*, got a combined response, in terms of agreement, of over 80%. The question, *problems should be in the context of business practice*, also got a strong combined response, in terms of agreement, of almost 80%. Now from this one might assume that in attempting to create that business context and realism, then teachers would be looking to develop activities, which enabled students to apply judgement in a range situations, some of which might be fairly predictable but others less so. However, the responses given to the

question, *problems/tasks should be ill structured and, similar to managers, students need to confront ambiguous, ill-defined situations and make sense of them,* only got a combined response, in terms of agreement, of 18.75%. Given the responses to the other two questions, then one would have expected this to be much higher. The response to this question also contrasted to the information that had been gained from the Young Enterprise Company observation, where it was seen that for most of the time problems were ill-structured, and that actually students seemed to enjoy this, and it improved their motivation for learning. Again, as will be seen shortly, this apparent contradiction in some of the answers to the questionnaire, along with the contrast this provided with the Young Enterprise observation helped to inform the development of the themes for investigation in the main study.

4.3 Results: Employer Survey

Similar to the questionnaire to schools and Further Education and Sixth Form Colleges, the employer questionnaire utilised a 5 point scale through from strongly agree, agree, neither agree nor disagree, disagree and strongly disagree. The cumulative percentages of respondents who very strongly agreed or strongly agreed with certain statements have been shown in table 4d. Similar to the tables for schools and Further Education and Sixth Form Colleges, table 4d shows the responses to the more practical questions which were identified as 1, 2 5, 8, 10 and 11. The strongest responses came on questions 1, 5 and 11, which returned percentages of 58%, 80% and 76% respectively. Question 8 showed a 46% agreement whilst the lowest agreement was on questions 2 and 10 with 35% on both.

Table 4d Responses to practical questions for Employers. Cumulative % for very strong or strong agreement
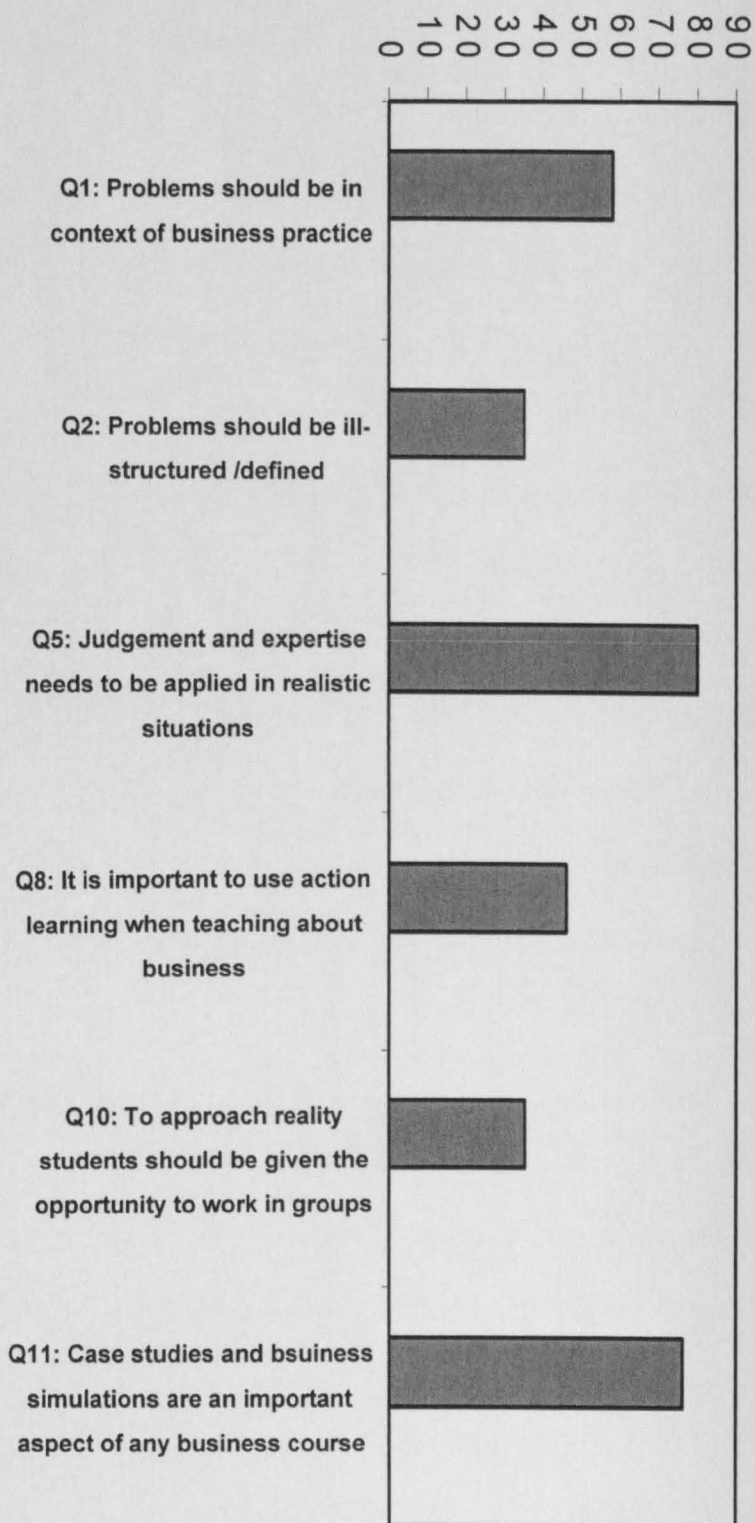
The employer responses to these questions provided a number of interesting differences to those from schools and Further Education and Sixth Form Colleges. The differences between the 2 groups are most marked on questions 1, 2, 8, and 10. These responses to these questions will now be considered further.

Question 1, *problems/tasks should be in the context of professional business practice,* got a strong response, in terms of agreement, from both groups. However, the employer response rate (58%) was much lower than the response from schools and Further Education and Sixth Form Colleges (80.75%).

Question 2, *problems/tasks should be ill structured and, similar to managers, students need to confront ambiguous, ill-defined situations and make sense of them,* has already been referred to as one which provided some apparent contradictions. For schools, Further Education, Sixth Form Colleges and for employers this question produced a low response. However, the response from employers (35%) was almost double that from schools and Further Education and Sixth Form Colleges (18.75%). This prompted some further thought around this particular question, as it is very much about students being able to have opportunities to confront uncertainty, and in turn learn how to cope with that and learn from it. Again, the employer response to this question also contrasted sharply with what had been observed in the Young Enterprise Companies.

Question 8, *action learning in management is about groups working together, reflecting on past experience, using that to understand current problems, developing new solutions and ultimately changing their behaviour. It is important to use similar methods when teaching students about business,* got an employer response rate, in terms of agreement, of 46%, which was just under half that for schools and Further Education and Sixth Form Colleges (74.5%).

Question 10 had asked: *To approach reality, it is important that students are given the opportunity to work in groups.* Here the employer response rate (35%) was less than half of that from schools and Further Education and Sixth Form Colleges (84.25%).

Here there really was a significant difference in the responses and level of agreement for questions 8 and 10. This was surprising in one way as it might have been expected that employer responses would be very much in agreement with the need to work in groups. The response could possibly have been down to a misunderstanding of the question as in a later set of questions about skills development, there was a very positive response from employers on the importance of students communicating effectively in groups.

Table 4e Responses to practical questions for Employers and Schools/FE/6th
Cumulative % for very strong or strong agreement

Q1: Problems should be in context of business practice

Q2: Problems should be ill-structured /defined

Q5: Judgement and expertise needs to be applied in realistic situations

Q8: It is important to use action learning when teaching about business

Q10: To approach reality students should be given the opportunity to work in groups

Q11: Case studies and bsuiness simulations are an important aspect of any business course

■ Employers
□ Schools/FE/6th

The questions on skills development (questions 12-18, and shown in table 4f) brought forth very strong responses across all of the questions, although this was particularly the case in communications and teamwork. (further reinforced in some of the employer commentaries: see below) These responses linked with some of the findings on Young Enterprise companies, where communication in particular, was singled out as being important.

However, as indicated in the previous section, there was a contrast here in terms of the response that was given about working in groups. In question 13 (importance of communicating in groups), there was a positive response from all the employers. In an earlier question, as already noted, the positive response of just 35% on the importance of working in groups did provide a sharp contrast to this. It will also be seen later on that when employers were interviewed as part of the main study they were positive about the importance of working as part of a team. This will be referred to again later in the thesis but to illustrate the point of contrast, 2 of the comments from the employer interviews are provided here:

"They can work as part of a team".

"The student is usually given an actual role to undertake and is part of a team and so needs to learn to participate and to keep up".

Table 4f Employer responses to questions 12-18.
Cumulative % who thought these skills were very important and important

Q18: Ability to take an holistic view of business

Q17: Coping with change

Q16: Dealing with uncertainty

Q15: Problem solving

Q14: Working as a member of a team

Q13:Communication with groups

Q12:Communication with individuals

120 100 80 60 40 20 0
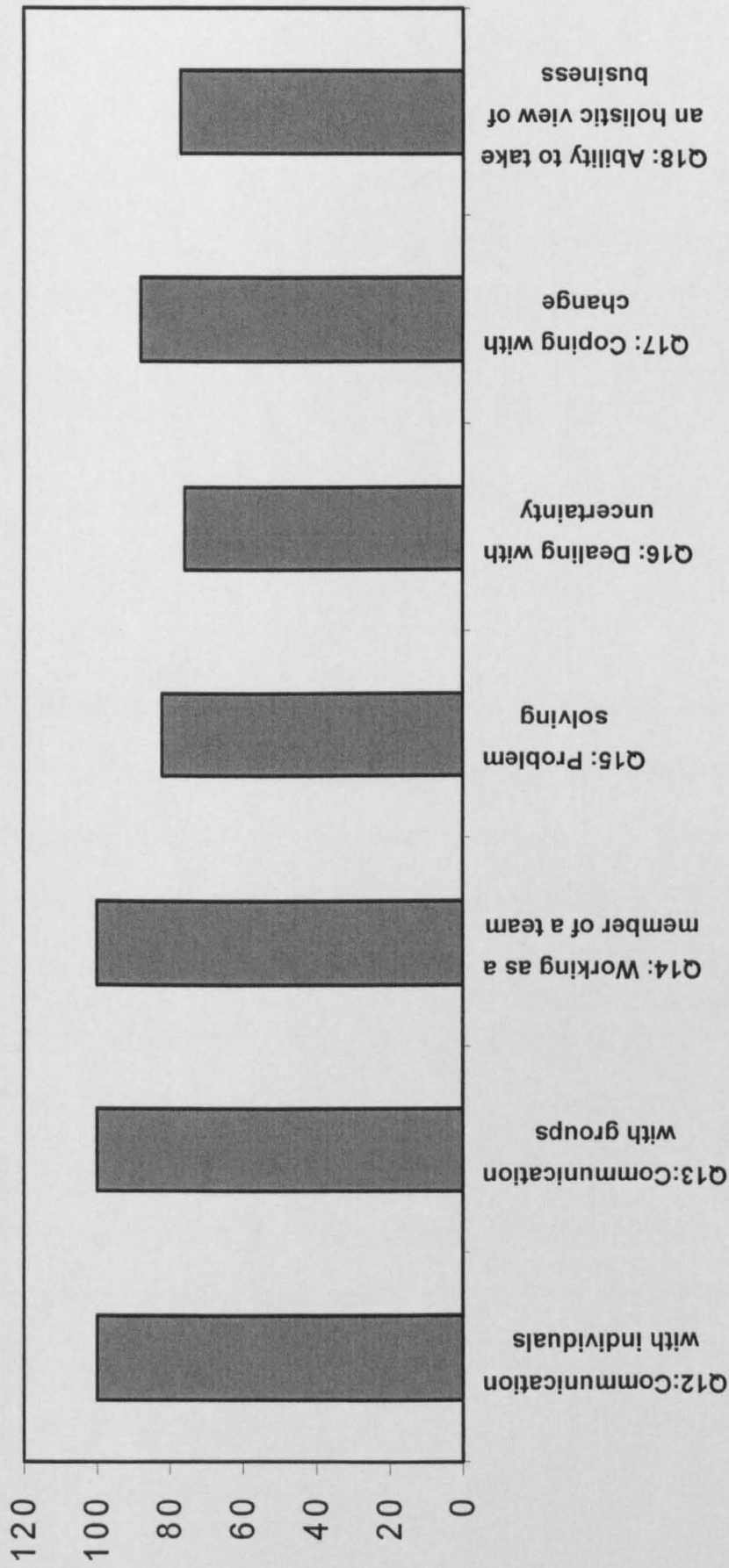
The final part of the employer questionnaire gave an opportunity for further comments based on two prompting statements, which were:

1. To what extent would you say that business courses are preparing students to enter industry/commerce in junior management positions.

2. In what ways do you think that business courses might better reflect the needs of employers.

Out of the 20 returned questionnaires, 11 employers made further comments on these two areas. The most interesting of these were:

• 5 employers who commented on the need for students to become familiar with the notion of failure as part of their experiences from 16 to 19. This was interesting in view of teacher comments (see later under section on classroom observation) that the dominant pressure in 16-19 education is student achievement: that pass rates have become a uniting focus, and that syllabus requirements often drive staff to adopt whatever approach is most successful;

• 4 employers who mentioned the need for students to develop flexibility and adaptability in their approach to employment and solving problems: this supported the response on question 17 on the need to be able to cope with change (almost 90% agreement). Although in some ways it contradicted the question on the importance of confronting ill-structured and ambiguous problems;

- 6 employers commented on the importance of students arriving at work with generic skills, and then went on to say that communication and teamwork skills were particularly valued; and,

- 4 employers pointed out that business courses appeared to have changed very little in the past twenty years and that there was too much emphasis on ticking boxes rather than focusing on what is practically relevant. One referred to a force fed production line approach, which does not prepare the individual student to adapt to the real world.

4.4 Results: Classroom Observation and Description

This aspect of the investigation had its limitations in that the time of year/ stage of the syllabus being studied can often dictate the type of teaching and learning activities, which are undertaken by students. As part of the classroom observation, feedback was given at the end of the observation to teachers as well as students. In giving feedback to teachers, there was also some further discussion about the teaching and learning process on Business courses.

Overall, the findings from the classroom observation tended to support some of the findings from the postal questionnaires, although it became clear that in order to obtain more reliable evidence more in-depth interviewing of teachers would be needed. The following points were deemed most interesting in terms of this initial study, and subsequently helping to inform the main study.

1. Experiential activities were being used more on Vocational Business as

2. compared to Advanced Level Business, which tended to have more of an emphasis on didactic approaches. This inference came from the observations in the FE College and school 1, which were then compared to the observation in school 2.

3. In all of the classes observed (in the FE College and in schools 1 and 2), when experiential approaches were used there was often a failure to effectively reflect on the activity leading to student uncertainty about links with the syllabus. One example of this was when a teacher used an experiential activity based on fixed and variable costs linked to varying levels of production in an imaginary business. The exercise involved students working in teams and deciding on levels of output, selling price and advertising expenditure. Each group was in competition and won orders based on how well or badly their decisions compared with other groups. The exercise illustrated a number of concepts (perfect competition; variable and fixed costs; pricing strategies and simple profit and loss accounts) and could well have formed the basis of several subsequent lessons. However, students only spent about 15 minutes at the end of the lesson thinking about pricing strategies. In the view of the observer this was a missed opportunity.

4. Overall, teachers seemed clear on the importance of a variation in teaching styles and were aware of the references to them in examining board literature. In the Further Education College, experiential approaches were used fairly extensively as part of the induction

5. programme but then apparently very little later on. However, there was a variation in this level of usage, both in terms of individual members of staff and/or the particular Vocational Business module being studied.

6. The teacher of the Advanced Level Business course did say that case studies formed an important part of advanced level business courses, although there was little evidence of this in the 2 lessons observed.

7. One teacher, working in Further Education, but with a schools background, felt that Further Education Colleges have greater flexibility in terms of their timetabling which enables them to incorporate more flexible, activity-based approaches.

8. Discussions with two other Further Education teachers indicated that the industrial/commercial background of a higher proportion (as compared to schools) of the teaching staff in the Further Education sector often made them more willing to use experiential/activity based approaches.

9. Teachers in both schools and Further Education/Sixth Form Colleges mentioned time as a severe limitation on the types of activities which could be undertaken: one teacher pointed out that case studies were often only used on the basis that they could be completed in a set number of lessons. This comment linked in to the pressure, which teachers felt in terms of achieving certain student pass rates.

4.5 Results: Young Enterprise Observation and Description

Some of the more interesting findings from this part of the investigation were as follows.

1. The Young Enterprise process (starting with the concrete experience of setting up and running a real business venture; followed by reflection on that experience through an examination, the writing of a formal company report, and participation in competitive events organised by Young Enterprise; and then subsequently modifying the operation of the business based on those reflections) would appear to encourage students to complete all stages in the learning cycle and equip them better for the total process of learning. In a small number (3) of informal discussions, students were asked to consider a model of the Kolb learning cycle and to comment on its relevance in terms of their own Young Enterprise experiences. For the researcher, this was a particularly interesting encounter and students could clearly see how this model fitted with their experiences. Some of them then went on to highlight the importance of reflecting on failure and success as a way of improving future performance. All students commented on how they learned from their experiences and were able to modify their future behaviour in terms of the operation of their Young Enterprise company.

2. Linked to the reflective experiences referred to above, students involved in setting up and running a Young Enterprise company were able to reflect over an extended period (in this case approximately 9 months);

test out new concepts and generalisations; and then apply that learning in new situations.

3. Students were enthusiastic about the opportunity that setting up and running a Young Enterprise company gave them in terms of 'sampling' and making a contribution to a number of the functional business areas within their Young Enterprise Company. One or two students then went to contrast this to their experiences of business in the classroom where the approach was to deal with the functional areas of a business in a more separated and individual manner.

4. Students involved in setting up and running a Young Enterprise company also pointed to the opportunities it gave them for risk taking, and experiencing the reality of business, and how in turn this enabled them to learn more.

4.6 Main study: themes for investigation and links to initial study

In the initial study, four specific objectives were distinguished. These were as follows:

1. To survey approaches to Business Education in the 16-19 age range in a number of institutions in the North West, with regard to experiential approaches to teaching and learning.

2. To survey employers as to what their perceptions are related to the vital components of Business Education courses in the 16-19 age range.

3. To provide more detail to this survey by observing and describing the work of three institutions involved in Business Education, with specific reference to experiential approaches.

4. To observe and describe the work of the Young Enterprise Scheme in at least five institutions.

Following on from the initial study, six themes for further investigation were developed. These themes for further investigation emerged in two ways: firstly from the findings from the initial study and secondly from aspects of the literature. To illustrate, each of these themes will now be listed along with an indication of how each was developed based upon what had emerged from the initial study. Following this there will also be a return to some key aspects of the literature to demonstrate how that also informed the themes for the main study.

Theme 1: Work-related Experiential Learning is an effective mechanism for student learning in Business Education.

Developed from: Young Enterprise Company observation, which provided an indication of students learning from the experience of running their own company. The survey of schools, Further Education and Sixth Form Colleges provided some contrasting findings, which have been referred to earlier. One example are the questions, *judgement and expertise needs to be applied in realistic situations,* which got a combined response, in terms of agreement, of over 80%, as did the question *problems should be in the context of business practice.* Yet in contrast, the question, *problems/tasks should be ill structured and, similar to managers, students need to confront ambiguous, ill-defined*

situations and make sense of them, only registered a combined response, in terms of agreement, of 18.75%.

Theme 2: Employers consider work-related experiential approaches to Business Education as being of most value.

Developed from: survey of employers, observation of Young Enterprise Companies and some discussion with employer and teacher advisors to those companies.

Theme 3: Experiential Learning requires particular conditions, which may be limited by organisational constraints.

Developed from: survey of schools, Further Education and Sixth Form Colleges, survey of employers, observation of Young Enterprise Companies, and some discussions with teachers. There was an apparent dichotomy between schools, Further Education and Sixth Form Colleges, in terms of their approach to Vocational Business and Experiential Learning. A contrasting learning environment was provided through the observation of Young Enterprise companies, where students were based in a much more informal and relatively unstructured environment. Finally, some of the discussions with teachers indicated that they could be constrained by the limitations of timetabling; staffing, and perceptions of how teaching and learning should be undertaken.

Theme 4: Experiential Learning enables students to contextualise and evaluate theoretical perspectives in a practical setting, and at the same time

provides them with a social and interactive learning process which will involve integration between theory and practice.

Developed from: observation of Young Enterprise Companies, and survey of employers. The findings here appeared to indicate that virtual real work in the curriculum, via the operation of a small business enterprise, can achieve curriculum aims, and provide an experience of work-based learning which could possibly be more beneficial than time spent out of school/college on work experience. In this respect the findings appeared to be providing a challenge to the more traditional approaches to work experience.

Theme 5: Theory and application can be effectively combined within a real work curriculum model and that operating realistic business activities can enhance student understanding in a more effective way than work experience.

Developed from: observation of Young Enterprise Companies, and survey of employers. The observation of Young Enterprise Companies did indicate that students were learning about business as they went through the process of running a company. The employer survey indicated that employers wanted to see business courses focusing more on what is practically relevant.

Theme 6: Risk taking and failure, which are integral aspects of running a small enterprise/business activity, are powerful forces in student learning.

Developed from: observation of Young Enterprise companies suggested that risk and failure are important both in terms of motivation and student learning. In contrast, evidence from teachers and from classroom observation seemed to indicate that they are given low priority, (and possibly even discouraged),

when planning teaching and learning strategies. Further contradictory evidence on this issue also came from the questionnaire to both schools and Further Education and Sixth Form Colleges and to employers. In particular, question 2 in this questionnaire, which had asked, if: *problems/tasks should be ill structured and, similar to managers, students need to confront ambiguous, ill-defined situations and make sense of them.* The response to this question from both groups was low (although the employer response was almost double that from schools and Further Education and Sixth Form Colleges), and seemed to indicate that there was not much agreement from these 2 groups on the need for students to be able to experiment with uncertain scenarios and possibly take risks and fail whilst doing so.

4.7 Main study: themes for investigation and links to literature

The literature has already been reviewed in some detail in chapter 2 and it is not the intention to replicate that here. However, this section will provide some examples of how aspects of the literature helped to inform the development and refinement of the themes for the main investigation.

The first example is from Rogers (1983), who defines personally meaningful learning as something that is significant to the learner, discovered by the learner, through the learner's own experience, thoughts and feelings. This occurs under conditions where the leaner is personally involved, has initiated the involvement, self evaluates the experience according to their own criteria and creates meaning by drawing on all aspects of the experience. For formal education contexts to mirror these, students need to be given freedom to

responsibly direct their own learning and to be free to themselves. This calls upon their own diverse previous experience, interest and curiosity; exploring issues in ways best suited to them individually and actively participating in deciding what is to be done as a class and individually. This helped to inform and refine themes 1, 3, 4 and 5.

Secondly, there is the work of Fuller and Unwin (1998) who discuss the importance of trying to design a framework for students in which they have the opportunity to develop and apply their theoretical and conceptual knowledge in the work situation. At the same time such a framework will also enable students to think more critically about practice. They then go on to point to a number of theoretical positions, which can underpin the design, and development of effective and innovative learning programmes. These include the rejection of the formal and informal learning dualism; the rejection of the transmission model of teaching and learning which portrays the learner as passive recipient of knowledge; the recognition that new knowledge can be produced in practical as well as academic settings; that knowing is never context free; and finally recognition that learning is a social, collective phenomenon. This helped to inform and refine themes 4 and 5.

Thirdly, Hodkinson et al (2004) pointed out that it is important to recognise that the workplace can be a creative and motivating site for learning, which in turn enables the development of a high-quality work-based route. It then follows that any site for learning created in this way needs to combine both combine on- and off-the-job learning in an integrated and holistic way.

Similarly linked to this are a number of writers (for example, Revans, 1998; McGill and Beatty, 1995; Ofsted, 1998;) who have stressed the importance of the need to approach reality within teaching and learning and how this better prepares students for the changing world of work. Within business organisations, the need for adaptability and continual learning is largely framed within an active mould, with an emphasis on learning through experience: there is very little didactic teaching in industry and commerce. As has been outlined in this review of literature this is the type of learning, which is based upon collaborative action which is centred on real problems and issues. This helped to inform and refine themes 2, 3, and 6.

One of the main areas of investigation, the Young Enterprise Programme, which has at its centre, collaborative learning by doing within a realistic and holistic business framework, also has links with the concept of apprenticeship. Guile and Young (1998) point to growing evidence that as the organisation of work changes, then demands for more generic problem solving abilities and of greater levels of collaboration and devolved responsibility are emerging. These changes clearly emphasise the need for an approach to learning that links the way employee identities are formed to the increasingly collective character of work and supports a greater emphasis on self-reliance so that learners are able to cope with the changes in work that are taking place. According to Hawkins and Shohet (1989) such approaches create a learning culture and emphasise the potential that all different work situations have for learning, both individually and collectively. They ensure good practice emerges not from reaction to crises but from set members balancing all parts

of an activity, from action, to reflection, to new thinking, to planning and then back to action. They also enable individual set members take time out to reflect on their effectiveness, learning and development. This becomes a cooperative process rather than an individual one, and means that the group/set encourage feedback from each other; and this in turn ensures that learning and development are seen as active concerns, which result in action and further learning. This helped to inform and refine themes 1, 2, 4, 5 and 6.

Closely linked to this are the concepts of risk and failure, which are both inherent in the approach to learning, which is advocated here, and when problems and crises are seen as important opportunities for learning and development. Failure is seen as an event to be learnt from, rather than to be depowered by (McGill and Beaty, 2001). Alongside this, is the issue of the environment in which this approach would be most effective (which is also an attempt to further investigate the dichotomy apparent in the initial study). How far the German model of combining vocational education with an academic education might be applied to the British system will also be an issue for consideration. In Germany, as already noted, vocational training is mainly conducted in what is known as the dual system of vocational training, where trainees spend 3 to 4 days per week at their training enterprise and attend a state-run vocational school on the remaining days (OECD, 1994). Of course, this system is not without its problems: one of its characteristics is that learning takes place at two different locations (usually in an enterprise and in a school). This makes it necessary to harmonise the contents of the curricula

at different sites, which is more difficult than would be the case if training were conducted at a single site (OECD, 1994). This helped to inform and refine themes 3, 5 and 6.

Underpinning these aspects of literature were two key reports: the Howard Davies Report (2002), and the Leitch Report (2006). These have been referred to earlier and they too played a key part in formulating the themes for investigation in the main study. Along with aspects of the literature, the initial study indicated a greater emphasis on experiential approaches within Vocational Business courses as compared to A Level Business courses. This distinction was more marked when comparing Vocational Business courses in schools with Vocational Business courses in Further Education colleges. The observation of Young Enterprise Companies seemed to indicate how an experiential, work-based approach could enhance the learning process by improving student motivation and at the same time enable students and teachers to comply with the demands of the Business Studies syllabus. The employer survey broadly indicated a preference for more activity based/experiential approaches within business teaching. The other significant finding concerned risk taking, both as a motivating factor and as a driving force in pushing student learning forward: this emerged particularly from the observation of Young Enterprise Companies. There was a significant amount of contradictory evidence with regard to risk taking, and the opportunities which students are given to experience failure. Evidence from students and observation of Young Enterprise Companies would suggest that these are important both in terms of motivation and student learning. In contrast,

evidence from teachers and from classroom observation seems to indicate that these (risk and failure) are given low priority, and possibly even discouraged.

The initial study also appeared to indicate that teaching students about business in a holistic manner, and using a realistic business operation as a framework, could be more effective in improving students' learning capabilities and motivation. Linked to this, a question emerged on how far realistic work experience can be developed within the curriculum. A further significant finding was that virtual real work in the curriculum, via the operation of a small business enterprise, can achieve curriculum aims, and provide an experience of work-based learning which can be more beneficial than time spent out of school/college on work experience. In this respect the initial study also appeared to be providing a challenge to the more traditional approach to work experience. The themes for investigation in the main study were thus framed in order to try and provide further insight into the issues that the initial study, along with the literature, had raised.

4.8 Summary

According to Howieson et al (1997) it is because of change and the need for businesses to continually transform that the distinction between education, training and work is becoming increasingly blurred. There is the economic argument that a high skill economy calls for new types of skills and knowledge, which transcend the academic/vocational boundary, and make a clear case for the inclusion of work-related learning in the curriculum.

Similarly, Seltzer and Bentley (1999) have stated that in order to thrive in the future, learners must draw on their entire spectrum of learning experiences and apply what they have learned in new and creative ways. It would seem to follow from this that in turn, the education system needs to challenge long held assumptions and move away from established ways of teaching and learning.

The results from the initial study appeared to indicate a number of issues in relation to these two perspectives. In particular, an apparent dichotomy between educational institutions (in this case, schools and Further Education and Sixth Form Colleges) in their ability to offer more practical approaches to teaching and learning in Business Education. Secondly, there was evidence with regard to risk taking and failure (some of it contradictory) as being important forces in driving forward learning and which in turn might help students to cope better with change and uncertainty in the working lives. Finally, there was some evidence that combining theory and application within some sort of real work model might provide a challenge to more traditional approaches to learning in Business Education.

It was against this background that themes for investigation in the main study were framed, with the aim of going deeper into these issues. In the following chapter, the results of the main study will now be presented, along with some initial discussion of the implications. There will then be a more detailed analysis of the findings in chapter 10.

CHAPTER 5

Results from Main Study: Student Questionnaire

This chapter, and chapters 6, 7, 8 and 9, will consider the results from the main study. This particular chapter will focus on the results from the student questionnaire. In order to set the context for the presentation of the results from the main study, the chapter will begin by revisiting the instruments involved and their links to the research themes. There will then be some comment on the sample and context. This is then followed by a presentation of the findings from the student questionnaire. Where it is felt appropriate in order to give greater clarity, the data obtained from responses to particular questions will also be illustrated in chart format.

5.1 Instruments and Research Themes

The main study utilised 5 instruments. These are summarised in table 5a below:

Instruments for Main Study

Instrument	Number
1. Student Questionnaire (100 in schools; 20 in Further Education)	120
2. Young Enterprise Company Programme: student interviews	33
3. Employer Interviews	10
4. Teacher Interviews	10
5. Young Enterprise Company Programme: trading reports	9

Table 5a: Instruments for Main Study

For clarification in this chapter and for the subsequent chapters on the results, the research themes are now listed again, along with their links to each of the

instruments used in the main study. Once again, it can be seen that, at times, the instruments overlap/replicate. This was deliberate since, as was pointed out previously, the strength of almost every measure is flawed in some way or other, and therefore research strategies can be offset by counterbalancing the strengths of one instrument against the flaws of another. In other words this demonstrates how triangulation can improve the reliability of the findings.

Theme 1: Work-related Experiential Learning is an effective mechanism for student learning in Business Education. Investigated by:

Main study Instrument 1: Student questionnaire.

Main study Instrument 4: Teacher interviews.

Theme 2: Employers consider work-related experiential approaches to Business Education as being of most value. Investigated by:

Main study Instrument 3: Employer interviews.

Theme 3: Experiential Learning requires particular conditions, which may be limited by organisational constraints. Investigated by:

Main study Instrument 1: Student questionnaire.

Main study Instrument 4: Teacher interviews.

Theme 4: Experiential Learning enables students to contextualise and evaluate theoretical perspectives in a practical setting, and at the same time provides them with a social and interactive learning process, which will involve integration between theory and practice. Investigated by:

Main study Instrument 1: Student questionnaire.

Main study Instrument 4: Teacher interviews.

Theme 5: Theory and application can be effectively combined within a real work curriculum model and that operating realistic business activities can enhance student understanding in a more effective way than work experience. Investigated by:

Main study Instrument 1: Student questionnaire.

Main study Instrument 2: Young Enterprise student interviews

Main study Instrument 5: Young Enterprise Company Reports

Theme 6: Risk taking and failure, which are integral aspects of running a small enterprise/business activity, are powerful forces in student learning. Investigated by:

Main study Instrument 1: Student questionnaire.

Main study Instrument 2: Young Enterprise student interviews.

Main study Instrument 3: Employer interviews.

5.2 Context and Sample

The sample group for this instrument comprised 100 students aged between 16 and 19, who were studying Business Education either Vocational or Advanced Level, in school. A further 20 questionnaires were administered to students studying Business Education in a Further Education College.

For the school-based students, a total of 100 questionnaires were issued to 5 separate groups, in 4 schools. The researcher was present during the

administration of the questionnaire and was able to explain the context of the questions. For some of the more complex questions (for example, question 3 on formal, informal and incidental learning) students were given an explanation of the question, and had the opportunity to ask their own questions to aid their own understanding.

For the students from the Further Education College a total of 20 questionnaires were issued to students aged between 16 and 19, who were studying Business on either a Vocational or Advanced level programme. Again, the researcher was present during the administration of the questionnaire and was able to explain the context of the questions.

For the school-based students only 71 of the completed questionnaires were found to be usable. This was due to 2 main reasons: firstly some of the questionnaires had been spoiled and secondly a number of questionnaires had only been partially completed, with nil responses for several questions. It was felt that the inclusion of these partially completed questionnaires would skew the data, and hence they were omitted. Out of the 71 completed questionnaires, 23 were from students who were studying Advanced Level Business, with the remainder (48) coming from students who were studying Vocational Business.

For the students from the Further Education College only 16 of the completed questionnaires were found to be useable. Again this was due to the same reasons as cited for the school-based students, with some spoiled

questionnaires and some only partially completed.

In presenting the results of the questionnaire, for the questions relating to work experience and student learning, work experience and risk taking, and work experience and failure, no distinction was made between these 2 groups of students (those studying Advanced Level Business and those studying Vocational Business). For those questions relating to and risk and failure in Business Studies Lessons a distinction was made between the 2 groups of students. This mirrored the approach taken in the initial study when a distinction was made between students studying on those 2 different programmes.

Also in the initial study, a distinction was made between students who were studying Business in school and those who were studying Business in Further Education and Sixth Form Colleges. Again, in order to mirror this procedure and possibly highlight any differences or similarities, a separate batch of 20 questionnaires were issued to students studying Business in a Further Education College.

The questionnaire itself was divided into 4 sections entitled: Work Experience and your Learning; Work Experience and Risk Taking; Work Experience and Failure; and Risk and Failure in Business Studies Lessons. Questions 1, 3, 4, 5 11, 13, 17, and 18 were closed questions with single or multiple response. Questions 2, 6, 7, 8, 9, 10, 12, 14, 15, 16, 19 and 20 were more open questions and enabled respondents to expand on the answers given to the more closed questions.

Questions 3, 4 and 17 required ranked responses. It was recognised that this approach can generate a lot of data, and also that respondents can find it difficult to discriminate meaningfully between lots of options. Hence, the number of options used for these questions was not excessive.

The procedure in presenting the results will be to firstly to present the data from the questionnaires issued to Schools and Further Education students, along with a brief overview of any similarities/contrasts between the results from schools and Further Education. When appropriate, the presentation of the results will also be accompanied by some commentary on their significance. Note that when presenting results a majority will refer to more than half of respondents. A clear majority will indicate more than three quarters of respondents. The analysis of the results will be deepened further in chapter 10.

5.2 Results from the Questionnaire

Questions 1 to 10 related to learning, risk taking and failure linked to work experience.

Question 1 asked: *Did work experience help you to learn about business?* For schools, out of a total 71 students, 41 (58%) responded with yes; 18 (25%) responded with sometimes; and 12 (17%) responded with no. There was a majority of students who felt that their understanding of business had improved as a result of work experience. Including those students who responded to this question with 'sometimes,' then this increases this total to a

large majority of 83% of the respondents. For Further Education, out of a total of 16 students, seven (44%) responded with yes; six (37%) responded with sometimes; and three (19%) responded with no. The response here was not as strong as that from schools although if one includes those students who responded to this question with 'sometimes,' then this increases this total to 81% of the respondents, which is similar to the figure from schools. The results here would seem to indicate that students valued work experience as a learning opportunity although this was by no means true for all students. The lower response from those students in Further Education (although the survey here contained lower numbers, so one has to be careful in comparing percentage values) could perhaps be indicative of a difference in the quality of what is being offered, and by whom, in the business curriculum in Further Education as compared to schools. Previous discussions with teachers had indicated a larger number of teachers in Further Education who had an industrial or commercial background and it could well be that they are able to pass these experiences on to their students. In which case then, those students may not see work experience as being important in their learning. The results for both groups are shown in table 5a.

Table 5a Responses to Q1 Student Questionnaire
Did work experience help you to learn about business?
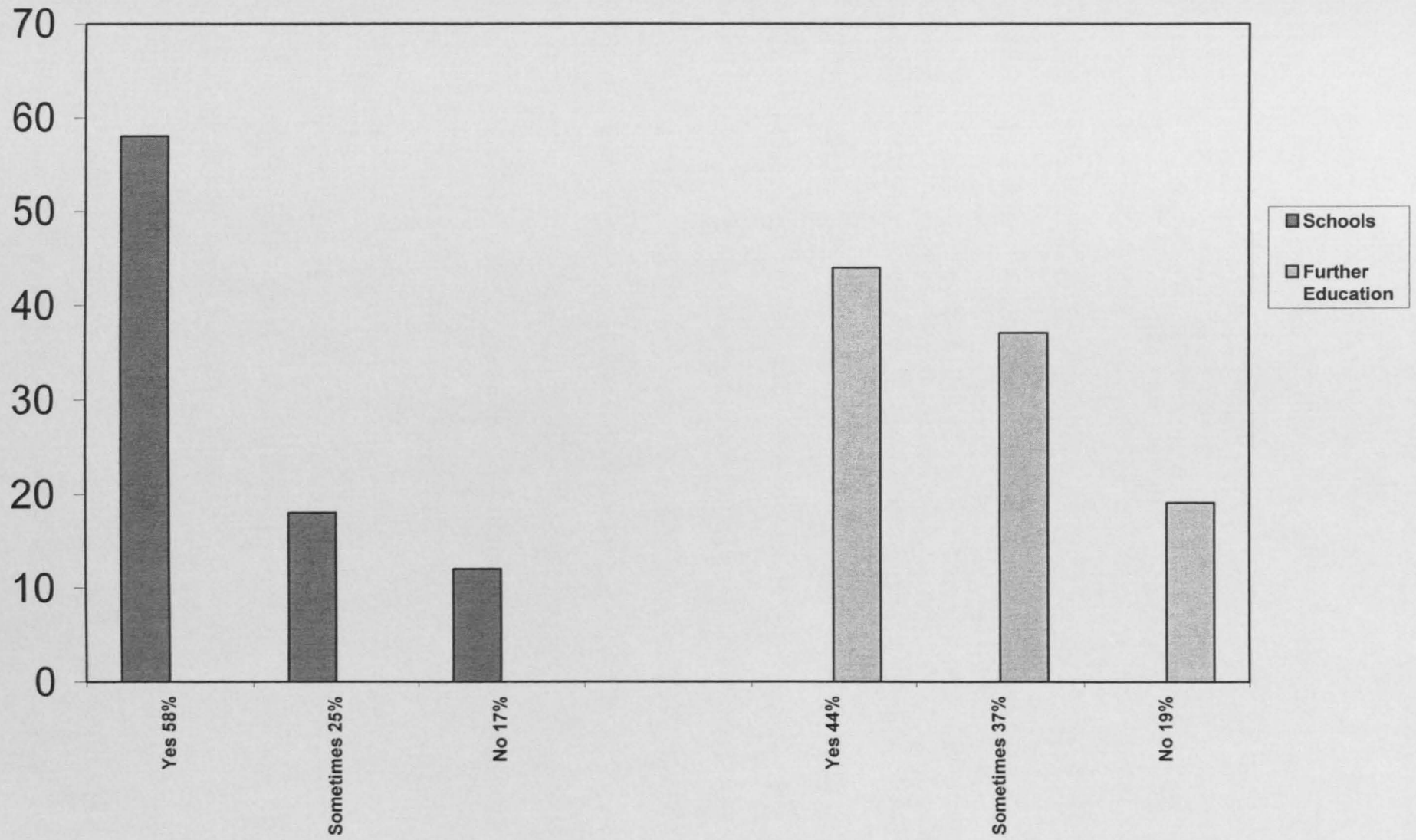
Question 2 gave an opportunity to expand on question 1 by asking *what was it about work experience that helped you to learn/not learn about business?* For schools, this question had a variety of responses: some of the more notable being ten students who mentioned their involvement in some of the financial aspects of business; eight students mentioned customers and the importance of communication; six students mentioned the importance of deadlines; whilst another three students mentioned the need to be organised, and another one student the need for a routine. Three students mentioned that they got a sense of how important every person was in an organisation; three students talked about working in teams, and two students about working on their own initiative. Only one student mentioned that practical activities had helped with learning. One student said that their understanding about quality had helped with learning and finally one student pointed to the importance of other employees talking to you. It is possible to infer from these responses that students could see how their learning had improved as a result of spending time on work experience. Importantly though, there were students who responded negatively (for example, four students who responded by saying that work experience was not particularly hands on and more of an observation) and this did raise the question as to the value of work experience, or certainly a question about the consistency of the experience, with some students clearly enjoying it and learning something whilst for others it had little impact.

For Further Education, this question also had a variety of responses: some of the more notable being four students who commented on the importance

of teamwork; four who commented on communication; three commented on how it gave them an insight into how a business works; and one commented on how it improved their time management skills. The negative responses here included one student who said they had learned nothing, and another who was always told exactly what to do and felt that they learned nothing. Once again, it appears that students could articulate how they learned whilst on work experience however, the results indicate that opportunities for learning whilst on work experience were not always made available and most certainly there is an inconsistency in experiences. This will come up again in the responses to other questions. It is an important issue and leads into the recommendations put forward in chapter 12.

Question 3 asked: *Thinking about your work experience, how much time (%) would you estimate that you spent on each type of learning? (Formal, Informal, Incidental).* The results for schools, for each of the categories in this case were broadly similar with 36.5% of time spent on formal learning; 30.1% of time spent on informal learning; and 33.4% of time spent on incidental learning. For Further Education, the results for each of the categories in this case were again broadly similar with 45% of time spent on formal learning; 23% of time spent on informal learning; and 32% of time spent on incidental learning

Question 4 asked: *Which of these methods of learning (in Q. 3) was most effective for you?* For schools, the responses for Formal Learning were 28 students (39.4%) found this most effective for them; 21 (29.6%) found this

to be effective; and 22 (31%) found this to be least effective. The responses for Informal Learning were 18 students (25.4%) found this most effective for them; 26 (36.6%) found this to be effective; and 27 (38%) found this to be least effective. The responses for Incidental learning were 25 students (35.2%) found this most effective for them; 24 (33.8%) found this to be effective; and 22 (31%) found this to be least effective.

For Further Education, the responses for Formal Learning were five students (31.25%) found this most effective for them; six (37.5%) found this to be effective; and five (31.25%) found this to be least effective. The responses for Informal Learning were five students (31.25%) found this most effective for them; seven (43.8%) found this to be effective; and four (25%) found this to be least effective. The responses for Incidental Learning were six students (37.5%) found this most effective for them; three (18.7%) found this to be effective; and seven (43.8%) found this to be least effective.

Combining the responses for most effective and effective, it would appear that informal learning was more helpful to students in Further Education than those in school. For incidental learning the opposite appears to be the case with students in school scoring this more highly than students in Further Education Question 5 asked: *How important to your learning on work experience was collaboration and social interaction with others?* For schools, out of 71 students 27 (38%) felt this was very important; 38 (53.5%) felt it was important; and 6 (8.5%) felt it was not important. For Further Education, out of 16 students 11 (68.75%) felt this was very important; five (31.25%) felt it was important; with nil

response for not important. So, for the same question, there was a large difference with 68.75% of students in Further Education seeing this as very important compared to only 38% of school students.

Question 6 asked: *Do you have any further comments on the importance of social interaction and collaboration to your learning whilst on work experience, and how it might have helped your learning.* Some of the most interesting responses for schools included: seven students who pointed to the importance of group discussions and working as a team in helping to solve problems and do things most effectively. Six students mentioned the importance of interaction with others and how it helped to give confidence and make them feel at ease; whilst another three students pointed specifically to how it improved their communication skills. A further two students specifically mentioned interaction with customers and how it helped in checking if the job was being done correctly. Some of the negative responses included one student who was told about the job but not allowed to actually do it. Another student made a similar comment that if they had been 'left to it' they would have learned more. Finally, two students commented that they found out most by themselves. For Further Education, the comments here included: six students who pointed to the importance of social interaction fulfilling a social need and helping when you are new to a role and need to settle in. Five students mentioned the importance of interaction with others and how it helped with effective team work; whilst another student said that talking with different staff was important as it gave a range of perspectives on the organisation.

Questions 7 to 10 asked students about any opportunities they had for risk taking and failure whilst they were undertaking work experience. For schools, some of the most interesting responses pertaining to risk were: 20 students who had taken risks (for example, one student who put colour on a customer's hair in a salon) and then were able to say it had benefited their learning, and made them more confident. Out of these, five students felt it improved their confidence; one student that it improved their communication skills; one student said it helped improve concentration skills; one student felt it helped to develop initiative; and one student who felt it made clear to them the importance of decision making. Finally, 18 students responded that there was no opportunity provided for them for risk taking; they were instructed what to do all the time and thus not able to make many decisions.

Some of the more noteworthy responses pertaining to failure were: 22 students cited failure as a positive experience, which helped improve their learning. The examples given to support this included giving customers the wrong delivery date; not listening carefully whilst on the telephone; not passing on important messages; measuring a room size wrongly (estate agent); and inserting the wrong bar codes. As a result of these experiences (failures) students said they learned the importance of asking questions; of having good time management skills; of thinking on their feet and not panicking under pressure; listening more carefully; and taking cognisance of information presented to them. Seven students responded that there was no opportunity provided for them to experience failure. One student responded that taking risks 'did not help me as I always take risks'. Finally, one student said that they

took a risk even though they had been told not to. So overall here there were some mixed findings and not all the students questioned were convinced of the benefits of risk and failure. However, there were approximately 33% of students who saw risk and failure as positive aspects of their experiences and this would provide some later parallels with the information gained from the Young Enterprise interviews. Ultimately, as will be seen, these responses also helped to inform the emerging themes in chapter 11 and the recommendations for practice in chapter 12.

For questions 7 to 10 for Further Education, there were eight responses here which focused on how risk taking helped to encourage initiative and improve understanding: for example,

'Answering the phone as no-one else was there and then having to deal with a customer enquiry'.

'Ordering stock helped my confidence and motivation'.

'Having to go into a quarantined area (medical environment) made me act in a professional manner'.

'I credited an administration charge in the hope that it would further business with that particular customer'.

A further three students commented that risk helped them to understand and gain knowledge and that *'live work made me more focused'* and *'I enjoyed it because it was not a made up task'*.

There were three students who commented that they were directed and told specifically what to do and hence did not take any risks. There were then nine students who commented on the importance of failure in improving their learning. For example:

'I took the wrong information from a customer which taught me that listening is very important'.

'I forgot to post a letter and was told off, which made me realise that all tasks are important'.

'Making a mistake on a customer home delivery made me more alert and concentrate more'.

'I broke the photocopier and lost some important information. This made me realise that it is difficult to get everything right all the time'.

Questions 11 to 20 related to learning, risk taking and failure linked to Business Studies lessons. The responses to these questions provided some significant information as it indicated that opportunities for risk taking and failure were limited both in schools and colleges. Even more significant was

that there were further differences in these opportunities depending on the type of course being studied (either Vocational or A Level) and also depending on the institution. The findings here did provide important evidence against theme with theme three *'that Experiential Learning requires particular conditions which may be limited by organisational constraints'* and against theme six *'that risk taking and failure, which are integral aspects of running a small enterprise/business activity, are powerful forces in student learning'*. This will be discussed in more detail in chapters 10, 11, and 12. Some of the detail on the responses to questions 11-20 is given below.

Question 11 asked: *When studying in Business Studies lessons (in any format: role play, case study etc) are you given opportunities to learn by taking risks?* For schools, out of 71 students in total 13 (18.3%) responded with yes; 21 (29.6%) responded with sometimes; and 37 (52.1%) responded with never. For Further Education, out of 16 students in total three (18.8%) responded with yes; nine (56.2%) responded with sometimes; and four (25%) responded with never.

For schools, these responses can now be broken down further into students studying A level and students studying Vocational Business. Out of 23 students studying A level: none (0% of the A level group) responded with yes; six (26% of the A level group) responded with sometimes; and 17 (74% of the A level group) responded with never. Out of 48 students studying Vocational Business 13 (27.1% of the Vocational Business group) responded with yes; 15

(31.3% of the Vocational Business group) responded with sometimes; and 20 (41.6% of the Vocational Business group) responded with never.

For Further Education, again these responses can now be broken down further into students studying A level and students studying Vocational Business. Out of seven students studying A level: one (14.3% of the A level group) responded with yes; two (28.6% of the A level group) responded with sometimes; and four (57.1% of the A level group) responded with never. Out of nine students studying Vocational Business, two (22.2% of the Vocational Business group) responded with yes; seven (78.2% of the Vocational Business group) responded with sometimes; and 0 (0% of the Vocational Business group) responded with never.

For question 11, *When studying in Business Studies lessons (in any format: role play, case study etc.) are you given opportunities to learn by taking risks?* there was a large difference with only 25% of the students in Further Education responding with no compared to 52.1% in schools responding with no. The 25% score for a no response in Further Education came entirely from those students studying A Level. The 52.1% no response in schools was divided into 74% for A Level students and 41.6% for Vocational Business students.

Question 12 asked students for examples of how they thought learning by risk taking happened. For schools, some of the more interesting responses here included: nine students who pointed to being able to test things out and then

be corrected (one would assume by the class teacher in most cases); five students referred to giving a presentation in front of the whole class; three students mentioned making decisions and working on their own initiative; two students mentioned about needing to run an event as part of their coursework. Five students referred to having to make decisions and choose the best option: this related to a number of scenarios in the classroom including the use of case studies and undertaking research on specific topics. Finally, one student commented on research on customer service and that they had gone to a local supermarket with a fictitious complaint in order to check out the level of customer service in that store. For Further Education, five students commented on the use of case studies and role play being important in this respect. Another two students mentioned answering questions, whilst another one referred to giving presentations in class.

Question 13 asked: *When studying in Business Studies lessons (in any format: role play, case study etc) are you given opportunities to learn by experiencing failure?* For Schools, out of 71 students in total 25 (35.2%) responded with yes; 22 (31%) responded with sometimes; 24 (33.8%) responded with never. For Further Education, out of 16 students in total eight (50%) responded with yes; five (31.2%) responded with sometimes; three (18.8%) responded with never.

For schools, these responses can now be broken down further into students studying A level and students studying Vocational Business. Out of 23 students studying A level: six (26.1 % of the A level group) responded with

yes; nine (39.1% of the A level group) responded with sometimes; and eight (34.8% of the A level group) responded with never. Out of 48 students studying Vocational Business 19 (39.6% of the Vocational Business group) responded with yes; 13 (27.1% of the Vocational Business group) responded with sometimes; and 16 (33.3% of the Vocational Business group) responded with never.

For Further Education, these responses can also be broken down further into students studying A level and students studying Vocational Business. Out of seven students studying A level: one (14.4 % of the A level group) responded with yes; three (42.8% of the A level group) responded with sometimes; and three (42.8% of the A level group) responded with never. Out of nine students studying Vocational Business, seven (77.8% of the Vocational Business group) responded with yes; two (22.2% of the Vocational Business group) responded with sometimes; and 0 (0% of the Vocational Business group) responded with never.

For question 13, *When studying in Business Studies lessons (in any format: role play, case study etc,) are you given opportunities to learn by experiencing failure?* the no response for students in Further Education was 18.8% compared to a No response of 33.8% for school students. For those students in Further Education studying Vocational Business the No response was 0% compared to a 33% No response from those students studying Vocational Business in schools.

Questions 14 and 15 asked students to give examples from their Business Studies lessons of when they were able to experience risk and failure and in what ways, if any, this helped with their learning. For Further Education and in terms of risk, five students commented on a lesson in which they are able to fictitiously buy shares, whilst one other referred to a lesson, which had used role play. In terms of failure, four students commented on receiving feedback (both verbal and written) from their teacher.

Question 16 asked: *Would the involvement of persons, other than teachers, in your Business Studies lessons, be of benefit? If yes or no, then why do you think this would be the case?* For Further Education, out of a total of 16 students, 11 said that this was of benefit, and comments here included: 'it provides a different point of view', 'speakers benefit my preferred style of learning', and 'it can make it more interesting'. Of the remaining five students, one said it would only be useful 'if the person was a professional' and the other four felt it was not always of use and did not provide anything different.

Question 17 asked: *thinking about Business Studies lessons, then over an average term, how much time would you estimate that you spent on each type of learning? (Formal, Informal, Incidental).* For schools, the results for each of the categories in this case were 59.8% of time spent on formal learning; 26.4% of time spent on informal learning; and 13.8% of time spent on incidental learning. For Further Education, the results for each of the categories in this case were 56.6% of time spent on formal learning; 24.2% of time spent on informal learning; and 19.2% of time spent on incidental

learning. The responses can now be broken down further into students studying A level and students studying Vocational Business. For Schools, for students studying A level, the results for each of the categories were 68% for formal learning; 21% for informal learning; and 11% for incidental learning. For students studying Vocational Business the results for each of the categories were 58.4% for formal learning; 27.1% for informal learning; and 14.5% for incidental learning. For Further Education, these responses can now be broken down further into students studying A level and students studying Vocational Business. For students studying A level, the results for each of the categories were 56.4% for formal learning; 30.7% for informal learning; and 12.9% for incidental learning. For students studying Vocational Business the results for each of the categories were 57% for formal learning; 19% for informal learning; and 24% for incidental learning.

These results have been shown in table 5d.

Table 5d Responses to Q17 Student Questionnaire
Thinking about Business Studies lessons, how much time would you estimate
that you spent on each type of learning? A Level/Vocational

Legend:
- A level Schools
- VOC'L Schools
- A Level FE
- VOC'L FE

X-axis categories: Formal Learning, Informal Learning, Incidental Learning, Formal Learning, Informal Learning, Incidental learning
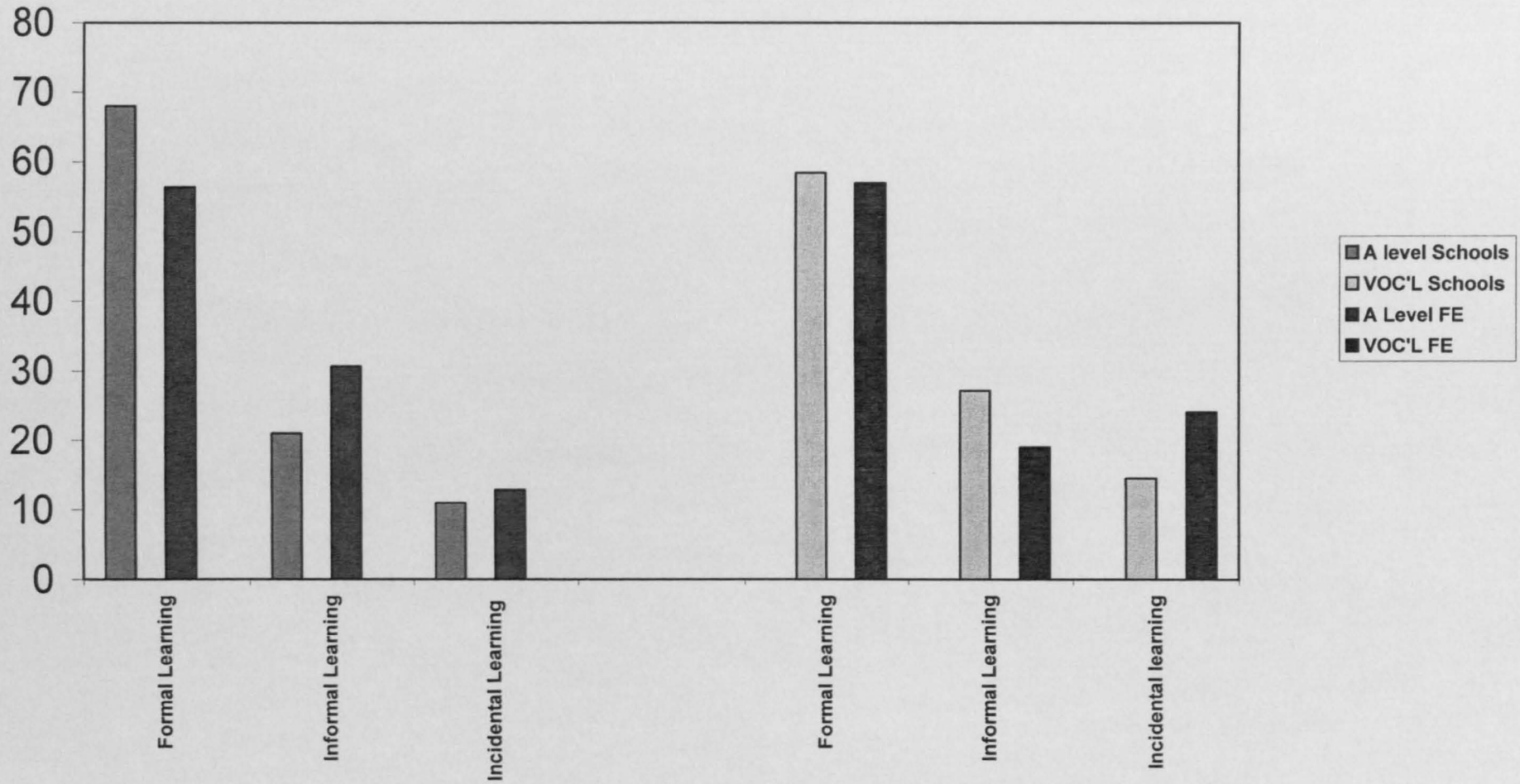
Question 18 asked: *How important to your learning in Business Studies lessons are collaboration and social interaction with other students?* For Schools, out of 71 students 27 (38%) felt this was very important; 38 (53.5%) felt it was important; and 6 (8.5%) felt it was not important. For Further Education, out of 16 students nine (56.25%) felt this was very important; six (37.5%) felt it was important; and one (6.25%) felt it was not important. These results have been shown in table 5e.

Table 5e Responses to Q18 Student Questionnaire
How important to your learning in Business Studies lessons are
collaboration and social interaction with others? All responses.
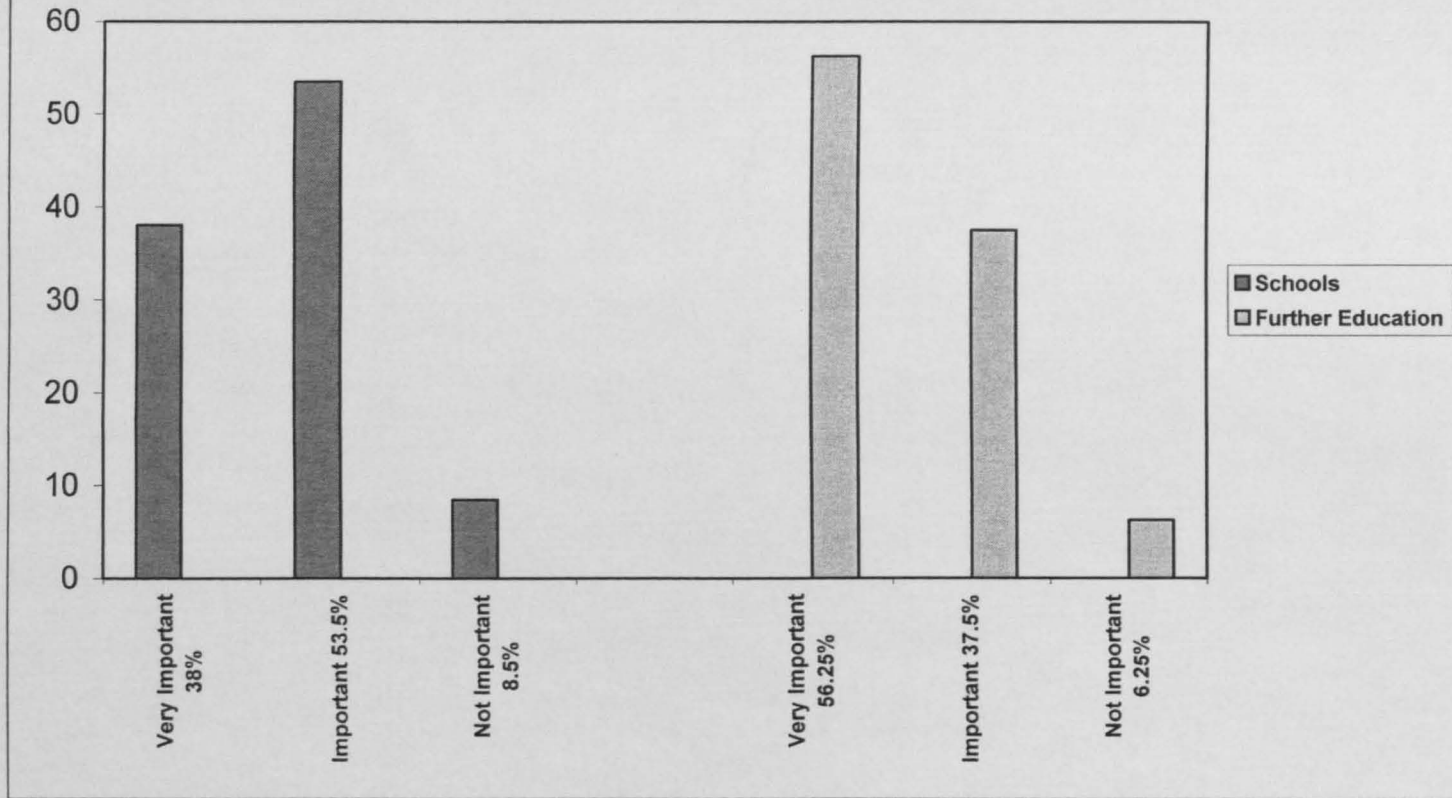
- Schools
- Further Education

Very Important 38%

Important 53.5%

Not Important 8.5%

Very Important 56.25%

Important 37.5%

Not Important 6.25%

These responses can now be broken down further into students studying A level and students studying Vocational Business. For Schools, out of 23 students studying A level: eight (34.8 % of the A level group) responded with very important; ten (43.5% of the A level group) responded with important; and five (21.7% of the A level group) responded with not important. Out of 48 students studying Vocational Business 19 (39.6% of the Vocational Business group) responded with very important; 28 (58.3% of the Vocational Business group) responded with important; and 1 (2.1% of the Vocational Business group) responded with not important.

For Further Education, these responses can now be broken down further into students studying A level and students studying Vocational Business. Out of 7 students studying A level, two (28.6% of the A level group) responded with very important; four (57.1% of the A level group) responded with important; and one (14.3% of the A level group) responded with not important. Out of nine students studying Vocational Business, seven (77.8% of the Vocational Business group) responded with very important; two (22.2% of the Vocational Business group) responded with important; and 0 (0% of the Vocational Business group) responded with not important.

For question 18, *How important to your learning in Business Studies lessons are collaboration and social interaction with other students?* the responses from students in Further Education and students in schools were approximately the same. However, when this question was broken down further into students studying A Level and those studying Vocational

Business, there were 14.3% of the A level students in Further Education compared to 21.7% of students in school, who felt that this was not important.

Questions 19 and 20 gave students the opportunity to make any further comments on the involvement of other adults in Business Studies lessons and what they felt were the essential components of a good Business Studies lesson. For Further Education, for question 19, there were more detailed responses from the Vocational Business group than from the A Level group. These included comments on improving confidence; generating a good working atmosphere; making things more interesting; and generating more ideas. For the A level group just two students commented that it was important. For Further Education for question 20, both the Vocational Business and A level students put forward a number of suggestions. Those that were from more than one student included: group work (five students); presentations (six students); guest speakers (five students); using the internet (four students); practical involvement (two students); and working at own pace (two students).

5.4 Summary

The student questionnaire did provide an amount of useful and interesting information. Students valued the opportunity of work experience although there were mixed responses to some of the questions. The social setting and opportunities for collaboration provided by work experience were seen as important, although this was much more marked in the case of students from Further Education, as compared to those from schools.

In terms of learning in the classroom, perhaps not surprisingly formal learning was much more prominent on A level courses as opposed to vocational courses, although interestingly in Further Education there appeared to be very little difference between the two. Informal learning was seen as more important in Further Education, whilst incidental learning scored more highly in schools.

Experiencing risk and failure both emerged as positive experiences in terms of student learning. Some students were able to be quite specific on how these impacted on their learning. It was clear too that there were opportunities for experiencing risk and failure during taught lessons although there was a much stronger response here from those students in Further Education as compared to schools.

Further analysis of the findings from the student questionnaire will be undertaken in chapter 10, when they will be compared against the main themes for investigation. In the chapter that follows, the results from the Young Enterprise interviews will be presented.

CHAPTER 6

Results from Main Study: Young Enterprise Interviews

This chapter will present the results from the interviews that were undertaken with students on the Young Enterprise Programme. Young Enterprise Companies are *real* companies; financed by the raising of share capital, and, within the academic year, usually operate from October to May. Similar to an actual business they have a management team, produce a product or service, keep accounts and make profits or losses. Throughout the Young Enterprise year trade fairs are arranged, by teams of business volunteers, to enable companies from particular areas to come together to sell their products. At the end of the year a competition within that area will see one company go forward to a regional competition, and then possibly further to a national competition.

6.1 Context and Sample

The sample group for the Young Enterprise interviews comprised students aged between 16 and 19 years, who were taking part in, or had just completed, the Young Enterprise Company Programme. Each student was part of a team linked to a particular school or sixth form college, and to engage in the programme each group of students has to set up their own Young Enterprise Company. In total, 33 students were interviewed in a semi-structured format. The 33 students came from three secondary schools (group sizes being 11, 8 and 7) and a Sixth Form College (group size 7). All of the students were, or had been, part of a team involved in the Young Enterprise

Company Programme. Unlike in the previous instrument (student questionnaire) no distinction was made in terms of the course of study that students were following and, the students in these interviews were not exclusively studying business and came from a variety of subject backgrounds. With regard to the students from the Sixth Form College, although the researcher did not expect any difference to emerge in terms of responses from this group, it was felt that by including these students in the interviews this would follow the previous pattern of surveying both school and Further Education or Sixth Form College students.

After an introduction by the teacher with responsibility for the group, the researcher conducted all of the interviews, usually at the end of the working day. In terms of timing of the Young Enterprise year, the interviews took place during, or shortly after, the students had been involved in the Young Enterprise Company Programme. This timing was important as the aim of the researcher, in accordance with the ideas proposed by Flanagan (1954) in Easterby-Smith et al (2002), was to obtain information from the students, using critical incident and protocol analysis. An incident (according to Flanagan) is an activity that is sufficiently complete to permit inference, or prediction to be made about the person performing the act. So in this case, students were asked to think back to particular instances during their Young Enterprise experiences and then to try and explain their actions and motives with specific regard to those instances. With the researcher trying to seek explanations just after the events this helped to facilitate open statements and descriptions. In that respect the interviews followed the approach outlined

under protocol analysis. Creating rapport with both the groups and individuals was fairly straightforward due to the researcher's profile within the Young Enterprise Programme and consequently being already known to many students. Groups and individuals were relaxed and contributed readily.

The interview (which lasted approximately 80 minutes for each group) was based around a series of questions, which focused on learning, working as part of a team, the importance (or not) of taking advice from others, work experience, risk and failure. The interview questions were divided into four categories:

1. Young Enterprise and your Learning.
2. Young Enterprise and Work Experience.
3. Young Enterprise and Risk Taking.
4. Young Enterprise and Failure.

Students were asked to verbally respond to the questions and then were given some 'quiet time' in which they could make a note of their responses and add any further comments, which they had been unable to express when speaking as part of the group. This approach also gave the researcher time to write down notes on the interview responses.

The procedure for presenting the results of the interviews will be to go through each these four categories and detail the responses given. The majority of the responses were spoken statements, although for some of the questions it was

possible to translate this into numeric data. In terms of the significance of the responses for this investigation, questions 2, 3, 5, 6, 13, 14, 15, 16, 17, 18, 19 and 20 are deemed to be the most important and the presentation of results in this chapter will focus on these questions.

6.2 Young Enterprise and your Learning

This was the opening section in the interview and students were asked (question 2) what it was about Young Enterprise, which helped them to learn. By far the largest response (17 out of 33 students) highlighted the importance of teamwork. Almost immediately here is was clear that learning had taken place as students spoke about learning how to cooperate with others and how accept constructive criticism. There was also an indication that students were gaining an insight into leadership and decision-making within groups, and that it was important to gauge the different skills and abilities of those in groups in order to make them work more effectively. Some comments included:

"Teamwork taught me that people have different skills and abilities that need to be identified in order to get tasks completed".

"Working in a team improved my communication and delegation skills".

"It was important that we came together in order to meet deadlines".

The second largest response (14 out of 33 students) to this question pointed to the notion of responsibility within a realistic scenario, and ownership of the

process, as being strong motivators. Some of the comments here included:

"The responsibility I had to the rest of the group".

"Learning how to run a business in a professional manner".

"I gained full knowledge of a professional working company".

"I had to interact with real customers and complaints".

"Having the chance to experience your own business as a group and being involved in the community".

The type of learning which students experience when they are involved in Young Enterprise is much more informal and at times incidental, in comparison to the more formal teaching which they usually experience in their lessons. Indeed, one student when responding to question 2 pointed out that:

"Young Enterprise was less structured than anything we have done in school before."

So not surprisingly, when students were asked about the type of learning they experienced during the Young Enterprise process, 28 out of 33 students pointed to informal and incidental learning forming the largest proportion of their learning in Young Enterprise, and that they found this approach

enjoyable. When asked why this type of learning (informal and incidental) was effective there were several interesting responses. There were 12 out of 33 students who focused on the realism of this type of learning, whilst 8 said that because it was more relaxed, enjoyable, and different from their usual learning experiences, it was effective for them. Importantly in relation to the theme relating to risk, students commented on learning by trying things out, and followed this up by referring to the realism and excitement of being able to operate in such a way. One really significant comment was made in relation to informal learning when a student observed that it gave other people a chance to appreciate my input. Some of the other comments here included:

"This type is less structured and I found it more useful as more ideas were brought to my attention".

"Because it was less structured it allowed new ideas to come through more easily".

"It meant my work was not planned and I had to think for myself".

Young Enterprise companies operate for one academic year, which is usually from September to May, and is referred to as the Young Enterprise trading year. At the end of the trading year, companies produce a final report and set of accounts and then they go into voluntary liquidation. A teacher, based within the school or college, acts as the link person and facilitator, and the Young Enterprise organisation provides additional support in the form of

business advisers. These business advisers are people (not teachers) from industry and commerce who volunteer their expertise and work with the young people, involved in Young Enterprise companies, usually once a week for approximately two hours. In the next part of the interview, students were asked for comments on this collaboration and social interaction with others, and in particular what impact the business advisers had. Out of 33 students, 24 felt that this aspect of Young Enterprise was very important. In terms of why it was important, although it was difficult to categorise the comments, the following were of most interest:

"It is something we don't usually get the chance to experience".

"Sometimes it caused friction but it did mean I go to know someone better who could help me".

"Discussions with advisers often make you aware of ideas you have not thought about".

"It ensured we were much more like a professional working company".

6.3 Young Enterprise and Work Experience

There were two questions in this section of the interview. The first of these (question 13) asked students if they felt that Young Enterprise was a more effective way of learning than time spent on work experience. There were 24 out of 33 students who felt that it was more effective. Students were then

asked why they felt this was the case. There were 11 out of 33 students who pointed to the responsibility and challenge of Young Enterprise, which they felt made it more effective than work experience. Another 4 students said that what they felt was important was the insight it gave them into the running of an entire business/company, and not just one aspect of a company or business as was the case with work experience. The response in favour of Young Enterprise over work experience was not unanimous: there were 5 students who felt that Young Enterprise did not give them as much responsibility as work experience and that their learning was either the same as, or less than, when they had taken part in work experience. Even so, there was a clear contrast here with the findings from the student questionnaire. Some of the comments in relation to the above, included the following:

"Young Enterprise was over a longer space of time which meant you had more chance to gain knowledge and learn new skills".

"I worked with people who I knew and were the same age".

"I had a more active role than on work experience".

"Young Enterprise did not give me a lot of responsibility but work experience was a real job".

6.4 Young Enterprise and Risk Taking

The three questions in this section of the interview asked students about risk

taking in Young Enterprise as compared to work experience, and how (if at all) risk taking helped with their learning. There were 26 out of 33 students who felt that Young Enterprise gave them the opportunity to take more risks. The examples they gave to support this included comments on the risk of taking on a particular role in their company, or appointing others to certain roles, and comments on the risk involved in deciding upon, and then investing in, the making of certain products. Some examples included:

"We took several risks appointing the directors as we didn't really know who would be more appropriate to each position".

"We gambled on the fact that we hoped to win the £500 sponsorship from Barclays bank".

"When I got my role I wondered if I was good enough".

"Bringing down the price of our goods when we couldn't really afford to".

"The company took a big risk in electing to purchase 500 key rings when our market research indicated we would not sell 500".

In terms of how risk taking helped with learning, 28 out of 33 students said that it helped them learn more effectively. The reasons that students gave for this were somewhat varied and not easy to categorise. There were 5 students said it enabled them to learn from their mistakes, although this could be

interpreted as learning from failure (the focus of the next part of the interview), whilst another 2 students said taking risks gave them confidence, whilst another 2 spoke about the importance of thinking things through as they would have to deal with the consequences if things went wrong. Some examples of the comments in this part of the interview included:

"Sometimes the risk taken was the wrong one and we had to learn how to overcome this".

"It gave me more confidence when things went right".

"We learned that we should not trust other companies and we should have seen their service first".

"It motivates you more to succeed".

"Taking risks brought us together as a team".

6.5 Young Enterprise and Failure

The final section of the interview had four questions, which asked students about their experiences of failure in Young Enterprise and how this might have impacted on their learning. This section of the interview started with a question to students about their failures: either as individuals or as part of a group. The question was initially met with some amusement and several students attempted to 'get in first' with their comments. It soon became clear to the researcher that students had numerous experiences of failure during

their Young Enterprise experiences. There were a variety of answers: some of these did refer to practical failures: for example, trying to 'bake' a candle in a microwave oven, keeping track of monies paid in to the company, and failing to keep the minutes of the company board meeting. However, there were also comments on individual failure linked to personal skills. For example, 4 students mentioned their failure to manage their own time, whilst further 3 commented on not being outspoken enough at particular times and thus failing to make what they later felt were useful comments and input.

In terms of the failures, which affected the group, there were again a variety of answers. In a similar way to the question on individual failure, some of these referred to practical failures: for example, not undertaking thorough market research, looking unprofessional and failing to prepare adequately for a trade fair. However, once again there was also reference here to group failure in terms of skills with a number of students commenting on an issue they had mentioned earlier in the interview, namely that of appointing people (who were subsequently found to be ill-suited) to particular roles within the company. Issues such as failing to make decisions, not working effectively as a team, and failing to meet deadlines were also pointed out. Some of the comments made by students in their responses to this part of the interview included, firstly as individuals:

"I think I maybe took on too much work, which led me to not being able to do things".

"I was unable to keep track of the money when the spreadsheet did not balance".

"I failed regularly to complete the minutes".

"Sometimes not saying exactly what I thought of a decision"

"Maybe I should have been less democratic and more abrupt when tasks were not completed".

And then as a group:

"We made a mistake with the appointment of people and then by not taking action against them".

"We were often unable to come to a decision, and then decisions were made without others knowing which caused problems".

"Sometimes communication was difficult and different friendship groups formed".

"We left everything to the last minute".

After asking students to relate incidents of failure both on a personal and group level, there were two questions about failure and learning. There were 32 out of 33 students who stated that experiencing failure had helped them to learn. Also, a question about failure always being a bad thing was met with a response of 31 students out of 33 stating that they did not think it was always a bad thing to fail.

Students were then asked to think about how failure had impacted on their learning. Once again there were a variety of responses which could not be easily categorised but which focused both on practical learning (for example, a group who learned that more effective market research was required in order for them to increase their profits), and on the learning of skills (for example, one student who mentioned that failing to keep track of money eventually made him more organised). If there was any trend in these responses then it was that having ownership of the process and actually being a stakeholder in a Young Enterprise Company seemed to make students more determined to learn from their failures. Some of the comments made by students in their responses to this part of the interview included:

"It is important to separate individual friendships from business relationships"

"We learned that communication was essential and that if we had problems we should voice our concern and not let friction build up".

"Failing to appoint people to the right job has taught me that personal qualities should not decide the job title".

"The production process did not work and so we tried something else"

"We got to know how committed you have to be".

"Responsibility had to be taken when something went wrong".

"My time and money was invested into Young Enterprise and so when we failed I was determined to correct my mistakes and learn from them".

6.6 Summary

The Young Enterprise Interviews yielded a significant amount of useful information in terms of this research study. The importance of teamwork and opportunities for collaborative working came out strongly in the responses from students. What was also interesting was that, as part of that Young Enterprise community of practice so to speak, was that apparently students were able to take more responsibility for their learning and that they felt confident in doing so.

Given the mode of working on the Young Enterprise Programme then not surprisingly informal and incidental learning occupy most of the learning time, as opposed to formal learning. However, students appeared to enjoy the informality, the accompanying realism and relaxed nature of the learning. Students felt that this improved their motivation to learn and participate more in the running of the Young Enterprise Company. When comparing Young Enterprise to work experience, then as noted there was a strong response in favour of the former. However, not all students were in agreement with this and a number felt that because Young Enterprise was not a totally realistic business operation, then they felt less concerned if things did not go right (as compared to say if they were on a work placement and things did not go right). In terms of risk and failure, students did comment that Young Enterprise offered them more opportunities for this, as compared to work

experience. Alongside this, they also commented that opportunities for taking risks and experiencing failure did have a positive impact on their learning. However, they were not always able to articulate why this was the case.

The analysis of the findings from the Young Enterprise Interviews will be undertaken in chapter 10, when they will be compared against the main themes for investigation. In the chapter that follows, the results from the Employer Interviews will be presented.

CHAPTER 7

Results from Main Study: Employer Interviews

This chapter will present the results from the interviews that were undertaken with employers. In terms of this research study and its main themes for investigation, employers were seen to be one of the key stakeholders and as such it was important that they were involved in the gathering of evidence against the research themes.

7.1 Context and Sample

The sample group in this case comprised 10 employers from a range of businesses. Employers were chosen on the basis of accessibility and willingness to take part. Mostly the contacts for this came through the researcher's involvement in employer networks and links with teachers involved in arranging work experience. In addition, and prior to arranging the interview, it was also determined by telephone as to whether the employer had worked with a school or college and employed students on work experience or work shadowing basis.

These interviews can be labeled as qualitative in that they comprised a range of different types of interview in that parts of the interview were totally non-directive or open, whilst in other parts the interviewer referred to a prepared list of questions. Similar to the teacher interviews, one of the underpinning theoretical perspectives for this instrument was the concept of situated

learning as put forward by Lave and Wenger (2003). The interview questions were divided into 4 sections. There was also a final question for additional comments. In order to aid the process of triangulation the questions had a similar focus to those used in other instruments. The first part of the interview asked the employer to consider work experience and student learning. Two sections then followed this on work experience and risk taking, and work experience and failure. Finally, employers were asked to comment more broadly on the business curriculum and how they thought risk and failure might be incorporated into the business curriculum or if there was any benefit in doing this.

The procedure for presenting the results of the interviews will be to go through each these categories and detail the responses given. The majority of the responses were spoken statements, although for some questions it was possible to translate the responses numerically. When giving examples of statements, all references will be anonymous.

7.2 Work Experience and Learning

First of all employers were asked to talk about work experience and how they felt this helped or hindered student learning. In this part of the interview employers were also asked to comment on the importance of relationships in the workplace. So the focus here was on what the workplace offered in terms of learning and secondly what the employees offered to the student in terms of learning.

Questions 1 and 2 were simply to confirm if the employer had been involved with students on a programme of work experience (all 10 positive) and to also confirm the pattern of that work experience (7 had provided a block experience of one week or more and 3 had provided a one day a week experience over a period of time).

Question 3 asked if work experience was an effective way for students to learn about business. Out of the 10 employers, a majority (6) responded with yes, 3 with sometimes and 1 with no. Some of the comments made against this particular question included:

"They learn about business because they can become involved in everyday activities".

"They can work as part of a team".

"The student is usually given an actual role to undertake and is part of a team and so needs to learn to participate and to keep up".

"Students on work experience can be matched to parts or areas of the business that interest them, and in which case they tend to become more involved and learn more about what we do".

"Students on work experience are involved in practical issues and can see results of what they do".

"Students on work experience can see why what they do is important".

So it would appear from these comments that the context of work experience, the fact that there is a tangible outcome, or product and the importance of working in a team, were all seen as important factors in the learning provided by work experience. On methodological note, the response here indicated the importance of using multiple methods to obtain information, as the response here was in contrast to those received in the employer questionnaire in the initial study.

Question 4 asked about how they (employers) felt students learned about the business whilst they were on work experience. Employers were asked to estimate whether they thought this happened through formal instruction/learning, informal instruction/learning or if instruction/learning occurred it tended to happen incidentally. Out of 10 responses only 1 felt that formal learning was important; 7 pointed to informal learning as being important, with a further 2 indicating that incidental learning was the main mechanism for student learning on placement. So, there was a majority of employers who felt that informal learning was most important. When asked (question 5) if any one/ more of these categories was more effective for student learning whilst on work experience, there were a number of interesting comments. These included:

"Informal settings tend to be practical situations where the student can watch the person, and then copy or practice what they do".

"I usually put them (student) with an experienced member of staff who can then show them the ropes but in their own way".

"When they (student) are around me or members of my team they are learning all the time just by watching and listening".

"Students learn even during lunch and break times when they talk to staff, and these are definitely informal situations".

"Because we are so busy then we do not always have time to sit with the student and go through every aspect of the job. I would much rather get them started on something and then they can pick up the rest as they go along".

"When the student is with someone who really knows their job and what they are talking about, they (student) pick things up".

It would appear from these comments that informal learning is important in work experience situations but the involvement of other persons, and again linking to the notion of the importance of teams, was also an important part of this process. This was reinforced in the answers given to question 6. This question asked how important to student learning was collaboration and social interaction with yourself/others. In response to this, a majority of employers (8) felt that this was very important, with the other 2 rating it as important.

Question 7 asked that once they had settled in to their placement role, how much instruction/advice did you/other employees typically have to give to the

student(s) whilst on work experience. (in responding to this question, the employer was asked not to include situations where there was a change of role when obviously new instruction would have to be given). The responses here were rather mixed with no clear pattern. There was 1 employer who said that instruction/advice had to be continuous, another 4 who said that they had to give a significant amount of instruction/advice, and finally 5 who said that they gave very little or no further instruction/advice. When asked to comment on the reasons behind these responses, perhaps not surprisingly 5 employers stated that help at the start of the placement was important. A further 3 stated that a lot depended on the nature of the job, and 3 others said that some students learned more quickly than others.

7.3 Work Experience and Risk Taking

These 2 questions asked employers about risk taking in the context of work experience and if having opportunities to take risks (even in a limited sense) enabled students on work experience to learn more effectively. There were 6 employers who answered yes to this question. There were another 2 who answered probably and finally 2 who responded with no. So, the response on opportunities for risk, if one includes the 2 probable answers, was that employers viewed this as something positive in terms of learning more effectively. The comments by employers on how it (opportunities for risk) helps learning provided some interesting answers, as follows:

"Because they have to use judgement".

"I would not want them to take any risks which put them in danger".

"The problem is that if it goes wrong then it will cost us money so the answer here would be no".

"While, I think risk taking is a good idea, it is not something I would encourage because if it goes wrong then it would impact too much on the business".

"On one occasion I was able to give the student a small project to do and it did not matter if it went right or wrong. So I suppose there was an element of risk. However, this was just a one off and I have not been able to do this since".

"I think that taking risks in the business environment can be exciting and interesting, and it makes them think about different ways of doing and it can boost confidence. As well as that, if the risk works then it can really boost confidence. However, I am only speaking from my own experience here".

The answers given here provided some very useful information and it does appear that what employers were saying is that having opportunities for taking risks is a good thing. However, and this is the key point, there is only limited scope for doing this in most work situations. One of the reasons for this are the cost implications in terms of any impact on company profits. However, one might also surmise that this is also because of limited opportunity for employers to provide a structured environment for guided risk taking, and to make available the necessary support for individuals as they engage in risk

taking. Indeed, the responses given to question 9 further reinforced this. Here employers were asked if they could give any examples of where students were able to take risks during their work experience. Only 2 of the employers were able to respond positively to this question, and even then they only gave some sparse detail:

"Dealing with an unpredictable customer on the phone".

"Having to cover for someone who suddenly went home ill".

These two comments provided little indication that the risks that were experienced, were in any way undertaken in a structured and supportive environment. The point about this structured environment for risk taking is an important one, and again it will be returned to later on when the findings are further analysed in chapter 10.

7.4 Work Experience and Failure

In a similar way to the previous questions, questions 10 and 11 asked employers about experiencing failure in the context of work experience and if this (even in a limited sense) enabled students on work experience to learn more effectively.

Again, 6 of the employers said that they felt that experiencing failure would help student learning, one said this would probably be the case, and 3 said no. The comments on how failure might help student learning on work experience included:

"Experiencing failure can be one of the best lessons for anyone".

"When you are working as part of a team, then you can feel you have let your team or boss down, and because of that you will want to do better next time. As well as that, the person who has made the mistake or failed if you like, may be chastised by their fellow workers or team mates, and so they will not want to repeat the mistake".

"In our business, failure usually costs us money and so may lead to a disciplinary situation".

"I can see that when somebody is new to the work environment that they should have the opportunity to make errors, otherwise they will become reluctant to do anything. However, getting things right first time is so important in what we do and so we would try to avoid any situations where things might go wrong".

Similar to the questions on risk taking, it appears that employers can see the benefits that experiencing failure can bring however, once again there is the cost implication. What was also clear is that being part of a team was an important aspect in how effectively an individual learned from any failures. Finally, when asked in question 9 if they could give any examples of where students were able to experience failure during their work experience, only 2 employers were able to give any answer to this, one of which was:

"I had a student working in the post room for a couple of days and they put first class franks/stamps on 120 letters instead of second class".

So again, there was some significance in the findings here, and for both aspects (opportunities for risk taking and opportunities for failure) employers were positive about these in terms of helping learning but importantly they indicated that the work experience setting was not always conducive to providing these opportunities.

The final part of the questionnaire asked employers about the importance of risk taking and failure in the context of teaching and business lessons in schools/colleges. The responses here reinforced what had been found earlier in the questions about risk taking and failure on work experience. In the final questions, there were 7 employers who felt that opportunities for risk taking and failure were important elements in any business lesson. When asked about examples of how risk and failure could be incorporated into lessons then not surprisingly perhaps, they were less certain, although maybe if they had been given more time to reflect upon this they may have been able to provide more detailed answers. Interestingly, the employers were able to give more extended answers to a question which asked about the environment in which business lessons were delivered and in particular, and if they thought incorporating risk taking and failure into lessons was easier in some business courses (for example, those taught in colleges) than in others. Some of the responses here included:

"Yes, I think that enabling students to take risks, and then possibly experience failure, would be easier in more practical courses such as floristry or hairdressing".

"Once I was invited into my son's school to act as an advisor in an actual lesson. The lesson was about a trade union pay negotiation and the students had been divided into 2 groups. One group represented employers and the other group represented the workers/trade union. I acted as an advisor with the employer group as we tried to reach a deal on a pay claim".

"I would think that if students have got exams coming up then teachers would not want to let them take risks or have any failures in case this damaged their confidence".

"I do know that many tutors who work in the (local) FE college have industrial or commercial experience and have done other things before they became teachers. I am not sure that this is always the case with school teachers. I would think that teachers in colleges would be more aware of how business works and that sometimes you have to take chances to be successful".

Without being able to give definitive answers the employers did indicate that they felt particular environments, and the expertise of staff, would be more conducive to providing opportunities for students for risk taking and failure as part of the learning process.

7.5 Summary

The responses from the employer interviews did provide some very useful information. It does need to be remembered of course, that the sample size (10) was relatively small and hence some caution has to be exercised when considering the significance of the employer interview results. It was clear that employers saw work experience as important, because it gave them a role to carry out, often provided a tangible, measurable outcome, and gave students the opportunity to work as part of a team. Collaboration with others was seen as important and the theme of team working came out strongly in a number of responses. In relation to opportunities for risk taking and failure, then employers did see this as important in terms of student learning. However, it would seem from the comments made by employers that opportunities for both of these were limited by organisational constraints, for example in terms of cost implications and the ability of the employers to provide structured and supportive environments in which these activities could take place. To summarise, there were 3 important aspects, which came out of the employer interviews, and which will be returned to later on as part of the analysis chapter and again in the chapter on the emerging themes. These aspects are team working, opportunities for risk taking and failure, and finally the environment in which these activities take place. In the chapter that follows, the results from the teacher interviews will be presented. Here it will be seen that the aspect of team working will again emerge, as something of value to students, although in respect of the teacher interviews there is some contradictory evidence on opportunities for risk taking and failure.

CHAPTER 8

Results from Main Study: Teacher Interviews

This chapter will present the results from the interviews that were undertaken with teachers. In terms of this research study and its main themes for investigation, then teachers were one of the key stakeholders, not only in terms of delivery in the classroom but also as facilitators of the Young Enterprise Programme and facilitators of work experience for students. As such it was important that they were involved in the gathering of evidence against the research themes.

8.1 Context and Sample

The sample group for this instrument comprised 10 teachers of Business Education. Eight of these came from secondary schools, whilst the remaining two were from a Further Education College. In order to take part in the interview a check was made that each teacher had been involved in student work experience, right through from briefing students prior to work experience, then being involved in visiting students in the workplace, and finally involvement in feedback and de-brief. The researcher undertook all of the interviews in each teacher's place of work. Notes were made during the interview and these were subsequently typed up. Interviews were semi-structured and lasted for approximately 40 minutes.

The interview questions were divided into 4 sections. There was also a final question for additional comments. In order to aid the process of triangulation

the questions had a similar focus to those used in other instruments. The first part of the interview asked the teacher to consider work experience and student learning. Two sections then followed this on work experience and risk taking, and work experience and failure. Finally, each teacher was asked to comment more broadly on the business curriculum and how they thought risk and failure might be incorporated into the business curriculum or if there was any benefit in doing this. The procedure for presenting the results of the interviews will be to go through each these categories and detail the responses given. The majority of the responses were spoken statements, although for some questions it was possible to translate the responses numerically. When giving examples of statements, all references will be anonymous.

8.2 Work Experience and Learning

First of all teachers were asked to talk about work experience and how they felt this helped or hindered student learning. In this part of the interview teachers were also asked to comment on the importance of relationships in the workplace. So the focus here was on what the workplace offered in terms of learning and secondly what the employees offered to the student in terms of learning.

These first two questions were aiming to get teachers to comment upon what has been referred to (Lave and Wenger 2003) as situated learning. This can be seen as involving participation in communities of practice, where activities, tasks, functions, and understandings do not exist in isolation; they are part of

broader systems of relations in which they have meaning. According to this perspective, students will initially participate on the periphery but then gradually their engagement deepens and becomes more complex, until eventually, they will become full participants, and will often take on organising or facilitative roles. Knowledge is, thus, located in the community of practice. Furthermore, in this view it makes no sense to talk of knowledge that is decontextualised, abstract or general (Tennant, 2005). The theory of situated learning claims that knowledge is not a thing, or set of descriptions, or collection of facts and rules. We model knowledge by such descriptions. However, the map is not the territory: human knowledge is not like procedures and semantic networks in a computer program. Human knowledge should be viewed as a capacity to coordinate and sequence behavior, to adapt dynamically to changing circumstances. Situated learning is the study of how human knowledge develops through activity, and individuals' interpretation of that activity.

The opening question asked what was it about work experience that helped the student(s) to learn/not learn about business. There were 8 teachers who did feel that whilst work experience had some benefits, overall students gained little in terms of their understanding of business. In this respect there was contrast to the feedback that had been obtained from employers after asking a similar question. The 8 teachers who said there were some benefits referred to skills development and in particular both interpersonal and time management skills. Some of the comments from teachers included:

"One of the main concerns with students was the time that they had to start and finish work (a shock to their systems) and also the distances they had to travel. On returning from work experience, I did a de-briefing session with them. The views were very mixed, from the extreme that one got 'sacked' because he would not do as he was instructed, to very positive experiences. Some did not really get to experience the 'business' side of things, or it could have been because they did not see the 'business', as some complained that they had to do mundane jobs such as filing (I did explain that all jobs have their interesting and less interesting aspects). I am convinced that in a lot of cases their actual experience does not relate to 'business', but is more concerned with their attitude and behaviour. My own view is that employers may not be briefed sufficiently, that students are not prepared sufficiently for most of them to gain a realistic experience of business that enhances the business curriculum".

"The vast number of my students said that the work they did was menial and was not the kind of work that they wanted to go into in their later lives. I also attended a vocational centre, which was mainly used by lower ability students. The more able students were often not given the choice to attend due to timetable restrictions. Those attending the vocational centre did talk about how they could make money with those skills – house building etc and could apply it to business without even realising".

"I have found that work experience has helped pupils to understand the importance punctuality and attendance within the business environment.

Students become aware of the need to have good customer service within all types of businesses not only restaurants/bars etc".

"I believe work experience is beneficial in providing students with a taster and insight into businesses or professions that they may choose to enter when leaving school. However, students are often restricted in what they can do in a placement and often because they only last for two weeks. I feel that placements that last over longer period of time, perhaps two days per week, benefit students more and give them more of an opportunity to feel part of a team, perhaps see projects through or even given a specific responsibility".

The interesting outcome here was the focus that teachers put on skills, as opposed to developing knowledge and understanding of business. One can also detect from these comments perhaps that there was some unease from teachers about the work experience placement environment and the scope that it offers. There was also comment about the length of time spent on work experience and how this could be a restricting factor. In terms of the environment provided by work experience there were definite links here with what had been said by employers.

Question 2 asked about the importance of collaboration and interaction with non-teachers whilst on work experience. All 10 of the teachers interviewed were positive about the importance of this. Some of the more interesting comments included:

"Students seem to have more respect for employers when on placement than they would towards teachers. Employers have no preconceptions about students when they enter a placement so don't judge them. In the past, students have told me they enjoyed being on placement as they were treated as an adult. Working in 'the real world' gives students the opportunity to observe and follow professional people and suitable role models".

"Some students will flourish given the right environment. One student who went on work experience in a care home for the elderly, was a quiet student in class and kept himself to himself in class. However, he thoroughly enjoyed talking about his work experience and how he interacted with the staff and the patients in the home. They can learn so much about respect and will react positively to how they are treated".

"I attended a vocational centre and saw that students, particularly of a lower ability, interacted much better with the 'professionals' such as brick layers, joiners and decorators, than in their usual school environment".

Certainly here then teachers gave a very clear message about how they perceived opportunities for interaction with others whilst students were on work experience. This was a similar response as to that obtained from the employers themselves.

8.3 Work Experience and Risk Taking

For this set of questions, teachers were asked to consider opportunities which

students had for risk taking whilst they were engaged in work experience and how, or if at all, this could help their learning. In spite of having been involved in all aspects of work experience (pre-brief, visits, and de-brief) all 10 teachers were unable to give examples of risk taking in the context of student work experience (question 3). It needs to be noted that there were some real parallels here with the comments that had been given by employers and put together these (comments from teachers and employers) began to provide some important evidence as to the suitability of work experience in providing meaningful opportunities for risk taking.

Similar to the question put to employers, teachers were also asked they felt that opportunities for students to take risks during work experience would help or hinder learning. In this case, 7 teachers were positive about risk taking and how it might help student learning. Some of the comments included:

"If a student was given the opportunity to take risks then I feel that it would beneficial to their confidence as an individual".

"I would say they would both help and hinder. Help in the way that they can put classroom based learning into context, but may hinder in that they may feel they are not confident or equipped enough to take risks".

This latter comment was interesting in that it did mirror some of the employer findings in relation to having suitable support mechanisms in place to ensure that any risk taking was guided and properly supported. There are of course

implications here for the form of such support mechanisms, how they would be funded, and who would provide that support. So, similar to the employer responses, there were clear statements in terms of the importance of risk taking for student learning but at the same time it was qualified against the opinion that, very often, work experience was unable to provide suitable risk taking opportunities. Findings such as this will be returned to later and it will be seen how they have informed the emerging themes discussed in chapter 11.

8.4 Work Experience and Failure

This section asked teachers similar questions to those about risk taking, but within the context of experiencing failure during work experience. There were 6 teachers who were unable to give any examples of students experiencing failure on work experience and of the remaining 4, who were able to give comments, one example was:

"I don't think that employers would set students up to fail. If a student was on a long-term placement then perhaps they would give the student relevant training before setting them challenges".

This comment was interesting in a number of ways. First of all it made reference to the length of time spent on work experience. This was something, which had come to light in previous questions and something that also emerged from the Young Enterprise interviews. There are two points to

make here. First of all, one could suggest that if work experience took place over a longer period of time then employers would perhaps be more inclined to try and design more meaningful experiences. Secondly, and closely linked to this, is the fact that if students spent a longer time on work experience then the likelihood is that they may start to become more productive in terms of their contribution to the organisation. So, in turn this could well add to employer good will in relation to how much time they would be prepared to guide and support a student on work experience. The other thing to notice is the point about giving the student relevant training. Clearly here there is a cost implication for providing that training and ensuring the person who delivers it (whether they be a teacher or non-teacher) is suitably trained to undertake the role. The importance of such training is further illustrated in the responses to the next question. Here teachers were asked about instances of failure during work experience. There were 7 teachers who indicated that in the context of work experience, an experience of failure for a student was seen as possibly being something, which would have a negative impact. For example:

"It could hinder as students confidence may be knocked".

"I think allowing students to experience failure during their placement could have a very negative effect upon self-esteem and confidence. Employers should brief students or give training. Students would benefit more from a positive experience".

"It would certainly have some affect on students learning, in terms that they

may gain an unrealistic picture of business and it may affect their confidence. The whole experience would need to be carefully managed by the school/employer to ensure that something positive came out of it".

The first thing to note is that these comments contrasted to those put forward by the majority of employers who saw opportunities for failure as being a positive experience for students. However, the comments do add further weight to the argument for an effective support mechanism to go alongside the experience of failure. Taking this one step further it does raise questions about the ability of employers to be able to give critical feedback, in a supportive way, to students whilst on work experience. This is important in boosting student confidence and helping them to improve their performance. So again the implication is that the experience failure can be a positive but the environment and associated support mechanisms have to be in place to ensure students do not see it as a totally negative experience. This aspect will be returned to as part of the analysis and in the consideration of the emerging themes.

8.5 Risk and Failure in Business Education Lessons

In this set of questions, teachers were asked if they gave their students opportunities during lessons to learn by risk taking, and for examples of how they thought this happened.

There were 8 teachers who responded that only sometimes did they give their students opportunities during lessons to learn by risk taking. Out of this 8, 4

teachers pointed to the importance of classroom support mechanisms (from student peers and from the teacher) in helping to see risk taking in a positive context. Regarding how they might facilitate the experience of risk taking during their lessons, some of the comments included:

"I would try to do this when setting a problem solving task, often in a group. If they fail then they are in a group, they can laugh it off with peers. If it was in front of real life employer then it could affect confidence and self-esteem".

"Role play in customer service situations. Presentations to rest of class based on their own research. Putting together financial documents for business planning".

"Usually using some sort of case study with a cost/benefit analysis, or role play on customer services, introducing aspects of the syllabus along with empathy of the situation and exploring exam technique for the A2 case studies, looking at application, analysis of the situation and application".

For this question on risk taking in lessons there was not a convincing response from teachers. The next set of questions followed a similar format to the previous ones but set in the context of experiencing failure. The responses too were similar with 8 teachers saying sometimes. Furthermore, the response by 8 out of the 10 of 'sometimes', rather than 'yes' would seem to suggest that many teachers did not view either of these as something, which is particularly important. Again there was a contrast here in terms of how employers had viewed this.

For the question on how teachers might facilitate the experience of failure in a Business Education lesson, some of the comments indicated that teachers had given some thought to this and did in fact try to facilitate it during lessons. For example:

"Again, in groups, allow students to compete against each other. For example, designing a new product etc, choosing a winner and say why the others failed etc. At least failure is experienced in a group and with peers".

The next question attempted to go into more detail on risk and failure in Business Education lessons and asked if planning for these two types of learning experience would be easier in some lessons than in others. There were 8 teachers who did feel it was easier in some lessons than others. However, only one teacher was able to be specific about this in terms of relating it to a particular aspect of the syllabus. There were 4 teachers who mentioned the need for careful planning and structuring of such experiences. Some of the responses to this question included:

"It would have to be carefully planned and managed so that it did result in a positive learning experience. I could see it working well in problem solving exercises, management and leadership lessons, and financial lessons. But the student would not have to see themselves as the failure, only the business related aspect".

Again this further strengthened the conclusions, in terms of ensuring the

provision of carefully thought out support mechanisms, which were being drawn from employer responses, and some of the teacher responses to earlier questions.

Question 13 asked about the importance of collaboration and the involvement of non-teachers in Business Education lessons. All 10 teachers responded to this positively, and overall they felt that it was a good idea. A sample of some of the responses included:

"I think that business studies is very much a subject which draws on all aspects of life and society and one in which students will have come across some topics without even realising it. The learning is re-enforced by introducing guest speakers to not only give students variety in the people who they can be educated by, but also to draw on experiences that teachers may not necessarily have witnessed or have expertise in, such as banking etc. I also feel that learning is enhanced with trips so that students can experience and see the business processes taking place, eg a trip to the BMW Mini plant in Cowley to see the production process, technology and engineering".

"Yes definitely. Students can benefit from the experience of other people, with some subject areas the teacher does not have the relevant experience or knowledge to deliver the content, the student will learn to respect other adult's opinions and feel more comfortable talking with other people".

"I like students to collaborate in groups as it helps them to learn about

teamwork, communication etc. I always explain to students that in business they will have to work in teams effectively in order to achieve goals etc. Using persons other than teachers to give talks to students is highly beneficial. The novelty of a guest speaker often gets the message over to students as their information comes from the 'real world'".

So clearly, teachers are not averse to using non-teachers as part of their delivery and obviously feel they have something to offer. The challenge that this is maybe presenting now is how to ensure such persons are properly trained to provide this type of input in the classroom.

Question 14 asked if planning for learning experiences in risk and/or failure meant that learning experiences were more formal; less formal or even incidental or unplanned. One of the responses to this was:

"I think the structure of the lesson depends on the teacher not the initiatives used in the lesson. Risk taking and interaction/collaboration can be structured into the lesson plan".

This comment was again an interesting one, and it raised questions around the notion of opportunities risk and failure as something that can be planned, and if one does this, then in turn does that planning impact on the spontaneity of the risk taking opportunities. On the other hand, teachers will not wish to lose control of classes and if they are not careful in how they plan things then it may result in a chaotic lesson/learning experience.

8.6 Summary

Similar to the results of the employer interviews, the teacher interviews provided some useful insights into the research themes. However, it does need to be remembered once again that the sample size (10) was relatively small and hence some caution has to be exercised when considering the significance of the teacher interview results.

The teachers interviewed also gave a mixed response in terms of the benefits of work experience. Some teachers did see work experience as beneficial in respect of developing students work and personal skills (for example, time management). However, some teachers seemed less convinced of its benefits in terms of developing an understanding of business, and also in that often students were only given very limited roles. Teachers were positive about the opportunities that work experience provided for teamwork and collaboration, and about the impact that it could have on student motivation, especially for those students who might be considered less academic.

Teachers were certainly less clear on the benefits of risk taking and failure in terms of student learning. So there is an implication here in terms of professional development and in terms of the initial training of teachers. There was also some evidence to suggest that students may need coaching and support in order that they obtain maximum benefit from any opportunities that are provided to take risks or to experience failure. How teachers, or non-teachers, undertake this is a challenge as it is often not something that they are trained to do or have much experience of. Again, this will be returned to

later when the implications for professional practice are addressed. In terms of risk and failure, perhaps significantly teachers were unable to give examples of how this could be helpful to learning whilst on work experience. There were also mixed responses on the benefits of experiencing risk and failure even if those opportunities were available to students. In particular, failure was seen as something that could have a negative impact on student confidence and if it were part of a work experience offer, then it would need to be very carefully managed. In respect if having opportunities to experience risk and failure in taught lessons, again the responses here was not convincing and teachers said if it did happen then it would need to be carefully planned. Finally, there were mixed responses on the question around the balance between formal, informal and incidental learning in taught lessons.

Further analysis of the findings from the Teacher Interviews will be undertaken in chapter 10, when they will be compared against the main themes for investigation. In the chapter that follows, the results from the Young Enterprise Company Reports will be presented.

CHAPTER 9

Results from Main Study: Young Enterprise Company Reports

This chapter will present the results from evidence taken from the Young Enterprise Company Reports. Unlike the other instruments in the main study this was secondary evidence. The Young Enterprise Company Reports are presented at the end of the Young Enterprise trading year and as such they come after the event. In that sense one needs to be careful in using this evidence as the students/writers of the reports may well have problems remembering accurately all the facts, or they might exaggerate certain points, so that the finished product appears more complete. Even so, it was felt that the Young Enterprise Company Reports would provide a useful perspective on the research themes.

9.1 Context and Sample

There were 9 Young Enterprise Company Programme Reports used, and they all came from Young Enterprise companies who had competed in the Merseyside and North West Young Enterprise Strategic Finals.

Young Enterprise operates a number of programmes for young people on a 'learning by doing' principle. The Company, Team and Graduate Programmes provide opportunities for young people to set up and run their own company, raise share capital, elect a board of directors, market and finance a product or service of their own choice, and finally present a report and accounts to their shareholders. The Team Programme is aimed at 15-19 year olds not in

mainstream education, whilst the Graduate Programmes is made available to undergraduates at university. In the Company Programme (aimed at 15-19 year olds, in mainstream education), Young Enterprise Companies usually begin trading at the beginning of the academic year in September or October. In March/April of the following year, they will begin to prepare their reports. Then in April/May each Young Enterprise Company will take part in an Area Board and/or Strategic Board competitive event. As part of this competition each company will present its formal written report: the Company Report (the other aspects of the competition are a presentation and display/trade stand).

The Company Programme is Young Enterprise's most popular and oldest programme. It was established in the USA and came to the UK in 1963. After having traded for approximately one year, the Company Report is the opportunity for the young people in each Young Enterprise Company to summarise their year in business. The report must be written by company members and must be original and innovative. Each company is given precise guidelines on the structure and format of the report. Overall the report should cover all aspects of the company's performance, and should read as one business-like document. The report should demonstrate the company's development through problem solving and innovation and should highlight the company's achievements. Company membership and structure should be illustrated, and there should be a review of the student's developments as individuals and as a team (Young Enterprise, 2008). In all the Young Enterprise Programmes, the success relies on the active involvement of an education partner (usually a teacher) and volunteers from business (known

usually as advisors). It is these business advisors who make the learning experience work for the young people who take part each year.

The 9 Company Reports came from the following schools/colleges. To preserve anonymity, each schools/college has been referred to as A, B and so on.

Company Name	School/College
Air	School A
Chance	College B
Checkmate	School C
Ignite	School D
KRE 8	School E
Making Waves	School F
Phoenix Inc.	School G
Talented	College H
Walk About	School J

The procedure that will be adopted in reviewing the findings from this instrument will be to consider each report in turn and comment on the following aspects of the report, which are deemed to be most relevant within the context of this study. These aspects are Learning about Business, Problem Solving, Risk Taking and Failure.

As an introduction to each report there will be a brief overview of the membership of the company and the type(s) of trading activity that they

engaged in during the course of the Young Enterprise year. Following the reporting of the evidence there will be a comment on how significant the evidence is and how it helped to inform the study.

9.2 Company Report: Air

14 students from year 12 formed this company in October 2006. The company was supported and advised by two teachers from the school and a business advisor from a local business. The company's activities included, children's and adult's nightwear and underwear, which was personalised using iron on transfers.

Aspect: Learning about Business

"Fulfilling our orders, our suppliers changing their stock, trying to get our raw materials from other suppliers whilst keeping our cots as low as possible and minimising wastage in production".

Aspect: Problem Solving

"Initially we tried to delegate the making of an item of clothing to one member of the production team. However, this seemed to take an unnecessarily long time and so....as people had different skills we decided the most time effective way to produce the product was to opt for a production line....this proved to be much more effective as people became increasingly skilled and productivity increased".

Aspect: Risk Taking

"We experimented with several plans of how the product could be manufactured".

Aspect: Failure

"When we were making our personalised clothing we did not take into account any wastage of materials during production; this significantly increased costs".

9.3 Company Report: Chance

16 students from the lower sixth form formed this company in September 2005. The company was supported and advised by two teachers from the college and a business advisor from a large multinational company. The company's activities included: key rings; ink cartridge recycling; customised handbags and salsa lessons.

Aspect: Learning about Business

"All members of the company were issued with a job description, and everyone was also issued with a formal contract".

Aspect: Problem Solving

"We designed and distributed a questionnaire. The results of the questionnaire helped us to formulate our product design".

Aspect: Risk Taking

"As our profits grew and we gained more experience in the business world we tried to be innovative in our approach and reinvest our profits in new products".

Aspect: Failure

"Less successful have been our inkjet cartridge recycling service with only 1 cartridge being recycled to date".

9.4 Company Report: Checkmate

7 students in year 11 formed this company in September 2006. The company was supported and advised by one teacher from the school. The company's activities included: cheese boards and ornamental glasswork clocks, using recycled/melted down champagne bottles; calendars; and recycled solitaire boards.

Aspect: Learning about Business

"Our company was able to announce a dividend of 70 pence per share with equates to a 40% return on the original investment".

Aspect: Problem Solving

There was no evidence provided on this aspect.

Aspect: Risk Taking

There was no evidence provided on this aspect.

Aspect: Failure

"To promote the product we had an advertising campaign that involved the characters Wallace and Grommit. Unfortunately, this advert had to be withdrawn because of copyright issues".

9.5 Company Report: Ignite

Twenty five students in year 12 formed this company was in September 2006. The company was supported and advised by 2 teachers from the school, and two business advisers from an aircraft manufacturer and an estate agent. The company's activities included: a children's cookbook, aimed at encouraging healthy eating, and a year 11 'leavers package' which included a year book and a DVD of memorable events in school.

Aspect: Learning about Business

"The marketing team embarked on a comprehensive research programme, analysing customer tastes and views in order to ascertain the actual saleability of the product".

Aspect: Problem Solving

"Initial prototypes of the (packaging) box revealed various problems, but through trial and error the box was eventually manufactured in-house using vacuum forming".

Aspect: Risk Taking

There was no evidence provided on this aspect.

Aspect: Failure

"We sought further support for our product by writing to local and national chefs in an attempt to encourage them to endorse our product. The response was disappointing".

9.6 Company Report: KRE8

Six year 12 Business students formed this company in September 2005. The company was supported and advised by one teacher from the college and a business advisor from a business support group. The company's activities were concentrated on one main product, which was a DVD postcard of the City of Liverpool. This was a particularly innovative company, who as part of their marketing strategy wrote to each of the 12 corporate sponsors of the Liverpool Capital of Culture Company, enclosing a complimentary copy of their product. The aim of this was to try and get them to use it as a corporate gift, which in turn might lead to substantial orders.

Aspect: Learning about Business

"We found out that there were legal documents to be completed to register the company and obtain a certificate of insurance".

Aspect: Problem Solving

"We realised that once our product was available to purchase, it would be very easy for other businesses to use our ideas and come up with a similar product. We sought the advice of a solicitor on how to protect the copyright of our product".

Aspect: Risk Taking

"One of our ideas was a DVD postcard of Liverpool to tie in with the opportunities available through Capital of Culture status. We had no idea how much this would cost to produce or what technical expertise would be required".

Aspect: Failure

"Our advisor was very experienced and had a lot of local contacts, which we found very useful. She did not always offer solutions to our problems, but pointed us in the right direction to help us learn from our experiences. We made many mistakes along the way but we managed to develop a culture where we learned from these mistakes and developed as a strong team".

9.7 Company Report: Making Waves

Twelve year 12 students formed this company in September 2006. The company was supported and advised by one teacher from the school and a business advisor from a public sector business. The company's activities included producing: calendars; A4 and A5 framed and mounted pictures; A4 and A5 folded photographic cards; fridge magnets and key rings.

Aspect: Learning about Business

"Throughout our time as a business our finances have been controlled efficiently and effectively with the use of spreadsheets. This has allowed us to keep track of our turnover, gross profit, net profit, Vat, and Corporation Tax, and means we can predict a return of over 80% on our shareholder investment".

Aspect: Problem Solving

"When considering cash flow we had to ensure that we did not tie up too much money in slower moving products".

Aspect: Risk Taking

There was no evidence provided on this aspect.

Aspect: Failure

"One product that failed these tests (on quality) was paperweights. These were made using resin bought from an Internet company, but they were difficult to make and we could not get the quality we wanted. We made a net loss on these products, but from them we gained the experience. Market research showed there was a demand for the product but we did not have the skills necessary to produce the product to a high enough quality".

9.8 Company Report: Talented

Seven year 12 students formed this company in September 2005. The company was supported and advised by one teacher from the college and a self-employed engineer. The company's activities focussed on recognising and promoting local musical talent. This company faced several difficulties and problems in trying to provide a venue for local bands/musical talent. They initially approached several clubs in the local area with a view to hiring one of these as a venue. Throughout the report there is evidence of the students experiencing setbacks and failure. They take what might be described as measured risks and are obviously advised by teacher/advisor on this.

Aspect: Learning about Business

There was no evidence provided on this aspect.

Aspect: Problem Solving

"We have encountered many problems, and have had to make quick decisions to overcome them as well as adapting our ideas to changing circumstances. We have all had disagreements, but have overcome them to work as a successful team. We have had support from each other, our advisor and link teacher, but most of all we have adapted our roles to ensure that each job was completed as it happened".

"Two days before the event, one of the bands dropped out, but luckily we had a contingency plan and one of our reserve bands agreed to take their place".

Aspect: Risk Taking

"When we started selling tickets, people did not want to but in advance and preferred to buy tickets on the door, which we had not anticipated. Our total number of tickets sold before the night was only 10. This was huge worry, as we need to sell at least 100 to break even. We decided to take a chance and go ahead, in the hope of selling the extra tickets on the door".

Aspect: Failure

"We now realise that we could have been more proactive in chasing entries, and an earlier deadline might have meant that we ran 3 events rather than one".

"We ran a successful event however, we would do things very differently if we did it again, and our experiences mean we would not make the same mistakes again".

9.9 Significance of the Evidence

In terms of learning about business the Young Enterprise Company Reports provided an indication that for those students involved in Young Enterprise, learning had taken place. In this respect the findings here supported some of the findings from the initial study along with findings from the Young Enterprise interviews. The reports gave details, which demonstrated awareness of a number of key business concepts including market research, finance and accounts, and the legal requirements surrounding the operation of a business. This was impressive and one needs to remember that when students run a Young Enterprise Company they are not taking part in a taught programme. A teacher will help to facilitate the process and students will have access to a business advisor however, this does not involve any formal teaching. So the learning, which does take place, is mostly as a result of the experiences that students have as they progress through the Young Enterprise year. The caveat to this of course is that the reports do not indicate if all of the students who were involved in each company developed their understanding of business to the same degree. Indeed, it could well be that there were 1 or 2 students who took the lead in writing the reports and the reports may be indicative of the one of the weaknesses when students work in a team namely, if that if the process is not carefully monitored then there may be students who do not fully participate. Nor do the findings indicate the depth

or significance of the learning that took place. This is something that will be considered later as part of the analysis.

Similar comments will apply to the other aspects (problem solving, risk taking and failure) of the reports. Even so, the evidence from the reports does indicate that learning took place in relation to problem solving, risk taking and failure and that at times this appeared to happen in a heuristic, or simplifying rules of thumb, manner. In this respect it appeared that for those students involved in the Young Enterprise Programme, they were experiencing problems and then using intuition, hunches and maybe even emotion to make judgements. It is clear also from the reports that sometimes this produced mistakes and it is possible to infer, although not with absolute certainty, that students began to realise that some judgements may come to mind quickly but without any logic, and that they then began to learn how to correctly assess risk, by using logic and access to information as well as judgement. Again, this aspect of developing risk taking skills and using experiences of failure will be returned to later in chapter 10 when the findings will be further analysed against the key themes of the investigation.

9.10 Summary

As was explained at the start of this chapter, the Young Enterprise Company Reports were produced after the event and as such they are secondary evidence. Even so, the reports do provide an indication that by partaking in the Young Enterprise Programme students had opportunities to experience risk and failure, alongside problem solving and working as part of a team. The

reports are submitted as part of a competition and therefore to what extent they have been enhanced is difficult to say. Certainly, the evidence that they present has to be treated very carefully. The next chapter will now take the findings presented in the previous 4 chapters and analyse these further in light of the (main study) themes for investigation.

CHAPTER 10

Analysis of Findings

This chapter will provide an analysis of the findings from the main study. In order to set the context for this analysis it is felt appropriate to briefly re-state the original aim of the study and the formulation of objectives. The links between objectives and key themes of the investigation will then be shown in order to provide a framework for the analysis of the findings. Initially, the analysis will follow the 6 main themes. It will take the instruments related to each theme and analyse the extent to which each instrument has illuminated the theme. Each theme will be presented and discussed along with the relevant information obtained from the instruments that were used to test that particular theme.

10.1 Aim, Objectives and Themes.

As outlined previously the aim of this study was to consider student learning in Business Education in the 16-19 age group, with a particular focus on:

- Experiential Learning in Business Education; and,
- holistic whole business approaches to teaching Business Education.

Underlying this aim was a consideration of the possibility of a new paradigm for learning in Business Education programmes, centred on Experiential Learning within real business contexts.

In the initial study that followed, a number of specific objectives were distinguished. These objectives have been explained previously, and to recap briefly they were as follows:

- to survey approaches to Business Education in the 16-19 age range;

- to survey employers as to what their perceptions are related to the vital components of Business Education courses in the 16-19 age range; and,

- to provide more detail to both surveys by observing and describing the work of three institutions involved in Business Education and by observing and describing the work of the Young Enterprise Scheme in at least five institutions.

The results of the initial study led to the formulation of more specific research objectives, namely:

- to investigate effective Experiential Learning in Business Education;

- to investigate learning within holistic real business scenarios which operate within the Business Education;

- within the objectives above - to investigate the concept of risk and the concept of failure as tools for effective learning;

- to investigate employer perceptions of work-related experiential learning; and,

- to consider if such approaches are realistic alternatives in terms of curriculum change; that they meet some key Government imperatives

on curriculum reform; and if they can effectively address issues of harmonisation between vocational and academic approaches to Business Education.

Following from this, a set of themes was developed in order to take the study forward and provide the basis for the main study. These were linked to the five specific objectives as shown in table 10a.

Objectives, Themes and Instruments

Theme	Objective	Instrument used to investigate
1: Work related experiential learning is an effective mechanism for student learning in Business Education.	1	Postal questionnaire to schools and colleges. Classroom observation. Student questionnaire. Teacher interviews.
2: Employers consider work related experiential approaches to Business Education as being of most value	1, 2	Postal questionnaire to employers. Employer interviews
3: Experiential learning requires particular conditions, which may be limited by organisational constraints.	2	Postal questionnaire to schools and colleges. Classroom observation. Student questionnaire. Teacher interviews.

Table 10a: Objectives, Themes and Instruments

Theme	Objective	Instrument used to investigate
4: Experiential learning enables students to contextualise and evaluate theoretical perspectives in a practical setting, and at the same time provides them with a social and interactive learning process, which will involve integration between theory and practice.	2	Postal questionnaire to schools and colleges. Classroom observation Student questionnaire. Teacher interviews.
5: Theory and application can be effectively combined within a real work curriculum model and that operating realistic business activities can enhance student understanding in a more effective way than work experience.	4	Young Enterprise Company observation Student questionnaire. Young Enterprise student interviews Young Enterprise Company reports
6: Risk taking and failure, which are integral aspects of running a small enterprise/business activity, are powerful forces in student learning.	3	Young Enterprise Company observation Young Enterprise student interviews Student questionnaire. Employer interviews

Table 10a: Objectives, Themes and Instruments

10.2 Analysis: Theme 1

Work-related Experiential Learning is an effective mechanism for student learning in Business Education.

Four instruments were used to investigate this theme. The instruments were a postal questionnaire to schools and colleges, classroom observation, a student questionnaire, and teacher interviews.

Postal Questionnaire

In the postal questionnaire to schools and colleges there was strong indication from teachers/lecturers (perhaps not surprisingly) that using work related experiential activities was important for student learning in Business Education. The most significant aspect of the responses from teachers/lecturers was the higher level of agreement shown for using work related experiential activities on Vocational business courses as opposed to the more traditional A Level courses. This was especially marked when teachers/lecturers were asked to comment on activities for students being ill-defined/structured, in the context of business practice and that students could apply judgement and expertise in realistic situations. The responses to these particular questions may be down to the nature of the syllabuses for Vocational business courses and the greater scope that they sometimes give for a teacher/lecturer interpretation. At the time of the questionnaire the syllabus was not something that teachers/lecturers were asked to comment upon and so it is difficult to make anything other than a broad assumption here. Nor has any further investigation into syllabus content been undertaken. Even so, the finding in this respect can be deemed to have some significance and as will be seen through the remainder of this thesis the notion of less structure in student learning activities is one, which re-occurs in the findings from other instruments.

Classroom Observation

The observation and description of classroom activities supported the findings from the postal questionnaire, and in the classes observed (although only a limited number) experiential activities were being used more, and were seen as an effective mechanism by teachers/lecturers for teaching on Vocational Business as compared to A Level Business.

Although teachers felt that the work they were doing was effective, it was difficult for the researcher to judge from the classes observed how effective experiential activities were as there was often a failure to effectively reflect on the activity, leading to student uncertainty about links with the syllabus. It appeared that teachers had planned to use activities but had not built into their planning sufficient time for in-depth reflection (and hence reinforcing the learning) by their students.

Perhaps the most significant aspect of the findings was the variation in the level of use of experiential activities by individual teachers. This was followed up by the researcher (although only in a limited way) and the conclusion was that the industrial/commercial background of a higher proportion (as compared to schools) of the teaching staff in the Further Education sector often made them more willing to use experiential/activity based approaches. This is worthy of some further comment as it does indicate a possible implication for the training of teachers, either as new entrants to the profession or training for existing teachers in respect of providing them with in-service up-dating relating to the effective use of experiential work related activity in the classroom. It is

also something, which emerged from the teacher and employer interviews in relation to the provision of support mechanisms in the work place in order to ensure that students reflected carefully on any experiences of risk and failure. This issue of professional relevance and implications for practice will be discussed again in chapters 11 and 12.

Student Questionnaire

Theme 1 was also investigated via the learning experiences for students outside of the classroom in order to try and obtain information on how these impacted on their learning. Here, the focus was on work experience with an attempt to try and draw a comparison between this and learning in a more formal environment (the classroom). Thus, this provided a contrast in terms of formal and informal learning about business. Formal learning can be defined as that which takes place in a relatively structured, dedicated environment: it is planned learning that derives from activities within a structured learning setting. Informal learning, or learning beyond the classroom, has been examined by (Bentley, 2003; Coffield et al, 2008; Marsick and Watkins, 1999; and Jarvis, 2006). It should be noted at this point that the reference here is to the context of learning and not to a typology in that it does not concern learning in itself but rather the context in which that learning takes place (Illeris, 2007).

In the student questionnaire more than half of the students felt that their understanding of business had improved as a result of work experience. This supports the comments made by a number of writers on work experience

(Singh, 2008; Engestrom, 2008; and Ryan, 1998). A notable aspect in the responses to this questionnaire was that students were able to pinpoint particular aspects of their work experience and how it helped their learning about business. It might be inferred from this that unlike classroom experiences (although not in all cases of course), work experience gives students the opportunity to repeat their experiences, often several times. An example of this might be when communicating with customers, when students are able to try out different methods and approaches. As a result of this it seems that students were able to effectively reflect on previous experiences, modify their behaviour and in turn reinforce their own learning. Structuring learning in this way (that is, when learning is based on real problems) can effectively promote a deeper approach to learning. The conceptual framework of deep and surface learning shows the difference between trying to reproduce su bject matter as opposed to understanding and applying that knowledge (Gibbs, 1998). Of course, the caveat regarding students who felt that their understanding of business had improved as a result of work experience is that it is difficult to judge the extent to which this happened, or in other words was the learning deep or simply surface learning. This is clearly a drawback in the findings here and points towards a much more structured and measured approach to work experience, involving assessment of student capability before going on work experience and then tailoring the work experience placement to their precise needs.

Aspects of literature also indicate that unfortunately, work placement does not always provide a meaningful and consistent experience for students

(Cameron-Jones and O'Hara, 1992; Kemp and Seagraves, 1994). There are also disadvantages as well as advantages to time spent on work experience, as Donovan (2005) has pointed out. Some of the responses to the student questionnaire would support this opinion. For some students who made negative comments about their time on work experience it was because they had not had opportunities to really become involved, or had been with an employer who was very prescriptive in what they were allowed to do. This linked quite strongly with some of the findings in the postal questionnaire relating to the effectiveness of students being able to confront ill-defined/structured problems or challenges in the context of business practice and that they were then able to apply judgement and expertise in realistic situations. Overall, the findings appeared to point to a need for a re-evaluation of work experience, not just in terms of its structure and length but also in terms of how it is supported.

A particular question relating to learning on work experience and collaboration and social interaction with others, gave an interesting result. The responses to this from students studying in Further Education were quite different from those studying in schools. Students in Further Education appeared to more fully recognise the importance of social interaction in the learning process, and the response rate to a question on the importance of social interaction in learning, was almost double that for school students (68.75% compared to 38% of school students). This could possibly be a reflection on the type of learning environment and classroom organisation that students are used to in Further Education Colleges as opposed to schools, with the latter being more

structured as opposed to the more open and interactive environment in Further Education Colleges. Perhaps too it raises a further question about what might be referred to as the more formal school environment, as opposed to the more informal Further Education environment. This notion of the environment in which learning takes place is an important one. It has links not only with the types of activities that can be provided but also there are socio-economic and political implications. A reference is made later on in this study to a project in a call centre run by young people, and which leads to a qualification which is equivalent to half a GCSE. It has been strongly criticised. Similarly, there is evidence (DCSF, 2009e) that for many young people from socially deprived backgrounds the school/college environment is not one where they feel comfortable, and as a consequence they do not engage in learning. The importance of the learning environment is something, which will re-occur later in this research. The learning environment is also linked to the type of learning that is provided and here again there are implications in respect of opportunities to facilitate more informal learning which, as has been shown in this study, is an important motivating factor for many young people.

Teacher Interviews

The final instrument used to investigate Theme 1 was the teacher interviews. The main finding here was that teachers felt that work experience was of benefit to their students. However, this perceived benefit was not in terms of student learning about business. Rather teachers had experienced and then commented upon, was that it was beneficial for students to be involved in communities of practice and draw benefit from situation in which their learning

was taking place. This is something referred to by Lave and Wenger (2003) as situated learning. However, as mentioned above, in terms of actual learning about business, a number of teachers were less certain about the impact of work experience. It could be that teachers were only looking at this in terms of links with the business studies syllabus that their students were currently engaging with, and not considering the wider impact that work experience might have on learning about business. This particular weakness in using work placement has been pointed out by Bourner and Elliker (1998), who have suggested that in order to be effective, work placement should be integrated with other academic work. In the case referred to here that would be the syllabus of study. This is an important point, as when discussing work placement with teachers it was clear that work experience for their students was usually undertaken with little thought as to how it could be integrated with their syllabus of study.

10.3 Analysis: Theme 2

Employers consider work-related experiential approaches to Business Education as being of most value.

Two instruments were used to investigate this theme. The instruments were a postal questionnaire to employers and employer interviews.

Postal questionnaire

The strongest responses from employers came on question 1 (problems should be in the context of business practice); question 5 (judgement and

expertise needs to be applied in realistic situations); and question 11 (case studies and simulations are an important aspect of any business course). Question 8 (action learning in management is about groups working together, reflecting on past experience, using that to understand current problems, developing new solutions and ultimately changing their behaviour. It is important to use similar methods when teaching students about business) gave a 46% agreement whilst the lowest agreement was on questions 2 (problems should be ill structured/defined) and 10 (to approach reality students should be given the opportunity to work in groups) with 35% on both. The employer responses to these questions provided some interesting differences to those from schools and Further Education and Sixth Form Colleges.

It might be expected that employers would strongly support the view that in Business Education problems should be in the context of real business practice. There was a majority of employers who agreed with this but was not as high as anticipated (58%), and was much lower than the response from schools, Further Education and Sixth Form Colleges (80.75%). This perhaps suggests that the employers surveyed were tending to focus upon what might be referred to as softer skills and behavioural attributes as being of more importance. This would tend to support the views of writers such as Reed and Anthony (1990) who have suggested that contemporary changes in the organisation of work; reliance on teamwork and erosion of functional boundaries, will progressively undermine established forms of expert knowledge. In that sense, it would appear that employers are laying greater

store on skills and behavioural attributes as opposed to knowledge, which is something that can be more easily, and perhaps more quickly, acquired. Of greater significance here though is the difference in the level of agreement between employers and teachers. It is significant certainly in view of the current proposals for 14-19 reform which have at their very centre the notion of strong partnership between employers, colleges and schools (DCSF, 2009b). If this is to work effectively then all parties involved need to have a very clear understanding of not just what they are trying to achieve but also what principles underpin the educational offer in the 14-19 age range.

Of course, young people seeking work in the future are likely to need to be more flexible and entrepreneurial in their attitudes (Davies, 2002). Employers increasingly want recruits who are going to be effective in a future, changing world. Employees will need the skills to be able to work on a range of tasks simultaneously. They will have to embrace change and be quick to learn in unfamiliar circumstance. The question to employers that addressed this issue did not elicit a high agreement. This was surprising with only 35% of employers surveyed agreeing with the statement. Perhaps more significant however, was that this response rate was almost double that which was received in the questionnaire responses from schools, Further Education and Sixth Form Colleges. The contrast in opinion that appeared here mirrored the contrast that surfaced in the previous question (problems should be in the context of real business practice) and would again appear in the question relating to action learning which was posed next.

The notion of action learning where groups of learners work together, reflect on past experiences, and then utilise that to understand current problems, and develop new solutions, has been noted by Revans (1998). The question to employers on the importance of an action learning type of approach in teaching about business brought a response/agreement rate of 46%. This was just under half that received in the questionnaire from schools and Further Education and Sixth Form Colleges which brought a response/agreement rate of 74.5%. The originator of action learning Revans (1998) has elevated the observation that we learn by doing into a structured case that learning is most effective when linked to real problems, and with the help of other people facing similar problems. He then went on to stress that behaviour change is more likely to occur as a result of reflection on experience (questioning insight) than on the acquisition of programmed knowledge. The most effective way to achieve this is, rather than deal with problems individually, to share them amongst learning sets, or groups of individuals. Although the question was phrased in such a way that it explained the notion of action learning, it could well be of course that employers are less aware than teachers of the theoretical construct behind action learning, and this would account for the difference in response rates. Even so, the difference in responses once again poses a question about consistency of approach in the educational offer in the 14-19 age range.

Question 10 had asked: *To approach reality, it is important that students are given the opportunity to work in groups.* Here the employer response rate (35%) was less than half of that that received in the questionnaire responses

from schools and Further Education and Sixth Form Colleges (84.25%). There was only a low indication from employers that working in groups necessarily gave the opportunity for students to work in a realistic situation. This provided an interesting contrast to the findings from students themselves and from the work done with Young Enterprise companies. It also contrasted with the findings from the employer interviews when opportunities for group working were seen as important in the learning process. Again it is worth noting that employers could well have misunderstood the question in the sense that they may have interpreted this as meaning working in student groups as opposed to working as part of any group. This could also perhaps be a reflection on the sample group of employers, which contained a number of small and medium enterprises, and where perhaps team working was not as well established as it might be in larger organisations. In view of the strength of evidence that emerged from the other instruments on the importance of working in groups then it has been judged by the researcher that the employer response to this question was not typical and as such no great weight has been attached to it.

Employer Interviews

The main finding from this instrument was that when asked about work experience and learning, it was clear from a majority of employers that they saw work experience as being of value in improving student learning about business. Secondly, the employers interviewed were also fairly clear on how they thought learning happened in a student work experience situation. This contrasted somewhat with the responses from the postal questionnaire and

may further support the assertion made about employers misinterpreting the question posed in the postal questionnaire.

In the employer interviews, the opportunities for collaboration and group working were seen by a number of employers as key to the learning process and this was in contrast to what might be expected in the organisation of a typical classroom. It was however, more difficult for the researcher to judge as to the extent of how valuable employers felt work related experiential learning was. Perhaps this is because very often there is no summative evaluation or assessment at the end of a period of work placement. Also, of course most employers are unaware of the starting point in terms of the knowledge and understanding that students have when they arrive at their place of work. Thus, it can be surmised that it is much more difficult to judge the progress that a student makes over the period of a work placement, in terms of value added. What employers can do more easily of course is judge distance travelled during the period of the work experience. This is an important outcome however, for students to obtain maximum benefit in terms of their learning then one can argue that work experience needs to be more fully integrated into the entire learning experience for the 14-19 age group. This would be more in line with what happens in the system of vocational education in Germany where placements are approved by local industry chambers, and follow a practical training syllabus, sometimes using group-training centres to supplement their facilities. Where employers more aware of prior experiences and knowledge then they might more easily (in a Vygotsky type framework) determine the actual development level and provide the

scaffolding/support blocks in order that an individuals can maximise their learning (Vygotsky, 1978). There are of course significant cost implications here both in terms of building such partnerships and ensuring that colleagues, who are involved in supporting students as part of those partnerships, are fully trained.

Moving one step further, it appears from the findings that work experience could be even more beneficial as a vehicle for student learning, if opportunities for risk and failure were also present, as part of the work experience offer. The employers questioned were very clear that risk taking (and to a lesser extent, experiencing failure) was a powerful force in student learning. Experience of risk and failure can of course lead to new understanding and new modes of thinking. Evidence for this has come out of this study particularly in relation to the instruments relating to the Young Enterprise Programme. However, without the support and encouragement to do otherwise, we can, and often do, just focus on success and the established ways of doing things. Botkin et al (1979) have referred to this maintenance learning, which is associated with conventional approaches and dealing with the known. It is designed to maintain an existing system. Similarly, success according to Sitkin (1992), tends to encourage the maintenance of the status quo, it sends a sign that no corrective action is necessary, and finally that there is more likely to be the risk of blame associated with trying something new. There are links here of course with the notion of groupthink (Janis, 1982) and this will be explored later in this discussion. The implication here is that individuals can look to the status quo rather than challenge the existing system.

Now if one assumes that in a successful collaborative group, learners have the support and encouragement to take risks and make changes, then we can say that such groups and the associated support that they provide can promote more effective work-related Experiential Learning. However, what emerged from this particular instrument was that much learning in the workplace was incidental/unplanned, meaning that it was less likely to have been supported. If this is then put alongside success and the needs of the business, then it follows that the potential for student learning in a work experience situation is limited with employers being reluctant to give opportunities (or if they do then only limited ones) to take risks. Risks of course can happen in an unplanned way, but by the same token they may not happen at all, and because of that some students may have a very rich work - related learning experience, whilst others may experience something quite different. In that respect it can be said that the process of work experience lacks consistency in what it is able to provide in terms of effective work-related Experiential Learning. That is of course, if one assumes that being exposed to risk taking and working in a culture where risk taking is encouraged, is a positive thing in terms of student learning. Certainly, the findings form this research study would certainly seem to suggest that working in a risk taking environment is a positive thing. Again there is considerable evidence here to indicate that some deeper thinking needs to be done about the structure of work experience. In this respect, the findings also have implications for training and professional practice, not just of teachers but also of employers in the role as mentors to young people in the work place.

10.4 Analysis: Theme 3

Experiential Learning requires particular conditions, which may be limited by organisational constraints.

Four instruments were used to investigate this theme. The instruments were a postal questionnaire to schools and colleges, classroom observation, student questionnaire, and teacher interviews.

Postal questionnaire

A sometimes erroneous assumption by those entering the 16-19 age phase as new teachers, is that all students will have the motivation to learn. One of the main challenges that teachers face when working with students in the 16-19 age range is how to engage all students effectively by creating a more motivating learning experience. Currently, with the new 14-19 diplomas, education in the UK is changing in to ensure that every young person has a high-quality, interesting and useful curriculum that will help them achieve their potential and progress to Further and Higher Education and skilled employment. Linked to this development is the notion that learning in this age range needs to be linked in some way to work. This idea is not new. For example, Fuller and Unwin (1998) pointed to a growing feeling that it is important to attach greater significance to work-related learning and how it might be possible to combine theory and application within the curriculum. They rejected the formal and informal learning dualism, and the transmission model of teaching and learning, which portrays the learner as passive recipient of knowledge. They then recognised that new knowledge can be

produced in practical as well as academic settings, where learning is a social, collective phenomenon. One way to more fully engage students and improving their motivation is to frame their learning within a realistic context and make it more work-related.

In the postal questionnaire a question about incorporating practical activities as part of the teaching programme gave a result, which mirrored that of another question in that there was a slight trend in favour of Vocational business programmes as compared to A-Level programmes. When combining all responses to what were deemed as practical questions for schools, Sixth Form and FE Colleges then there was a clear trend in favour of Vocational courses for all questions except for a question relating to the use of case studies and business simulations (went against the trend). A question relating to the percentage of time spent on the practical activities, brought out a strong trend in terms of Vocational Business programmes compared to Advanced Level Business. Significantly however, there was an even stronger trend, and higher mean values, in terms of Vocational Business for Sixth Form and FE Colleges, as compared to schools.

While not definitive, it would appear that there is some indication that the formal/informal dualism, referred to by Fuller and Unwin (ibid) is being reinforced by differing approaches to Vocational Business as compared to A Level Business. It would seem, from the results obtained, that the transmission mode of teaching with the learner as a more passive recipient is more prevalent on A Level programmes as compared to Vocational Business.

The key question is how significant this is felt to be. It is an important finding in respect of the reforms of 14-19 education, and the desire to establish a system, which gives parity of esteem to all courses of study in that age range.

Classroom Observation and Description

Some of the findings from this instrument did add further weight to the vocational/academic issues indicated above, however there was little of any real significance which merits comment at this point.

Student Questionnaire

The main finding from this instrument appears to be that the activities from which students appear to gain most in terms of their learning, do take up more time. Also, these activities are more appropriate whilst students are engaged in work placement as opposed to when they are working in the classroom. So there is an implication here in terms of the environment in which learning takes place and if the time constraint is significant. This issue will be addressed again towards the end of this chapter.

The activities which students highlighted as being of benefit to them included: collaboration, social interaction, incidental and informal learning. All of these resulted in strong responses in the survey that was undertaken with the students. For example, almost all students in the questionnaire felt that collaboration and social interaction was important to their learning. Costa and O'Leary (1992) have noted this possibility of greater creativity in collaborative groups, and the feeling of social identity and belonging, and where learners

learn about relationships by being in relationships. Certainly, the evidence obtained here would appear to support this. Furthermore, in terms of the effectiveness of their learning, students pointed to incidental and informal learning as being more effective (approx 2/3 of respondents) compared to formal learning (approx. 1/3 of respondents). The contrast came through the answers to the same questions (relating to collaboration, social interaction, incidental and informal learning), which were asked in the context of classroom activities. Here the scores were lower: in this case the use of formal learning scored just over half for both schools and Sixth Form and FE Colleges.

From these results it would appear that whilst informal and incidental learning are favoured by students and seen as important way of them learning, that almost the opposite is happening in terms of the menu that they are served up in the more restricted setting of the classroom (at least in the context of the sample size in this investigation). The responses from students gave a strong indication as to the relative inflexibility of the classroom environment, in terms of informal and incidental learning. This perhaps appears to support a comment made by Donovan (2005) who pointed out that the education system needs a greater capacity for innovation and creativity, and that this partly depends on the system being able to leave behind established assumptions and educational methods. The finding here does lead on to the question about the learning environment and which type of environment is most appropriate in promoting meaningful Experiential Learning. This adds further support to some of the findings from instruments which were used to investigate other themes.

More interestingly, when comparing the results from students in schools to those from Sixth Form and FE Colleges it appears that informal learning was more helpful to students in Further Education than those in school. Although, for incidental learning, the opposite appears to be the case with students in school scoring this more highly than students in Sixth Form and FE Colleges. For collaboration and social interaction on work experience there was large difference in opinion between schools and Sixth Form and FE Colleges, with almost twice as many students (68%) in the latter group seeing this as very important. This does suggest that the different environment of Sixth Form and FE Colleges has helped to develop somewhat differing attitudes in students towards the opportunities that collaboration and social interaction can provide. To be more definitive on this would, one feels, require more research but nevertheless from the findings obtained here do indicate a difference.

Teacher Interviews

Further weight was added to the importance of the learning environment by the comments of teachers in the teacher interviews. The most interesting responses came when teachers commented upon work experience and student learning. It was clear that teachers viewed the change of environment as being important in respect of student motivation, along with the additional responsibility that is often given to students on work experience. Of course, the motivation of learners is an extremely complex issue and is one which is multi-causal however, it has been argued by Gray et al (1998) that in order to motivate students, it is important to problematise the knowledge that is presented to them. Work experience has the potential to do this, and although

it has to be said that this was not always the case and that some teachers did point to some work experience placements being routine and not sufficiently demanding, it was clear also that for certain groups of students being treated as an adult in a business setting, and being able to observe and follow professional people/role models, encouraged positive behaviour and ensured strong motivation from the young people. In this respect it is akin to being a member of a community of practice (Wenger, 2003).

There is no doubt of course that learning is a complex phenomenon. Not all individuals learn in the same way, and the conditions under which learning takes place will influence the extent to which individuals will derive anything from particular experiences. Honey and Mumford (1992) for example point out that effective learning for individuals requires recognition that one reason why individuals do not learn fully from any particular experience is that it may not match the way in which they like to learn. Importantly, the findings here appear to indicate that that direct contact with real work situations can provide opportunities for students to learn in a more effective manner than they would in the classroom. This observation is supported if one takes a view of learning as a social, and collective phenomenon as pointed out by Lave and Wenger (2003). In this view of learning, work placement enables the social and collective aspects to be exploited to the full. At this point it is deemed relevant to revisit 3 perspectives outlined previously. The first of these is that when teaching and learning is focused on real business problems, then the motivation of learners (which is an extremely complex issue) does appear to improve. Secondly, the findings appear to give some further weight to the

importance of problematising knowledge. Thirdly, understanding the changing

nature of work, in conditions of rapid economic and technological change, can

give a reality and legitimacy to academic study. It is a process that

encourages students to engage not just in pre-formed ideas but also in a

whole range of new and developing knowledge. Finally, when teaching and

learning is problematised in this way then such approaches are cognisant with

views on how employees need to perform in the future (Handy, 2002).

10.5 Analysis: Theme 4

Experiential Learning enables students to contextualise and evaluate
theoretical perspectives in a practical setting, and at the same time provides
them with a social and interactive learning process, which will involve
integration between theory and practice.

Four instruments were used to investigate this theme. The instruments were a

postal questionnaire to schools and colleges, classroom observation, student

questionnaire, and teacher interviews.

Kolb (1984) has been a key contributor to the theory that effective learning

concerns the reinterpretation and reshaping of experience, sometimes

referred to as Experiential Learning. His ideas are based on the assumption

that the best way for people to learn is by having experiences or more simply

doing things. He then goes to say that the next step in this process is to think

about how they (people) have done them, and then to consider both the

details of the experience and the thoughts feelings and perceptions, which

emerged during the experience. Therefore, by experiencing a situation and then looking back at the situation we glean new meanings from it (Burnard, 2002). There are four stages involved in this process. Firstly there is actually having a concrete experience. This is followed by observation of, and reflection on, that experience which leads to the formation of abstract concepts (analysis) and generalisations (conclusions), which are then used to test hypotheses in future situations, resulting in new experiences.

In relation to this theme, a number of findings emerged. The classroom observation and description brought forth just one key finding relating to a failure to effectively reflect on a classroom activity, and this led to student uncertainty about links between the activity and syllabus. Perhaps the most interesting findings came from the student questionnaire and the teacher interviews.

Student Questionnaire

In relation to actually having an experience (in this case a work placement, or an activity in the classroom) there were a number of students who felt that their understanding of business improved as a result of work experience. It would appear that this was happening because they were able to take the time reflect upon the experience, although the students themselves were generally unable to articulate the process that they underwent. However, there were some students in the survey who pointed to being able to test things out and then be corrected. One student was able to comment upon research into customer service, when they had gone to a local supermarket

with a fictitious complaint in order to check out the level of customer service in that store.

The question of course at this point is did these experiences enable students to see the application of theory in a practical setting? It would appear that this was the case although whether this happened (in a work placement situation) through communication with others or direct involvement in aspects of the business (for example, the management of finance) was not always clear. It would seem that it was some combination of both of these processes. Indeed for it to be truly effective then practical experience followed by some form of reinforcing communication would appear to be the most effective way of achieving a clear understanding of the links between theory and practice. This comes back to the notion that success in learning does not always require the direction and control provided by a teacher/instructor, and the ability to self-develop and grow intellectually is inbred within all of us (Whittaker, 1995).

Teacher Interviews

The questions posed here on work experience and learning were aiming to get teachers to comment upon what has been referred to as situated learning (Lave and Wenger, 2003). This can be seen as involving participation in communities of practice, and as Lave and Wenger state, learning involves the whole person and it implies a relation to specific activities, and a relation to social communities, meaning it implies becoming a full participant, a member, a kind of person. In their view, learning only partly – and often incidentally – implies becoming able to be involved in new activities, being able to perform

new tasks and functions, and to master new understandings. Thus they imply that activities, tasks, functions, and understandings do not exist in isolation; they are part of broader systems of relations in which they have meaning.

According to this perspective, students will initially participate on the periphery but then gradually their engagement deepens and becomes more complex, until eventually, they will become full participants, and will often take on organising or facilitative roles. Knowledge is, thus, located in the community of practice. Furthermore, in this view it makes no sense to talk of knowledge that is decontextualised, abstract or general (Tennant, 2005). The theory of situated learning (Lave and Wenger, 2003; Tennant, 2005) claims that knowledge is not a thing, or set of descriptions, or collection of facts and rules. We model knowledge by such descriptions. But the map is not the territory: human knowledge is not like procedures and semantic networks in a computer program. Human knowledge should be viewed as a capacity to coordinate and sequence behavior, to adapt dynamically to changing circumstances. Situated learning is the study of how human knowledge develops through activity, and individuals' interpretation of that activity.

Teachers interviewed were of the opinion that whilst work experience had some benefits, overall they felt that their students gained little in terms of their understanding of business. A number of teachers pointed to benefits in terms of skills, for example interpersonal and time management skills. For example, realising the importance of punctuality and good customer service were pointed out as genuine benefits, which the students gained. This was linked in

with the respect that students often showed for employers during work experience. Whether this was because they were relating to them as non-teachers was not something, which was asked. It could of course be due to other reasons such as the working environment. Even so, there are some links here with previous findings relating to an improvement in motivation of students whilst on work experience. The teachers interviewed also highlighted the number of students who were given very low-level work, and they (teachers) were clearly unimpressed with the whole work experience process. Perhaps more importantly for this study the teachers also felt that students were restricted in what they could do and also that the time in placement was often limited (most commonly to two weeks) and often they did not have enough time to become part of a team or participate in the communities of practice, something that has been referred to previously (Lave and Wenger, 2003). This observation by teachers was a significant one in that it provided a contrast with the experiences of students on the Young Enterprise Programme, which most usually runs from approximately September to May during the academic year. The evidence here from the observation of Young Enterprise Companies and from the Young Enterprise interviews was that students did benefit from this more elongated experience and as a result of this were more able to effectively reflect, which then in turn led to enhanced learning experiences. The responses given by teachers here also raised a very fundamental issue in relation to this investigation in that if the finding is that time spent on work experience by students is seen as insufficient to be of any benefit then that calls into question the structure and organisation of work experience.

10.6 Analysis: Theme 5

Theory and application can be effectively combined within a real work curriculum model and that operating realistic business activities can enhance student understanding in a more effective way than work experience.

Four instruments were used to investigate this theme. The instruments were Young Enterprise Company observation, student questionnaire, Young Enterprise student interviews, and Young Enterprise Company Reports

Young Enterprise Company Observation

There were three main findings here. The first was that when students had the opportunity to experience certain activities a number of times, working as part of a team, then they seemed better able to refine their behaviours in relation to those activities and enhance their understanding of how to improve their own performance. Students were able to reflect on what they were doing over an extended period and it was this that also helped in their understanding of business concepts. Such an approach to teaching and learning does in many respects mirror the methods of industry and commerce, where the need for adaptability and continual learning is largely framed within an active mould, with an emphasis on learning through experience. Of course, not all individuals learn in the same way, and the conditions under which learning takes place will influence the extent to which individuals will derive anything from particular experiences. So it was the case here that not all students gave a positive answer in this respect.

The second finding related to students being able to try out different activities,

within the different functional areas of the business operation. For example, students had the opportunity to work on say financial matters and then might be able to move to look at production or say sales. Perhaps, this would appear to indicate that activities such as Young Enterprise give students the opportunity to work in way that suits their differing styles of learning. Again, for example, working in finance would demand more of a theorist type of learning style as opposed to say sales, which might require a more activist style. Kolb (1984) and Honey and Mumford (1992), have developed ideas on learning styles. For example, Honey and Mumford (ibid.) have pointed out that effective learning for individuals requires recognition that one of the reasons why individuals do not learn fully from any particular experience is that it may not match the way in which they like to learn.

The third finding, which was closely linked to the comments above, also related to sampling of different activities within the different functional areas of the business operation. In this case it gave students a better understanding of how the whole business operation fitted together. In other words it gave them the opportunity to see the whole picture rather than just parts of it. Importantly, students then went to contrast this to their experiences of learning business in the classroom where the approach was to deal with the functional areas of a business in a more separated and individual manner. It is felt that this was significant in that students were to able replicate real business practice. Stinson and Milter (1996) have commented on approaches such as this and have suggested that in order for learning about business to have an underpinning realism, then that learning should also encapsulate the holistic nature of business.

These findings would appear to indicate that learning about business in an unstructured manner, not linked to any pre-determined functional business boundaries, was more effective for students. The question that this perhaps poses is how well this matches the changes in the organisation of work and the knowledge that is required for employees to function effectively in that changing environment. One might surmise that the current economic climate, along with the need in many business operations for employees to become productive as soon as possible, then this extended testing out of different activities may well prove not to be feasible. It also raises further questions about the structure of work experience and the rather limited opportunities it provides when students are only in the work place for a short period of time (most often 2 weeks).

On the other hand the approach does fit with changes in the organisation of work, the erosion of functional boundaries and what one might refer to as a decline in many forms of expert knowledge. In an age of almost instant access to information, the importance of specialist knowledge is being eroded and employees who can work in a more multidisciplinary way are often those who are more highly sought after. This was noticed by Handy (2002) who used the analogy of the armed forces by stating that 'everybody is now an officer' and as such needs to take on responsibility for a whole range of areas and not simply focus on singular, specialised tasks.

Student Questionnaire

Here, students indicated that their understanding of business had improved as a result of work experience, and this was the case for both schools and Further Education students. A number of reasons were given for this and these have been detailed as part of the results section of this study. However, if these were to be categorised then it would be fair to say that the benefit gained was dependent on the level of involvement: whether that related to working in a particular functional area, working as part of a team or working with customers and so on. Where it was not the case that students found work experience useful then this was because they were more like observers rather than active participants. In one sense this is no surprise however, it is worth remembering perhaps that often when in a classroom situation, students can often be less active participants in the learning process. The response from students here does raise further questions about the level of support that is offered in the workplace and how this might be improved. As noted previously, this has implications for the training of all of those involved in supporting students throughout the work experience process.

Informal and incidental learning were seen by students to be important forms of learning for them in the workplace. This of course could be a reflection on the lack of a structured training programme for them and may indicate that they were often just left to get on with things, shadow or even simply copy what other employees were doing. In respect of informal and incidental learning the contrast came when asked about this type of learning in the classroom and not surprisingly students pointed out that, for both vocational

and non-vocational courses, more time was usually spent on formal learning as opposed to informal or incidental learning. There was also a clear majority of students who felt that collaboration and social interaction was important for the learning process in the workplace. Related to this, a number of students pointed to the importance of group discussions and working as a team in helping to solve problems, in helping to do things most effectively and in helping to give them confidence. Once again this pointed to a tension between the type of learning that was on offer in the work place and that which is on offer in the classroom, with the former being seen by students as being more useful in terms of their learning.

Young Enterprise Interviews

One of the main findings here, which is deemed to be important, and one which linked to the findings from the survey of work experience, was the importance that was given to teamwork, having responsibility within a realistic scenario and ownership of the process, which in this case relates to the running of the Young Enterprise Company itself. The results from this instrument do have to be handled carefully as the type of learning which students experience when they are involved in Young Enterprise is much more informal and at times incidental, in comparison to the more formal teaching which they usually experience in their lessons in a classroom situation. So not unexpectedly, when students were asked about the type of learning they experienced during the Young Enterprise process, then the majority pointed to informal and incidental learning as forming the largest proportion of their learning in Young Enterprise.

However, in terms of this investigation it would appear that what was important was that students found this approach useful for their learning because of its realism, the opportunities it provided for social interaction and collaboration, and finally because the more relaxed and less formal setting of the experience was more conducive to their own motivation and participation. Almost too, one might surmise, it was seen as important and motivational that students were able to vary the pace of their learning in this setting. Sometimes (and this came through observation of their activities) students would work at a very intensive level, whilst at other times they would tick over. This of course is not dissimilar to the pattern of working that many full time employees have. Honey and Mumford (1992) have suggested that we oscillate haphazardly between different approaches to learning from experience. At certain times we may be complacent as our job ticks over; a sudden crisis might force us into learning; sometimes we might review our experiences, whilst at other times we may try out different approaches. This pattern of working experiences of course links in with the four learning styles postulated by Honey and Mumford (ibid.). Thus, the data here appears to provide evidence that a less structured, interactive approach, incorporating aspects of peer learning, gave students a valuable learning experience, and was also one which gave impetus to their motivation to learn.

To what extent theory could be combined with application was less clear from this instrument. Indeed, for some students there was very little/possibly almost none in the way of theoretical input during the Young Enterprise process. Also, it needs to be noted that not all students in each company were studying

business, and hence there was inconsistency in terms of the sample in this respect. The main finding was that a number of students felt that Young Enterprise was more effective than work experience in terms of the insight it gave them into the running of an entire business/company, and not just one aspect of a company or business as was the case with work experience. However, it is important to note that the responses in favour of Young Enterprise over work experience were not unanimous, and some students expressed the opposite view that work experience was the more effective.

Young Enterprise Company Reports

In one sense this instrument was useful in providing written evidence to support some of the findings from the Young Enterprise interviews. The Company Reports also gave more detail on the practicalities of risks or failure, and were able to provide the concrete examples of risk and failure. However, beyond this their importance in terms of this particular theme is not seen as significant.

10.7 Analysis: Theme 6

Risk taking and failure, which are integral aspects of running a small enterprise/business activity, are powerful forces in student learning.

Four instruments were used to investigate this theme. The instruments were Young Enterprise Company observation, Young Enterprise student interviews, student questionnaire, and employer interviews.

Young Enterprise Observation

Students involved in setting up and running a Young Enterprise company also pointed to the opportunities it gave them for risk taking, and experiencing the reality of business, and how in turn this enabled them to learn more. Other than that there was not a great deal of significance in the findings here.

Young Enterprise Interviews

After having undertaken these interviews a number of things became clear in relation to this the theme of risk and failure being powerful forces in student learning. First of all, a large majority, of the students interviewed, felt that Young Enterprise gave them the opportunity to take more risks. The examples they gave to support this included 14 out of 33 students who commented on the risk of taking on a particular role in their company, or appointing others to certain roles, and a further 10 students who commented on the risk involved in deciding upon, and then investing in, the making of certain products. The opportunity to take risks when involved in Young Enterprise was also borne out by the information and data obtained from researcher observation of

activity and from Young Enterprise company reports.

In terms of how risk taking helped with learning then 28 out of 33 students said that it helped them learn more effectively. The reasons that students gave for this were somewhat varied and not easy to categorise. Five students said it enabled them to learn from their mistakes, although this could be interpreted as learning from failure (the focus of the next part of the interview).

Two students said taking risks gave them confidence, whilst another two spoke about the importance of thinking things through as they would have to deal with the consequences if things went wrong. In terms of this study and this particular theme the key question of course is whether this amounts to a *powerful force in student learning* as per the focus of this theme, or if it is simply an aid to student learning. The learning, which came about through students being able to take risks, was certainly influential and potent however it is whether this amounts to it being powerful and dominant. It is the view of the researcher that this was not the case due to 2 things. First of all, the Young Enterprise process of running a Company was not linked in any of the groups studied to any aspects of their academic study (business studies syllabuses, for example) and secondly, as has been pointed out previously, not all of the students engaged in the Young Enterprise Company were students of business but in fact came from a variety of study backgrounds. It could well be, and may be an avenue for further investigation, that the learning in this situation has the potential to be powerful and dominant if it were more closely linked to academic study syllabuses and if the participating group of students were more homogenous in terms of their academic study subject.

In respect of student comment on failure being important to learning, many of the answers referred to practical failures: for example, trying to 'bake' a candle in a microwave oven, keeping track of monies paid in to the company, and failing to keep the minutes of the company board meeting. The answers here referred both to individual and group examples of experiencing failure. At the same time, many of the comments on individual failure concentrated on

personal skills. For example, four students mentioned their failure to manage their own time, whilst further three commented on not being outspoken enough at particular times and thus failing to make what they later felt were useful comments and input. Similar to the answers on practical failures, the answers here referred both to individual and group examples of experiencing failure. Again, similar to the comments made above on risk, it was something that was clearly influential and potent however it is whether this amounts to it being powerful and dominant is another matter.

As noted, in respect of risk taking, students indicated that Young Enterprise gave them the opportunity to take more risks, and that in doing this it helped them learn more effectively. There are two aspects of this, which are deemed worthy of further discussion. Firstly, it needs to be asked if the Young Enterprise process is very risk focussed in the way it is organised, and the second question is, does the social grouping and collaborative working of the students impact on their propensity to take risks. With regard to the first aspect, then similar to other persons involved in business start-up, there is an element of risk taking in the Young Enterprise process. However, when setting up a Young Enterprise company students are encouraged to undertake business planning, market analysis and so on, before embarking on their business venture. The students involved also have access to business advisors who can guide them around any possible pitfalls. In that respect, although still present, risks are minimised. With regard to the second aspect (collaborative working) it does appear that this increases the propensity for students to take risks. This is also something that was noticed when looking at

Young Enterprise Company Reports and it is appropriate at this point to provide some theoretical underpinning, which may shed light on how this comes about.

The judgments and decision processes of people in groups often differ from how they make up their minds when acting alone. One can be led to think that that decisions made by those working in groups can often be slow and cautious. In government for example, effective decision-making can be frustrated by slow, rule bound, bureaucratic processes. The same can apply to groups of students working in an educational setting. However, groups of students working together can often be bolder than single members acting alone. As noted by Cartwright and Alvin (1968) and Janis (1982), there can be two reasons for this. Firstly, some students who are risk takers may be more powerful and persuasive in a group situation. Secondly, member responsibility when working in a group is diffused as there is a degree of anonymity in the group, and any failure due to incorrect decision-making does not attach itself to any one particular person. In that sense, risky decisions carry less of a burden for individuals. These are the processes of group think and risky shift. Although it is not relevant to explore here, the converse also applies, and a group can be overly cautious. As has been argued by several writers (Cartwright and Alvin, 1968; Janis, 1982; and Mullins, 2007) risky shift or cautious shift behaviours in a group may undermine good decision making, and consequently group members need to be sensitive to such processes and their implications. Although this is disadvantageous to the decision making process, in the context of this study it is its impact on student learning which is significant. Some of the

findings suggest that in group situations, there is more likelihood of students becoming more radical than they would be as individuals. They are less likely to challenge the assumptions of the majority and may find it more comfortable to hide within a majority view. Thus the more risky decision (or more cautious) may prevail. This may then of course result in some sort of failure however, at the same time it can impact in a positive way on student learning and it is this, which is important in the context of this study.

The Young Enterprise interviews also brought forward comments from students on failure and its perceived impact. Many of these comments concentrated on individual failure in relation to personal skills. For example, failure of a student to manage their own time or not being outspoken enough at particular times and thus failing to make what they later felt were useful comments and input. In their responses, students also referred to group failure in terms of collective skills. For example, they pointed to the failure of the group to make decisions, and not working effectively as a team. It is not a huge step however to link this with the earlier comments on cautious shift in decision-making, and in terms of student learning this can also be seen as a positive. In these interviews, a large majority of students were very clear that experiencing failure had helped them to learn. Furthermore, the failures, which students experienced, were not simply written off but because students had ownership and personal involvement, and often a financial interest, then it appeared to make them more determined to learn from their failures.

Certainly the findings would appear to indicate that both risk and failure are

welcomed, that ownership of the process made it more likely that students would engage, and that they liked having a holistic view and rounded experience. Less structure and more informality seemed to encourage motivation and gave students the opportunity to learn at their own pace. In those respects then, work experience came out as a less valuable option compared to an organised Young Enterprise experience.

Student Questionnaire

For Schools and Further Education, the responses from students who had taken risks whilst on work experience indicated that it had benefited their learning. While some students said that it had helped them to gain knowledge this was not always easy to quantify. The majority of responses indicated an improvement in learning in relation to skills development (for example, communication, taking the initiative, and decision-making). It should be noted that a number of students responded that they had not had the opportunity provided for them for risk taking; they were instructed what to do all the time and thus not able to make many decisions. In that respect this aspect of the findings would tend to support the idea that work experience is often only of limited benefit to students.

For the students who cited failure as being a positive experience for them, the examples they gave did tend to focus on skills as opposed to knowledge: for example, the importance of asking questions and of having good time management skills were seen as aspects where they (students) had experienced failure but were then able to learn from the experience. Again, as

in the case of risk, there were students who responded that there was no opportunity provided for them to experience failure, and again, similar to the example of risk taking cited above, this aspect of the findings would tend to support the idea that work experience is often only of limited benefit to students.

The second section in the student questionnaire related to learning, risk taking and failure this time linked to Business Studies lessons, as opposed to work experience. Once again there was a noticeable difference in the responses from schools and Further Education. Approximately half of the school students questioned agreed that they were given opportunities for risk taking in their lessons, whereas for those students in Further Education this figure rose to approximately three quarters. Once again also, the figures for those students studying A-Level were lower in both cases. A similar question on failure (opportunities to learn from failure) produced similar results for schools and for Further Education. It would perhaps be unwise to read too much into this in the sense that student perception of what failure means within the context of the classroom is perhaps very different from how they view risk. The notion that business studies tend to rely on a more traditional approach to learning with a heavy focus on the theory of business and delivered through textbooks in a classroom environment, is not a new one. One of its more recent advocates has been Peter Jones (Guardian newspaper, October 2009) where he notes that such approaches, while extremely valuable, cannot replicate the "real life" business world. He then goes on to say that enterprise and entrepreneurship are key skills upon which future growth and expansion are

predicated. However, in spite of this they have not enjoyed the same billing as traditional subjects.

Employer Interviews

The main finding from this instrument and which is worthy of mention here, was that employers did view the opportunity of being able to take risks within the workplace as something which would be of benefit to student learning. This perhaps of course is nothing new and does fit in with some very established ideas on business success. Goldsmith and Clutterbuck (1997) give numerous examples of how employers encourage risk as a way of developing their employees and fostering business success. Although it should be noted that they also provide evidence of companies, usually the less successful ones in their view, who actively discourage risk taking.

The caveat from employers however was that although risk taking was seen as something positive in terms of learning, they expressed a view that the context of work experience did not always provide sufficient opportunity for risk taking. Employers were also able to give reasons for this and these included the opinion that risk taking by an individual needs to be supported and it is not something that individuals can be just left to get on with. If risk taking is not supported then it would seem that individuals could lose the support and confidence of their work colleagues (and maybe the esteem in which they have been held). So it would seem that one could infer from this that opportunities for risk taking by students on work experience need to be set within a supportive context, which has taken cognisance of any possible

impact on business performance and on any other employees. The problem that this then raises of course is not just the time involved in ensuring the appropriate context for risk taking, but also the resource implications and whether this is feasible given the everyday pressures that employers are under relating to the performance of their business and so on.

At the same time of course students have to be made aware and understand the impact of their actions within the workplace. This is a delicate if not impossible balance and if, as the findings here are indicating, the experience of risk and failure are positive in terms of student learning, then one would not want to sanitise the experience of risk and failure, otherwise the whole point of learning through the mechanisms of risk and failure could be lost. For example, if there are no negative consequences then students may not bother taking risks at all, or perhaps even worse take unacceptable risks. This can perhaps be illustrated from an idea put forward by Joseph R. Mancuso in 'The Entrepreneur in You' (1984). Here Mancuso has devised a questionnaire to determine an individual's entrepreneurial qualities and their propensity to establish their own business venture. It is not appropriate here to judge the suitability of such a mechanism for determining entrepreneurial qualities however it will serve to illustrate a point by considering one of the questions posed by Mancuso namely, if you were at the races which of these would you bet on? Mancuso then gives four options:

1. The daily double: a chance to make a killing.
2. A 10 –1 shot.
3. A 3-1 shot.

4. The 2-1 favourite.

The answer, given by Mancuso, is the 3-1 shot. The rationale here being that those with an entrepreneurial outlook would take a risk but not so that it would be a risk with little chance of success. So in the context of the student on work experience what an employer would not want would be someone taking the 10 to 1 shot for example but to make a judgement on a more reasonable risk then what the findings of this part of the investigation indicate is that providing that support would be too time intensive (and hence most likely costly) for employers to undertake. The question emerging from this is how to best manage learning about risk to ensure risk taking is not too controlled so as to be ineffective in promoting learning.

10. 8 Summary

As explained at the beginning of this chapter, following the initial investigation a set of six themes were developed in order to take the study forward. A number of instruments were then identified in order to further investigate each theme.

The evidence provided by teachers, employers and students themselves indicated the importance of work related activities, and direct contact with work situations. Work experience was also seen as being a useful activity for students to engage in. Significantly too, many students were able to pinpoint particular aspects of work experience and say how it impacted on their learning. However, one problem, which emerged, was that there was a lack of

consistency in what work experience was able to provide for students. Work related activities, and direct contact with work situations were also seen to have an impact on skills development as well as improving knowledge. Indeed, a number of employers lay greater emphasis on the benefit of skills development perhaps because many see expert knowledge as something which is being undermined, and that a mix of work skills is more important to students.

In other ways too, the instruments for investigation provided some mixed results. The importance of group work and collaboration became clear, although there were much stronger responses here from schools and colleges as opposed to employers. Similarly, the importance of students being able to experience risk and failure became clear, although again there were some contrasting responses. Overall, and in an attempt to try and condense the findings from the instruments for investigation, it would appear that the key finding was that some form of standardised or controlled work related activity, which embraced risk taking, opportunities for failure, students collaborating and working in groups, along with aspects of incidental and informal learning, would seem to be a way to maximise student learning opportunities. How this might be organised and supported if of course a key question and this will be returned to in the final chapters. In terms of this and the other issues that have arisen as the research progressed, there now follows a consideration of those new aspects and what will subsequently be referred to as emerging themes.

CHAPTER 11

Emerging Themes

As the research study progressed through its later stages, and then towards the end of the study, it was realised that a number of aspects had emerged, and that these demanded some further consideration. The purpose of this chapter is to first of all consider those aspects, and show how some of the findings led to their formulation. Once that has been done, the aspects will then be refined further into two emerging themes. They have been referred to as emerging themes as it is felt that they do have considerable potential for further research.

11.1 Aspects and Emerging Themes

As mentioned, there were a number of aspects, which emerged from the research. Each of these aspects will now be listed, and then against each aspect examples from the research findings will be given, in order to demonstrate how that aspect was identified. Following this it will be explained how these particular aspects were used to inform the development of the two emerging themes. The aspects that were identified from the research findings were as follows:

Aspect 1: *Risk taking and experiencing failure in encouraging learning and allowing individual students to be entrepreneurial in their approach to learning.* Responses the student questionnaire indicated that individual students saw opportunities for risk taking as something, which enabled them

to become more entrepreneurial in their approach to learning and helped to develop their own personal skills. In their responses to the questionnaire, students were also able to state that experiencing failure impacted positively on their time management skills, that it helped them to not panic under pressure, and finally that it developed their skills in thinking on their feet and acting independently. In turn, they were then able to say that this had a positive impact on their learning. The evidence which came from the Young Enterprise interviews was very strong in respect of how opportunities for risk taking and experiencing failure allowed individual students to be enterprising in their approach towards learning. Students were able to point to how when faced with similar situations they were able to respond in new ways and act more independently than previously.

Aspect 2: *Risk taking and experiencing failure in encouraging learning and allowing groups of students to be entrepreneurial in their approach to learning.* Similar to Aspect 1, the findings also indicated that allowing groups of students to experience risk and failure also encouraged them to be entrepreneurial in their approach to learning. Employers, for example, indicated that the power of working in a team was significant in this respect. They pointed not just to the support for risk taking that a team can offer but also to the peer pressure that may be felt if an activity was not successful and how this would encourage a change in thinking and action for next time. Teachers too, gave similar responses to this when they are asked about students working in groups and experiencing failure.

Aspect 3: *Interaction, collaboration and the value of working in groups.*
The research findings provided an ample amount of evidence against this aspect. The examples given here also link with Aspect 5 below. Two examples will be given. First of all the student questionnaire, where interestingly students from Further Education, compared to students from schools, rated the importance of interaction, collaboration and working in groups more highly. In their responses, students pointed to the importance of group discussions and working as a team in helping to solve problems and do things most effectively. The also spoke of interaction with others and how it helped to give them confidence and make them feel at ease. Secondly, the Young Enterprise interviews provided evidence for this aspect. In these interviews students indicated how they learned to cooperate with others, and accept constructive criticism. They also referred to the insights Young Enterprise gave them into their own, as well as others, strengths and weaknesses, and how the collective efforts of a team could often outweigh the effort of an individual.

Aspect 4: *The importance of, and the motivation provided by informal learning.* The student questionnaire indicated that more than half of the students viewed informal learning as important, more realistic, more enjoyable and a factor in their motivation to learn. The Young Enterprise interviews brought forth an even stronger agreement on the value of informal learning, when 28 out 33 students were able to articulate the advantages of experiencing learning in this way. A final example was the employer interviews when there were 7 out of the 10 employers interviewed who were in

strong agreement on the value of informal learning.

Aspect 5: *Learning environments and their influence on student learning.* The student questionnaire indicated that while students valued being able to take risks and experience failure as part of the learning process, that opportunities for doing this were limited both by the environment in which they were studying (although this was less so in the case of those students who were based in colleges) and by the type of course they were studying, with Vocational courses appearing to be more accommodating in this respect. Evidence from the employer interviews indicated that the context of work experience, the fact that there is often a tangible outcome (or product manufactured) and the importance of continually being part a team, were all seen as important factors in the learning experience that could be provided in a work setting.

Aspect 6: *Students working in a less formal way and independently of teachers.* The main evidence for this particular aspect came from the findings from the Young Enterprise interviews and Young Enterprise Company Reports. When students run a Young Enterprise Company they are not taking part in a taught programme. The Young Enterprise Company Reports indicated that in spite of the lack of a formal structure, students did learn about key business concepts whilst they were running their Young Enterprise Company. There was also evidence from the Young Enterprise Reports that learning took place in relation to problem solving, risk taking and failure. As discussed in chapter 9, it was also clear from the reports that often students

made mistakes as they went through the learning process. From this, it is possible to infer that students began to realise that some judgements may come to mind quickly but without any logic, and that they then began to learn how to correctly assess risk, by using logic and access to information as well as judgement. Finally, in relation this aspect the Young Enterprise interviews provided evidence that students enjoyed the lack of structure of a Young Enterprise programme and that it made them think more independently and generate more ideas in trying to find solutions to problems.

Clearly, the aspects identified above are not exclusive and there is an element of overlap between them. The next step in considering these aspects was that the researcher refined them into two emerging themes for further consideration and discussion. They have been labelled as emerging themes as it is considered that they do have considerable potential for further research. These 2 emerging themes were formulated as:

1. Risk taking and failure in encouraging learning and allowing students to be entrepreneurial in their approach to future learning both in employment and in their future lives.

2. Students working and learning in groups in a more informal way and in so doing forming their own knowledge and way of working.

11.2 Emerging Theme 1

Risk taking and failure in encouraging learning and allowing students to be entrepreneurial in their approach to future learning both in employment and in their future lives.

In order to first provide some basis for a discussion of this theme it is perhaps appropriate to provide some additional background based around 3 different contexts. The first of these is a recent article from the Guardian newspaper. In this article (Guardian newspaper, October 2009), the entrepreneur Peter Jones, has commented on what he refers to as high-calibre individuals who demonstrate excellent business knowledge but lack the skills required to turn their ideas into success stories. He notes that many young people entering the labour market do not seem to have the entrepreneurial skill-set needed by most employers, and that in most cases traditional business courses equip students with valuable theoretical business knowledge, but there is no consistent provision of enterprise education. Jones goes on to say that enterprise and entrepreneurship have not always enjoyed the same status accorded to the more traditional subjects, whilst Business Studies courses tend to rely on a more traditional approach to learning, which is focused on theory and delivered through textbooks in a classroom environment.

The second context to consider is around existing qualifications in enterprise education. For example, Edexcel, the UK's largest qualifications awarding body, has recently developed a BTEC Diploma in Understanding Enterprise and Entrepreneurship. This comprises of 8 units which have a focus on understanding how business works and how one might go about setting up a business. The aim of such courses is to expose students to real-life issues in real business environments, and subsequently enable them to develop an entrepreneurial mindset. However, the courses are based upon what might be considered to be a traditional model of teaching, learning and assessment.

According to Edexcel (2008), Enterprise Education works when students use real-life situations to enhance their entrepreneurial skills, supported by better financial, economic and business understanding. It can help raise aspirations and develop valuable skills for both higher education and employment. Enterprise opportunities can challenge the most able students, as well as enhance a range of curriculum subjects, and drive up standards as part of the school improvement agenda. In the programme specification it goes on to say that:

"Centres are encouraged to use a variety of assessment methods including assignments, case studies and work-based assessments, along with projects, performance observation and time-constrained assignments. Practical application of the assessment criteria in a realistic scenario should be emphasised and maximum use made of practical work experience".
(Edexcel, 2008 p.8)

Finally, there is the business context. According to Goldsmith and Clutterbuck (1997), persuading managers to take initiatives is one of the more difficult tasks for any top-management team. Doing so involves both providing incentives to take controlled, calculated risks and removing the fear of failure. This is against a background where experience has taught managers in many British companies that risk taking does not pay off and that success comes more surely from restraining those imaginative leaps ahead rather than embracing them with enthusiasm. One might also infer that this might well be the case in many educational institutions. Returning to British companies,

Goldsmith and Clutterbuck go on to note that some companies actually discourage risk taking in a number of ways. For example they have excessively rigid rules and procedures, which mitigate against taking risks as risk ventures often, by their nature, involve a departure from the rules. Such companies often penalise managers when the risk does not come off. Finally, Goldsmith and Clutterbuck note that the example set by top management is absolutely vital. If top management are not seen to take calculated risks, then people down the line are unlikely to do so either. As a contrast to this, they go on to say that successful companies also recognise that some risks have to fail, but are prepared to look at them as learning experiences. They give the example of one company who deliberately allowed a subordinate to try things his own way, even though they knew it carried an abnormally high risk of failure. That they did this was to simply to give the employee a chance to learn for himself.

Against the background of these 3 perspectives are the findings which have come out of this research study and which can be considered to provide both contrasts and comparisons. If we take the first perspective as a starting point then according to Jones (2009), many young people entering the labour market do not seem to have the entrepreneurial skill-set needed by most employers. The responses gained from students to the student questionnaire gave a strong indication as to the relative inflexibility of the classroom environment, in terms of informal and incidental learning. One might assume that this indicates a need for more innovation and creativity in the organisation of the education system, and the ability to leave behind established assumptions and educational methods.

If one takes the educational environment as also including what happens outside the classroom then this point above on innovation and creativity was also mirrored when considering the value of work experience. When questioned about this, the majority of teachers agreed that work experience had some benefits. However, when they considered work experience more holistically then they felt that their students gained little in terms of their understanding of business. Some teachers did point to benefits gained by students in terms of interpersonal skills, yet at the same time they pointed to the large number of students who were often given very low-level work. This point, on the value of work experience for students, will be returned to in the next chapter when there is a consideration of some of the implications of the research for professional practice.

Staying with the idea of the environment in which teaching and learning takes place then it is worth mentioning that there was a noticeable difference in the responses from schools and Further Education. In this instance the findings indicated that the Further Education environment was more conducive to students engaging in risk taking, as opposed to the school environment. The type of course being studied was also a factor here with Vocational courses appearing to give students more opportunities for risk taking than A-level courses. Again linked to this notion of the environment in which learning takes place then a number of students felt that the environment in which the Young Enterprise Programme operated was more effective than work experience in terms of the insight it gave them into the running of an entire business/company, and not just one aspect of a company or business as was

the case with work experience. Even more importantly it appeared that this environment (Young Enterprise) encouraged students to work with greater independence and in turn encouraged them to think more creatively. It would seem that in an environment with less structure and formal input by teachers, that students become more entrepreneurial in their approaches to problem solving and creativity.

The perspective put forward by Goldsmith and Clutterbuck (1997) is that successful companies also recognise the value of employees being able to take risks, that some risks have to fail, and that they are prepared to look at both scenarios as learning experiences. This research has shown that students view risk taking as something positive and which helps them to learn more effectively. The employers who were surveyed as part of the research also indicated that they saw risk taking as something, which has a positive benefit in terms of student learning. However, in saying this employers expressed a view that the context of work experience did not always provide sufficient opportunity for risk taking. The reason employers had for taking this view it seems, was that they felt that risk taking by an individual needs to be supported and it is not something that individuals can be just left to get on with. They went on to point out that if risk taking were not supported then individuals could lose the confidence of their work colleagues. This observation made by employers is an important one. It also has implications for what might be referred to as employer mentoring. That is, if employers are to be involved in aspects of education, whether it be through facilitating work experience or becoming involved in classroom activities, then they need to be

skilled in supporting students and providing feedback. The nature of this support and feedback is even more critical if students are involved in risk taking activity and if they have experienced failure. Following this, any support and advice that is given (by employers, or by teachers for that matter) needs to be done in a measured and sensitive way in order that the benefits of risk taking and experiencing failure are not lost, and students are guided in their reflections in order that their learning is maximised. As has been pointed out in the literature review, experiencing failure can have a negative as well as a positive impact and it is vital that appropriate support is given to students in order to maximise one and minimise the other. There is an implication here in terms of professional training for teachers and for employers, if the latter are to be involved in aspects of student learning and development.

Finally, in relation to this emerging theme it is useful to consider the courses, which are available in terms of Enterprise Education, and which in turn one would imagine should provide an environment that is conducive to risk taking and experiencing failure. In the student questionnaire, the findings indicated that the activities which students viewed as being of benefit to them included: collaboration, social interaction, incidental and informal learning. For example, over 90% felt that collaboration and social interaction was important to their learning. The conclusion that was drawn from this aspect of the findings was that ownership of the learning process added to student motivation and encouraged more creative and independent thinking. These are components of the Edexcel syllabus referred to earlier. However, the syllabus is still prescribed in terms of the learning being specified by learning

outcomes and one has to question to what extent this enables students undertaking such programmes to ensure that their learning is really expansive. Indeed the syllabus for this programme appears to be contradictory at times for example whilst it mentions 'practical application of the assessment criteria in a realistic scenario' it also talks about time constrained assignments!

In terms of emerging theme one then it appears that there are currently some mixed messages. It would seem that what is needed is less formality in learning situations, closer links with realistic scenarios, and more opportunities for risk taking and experiencing failure. Of course, this does not sit comfortably with an educational system focused on results and league tables, and with syllabuses which often have precisely defined learning outcomes then this limits the ability of teachers to work outside of the box and one might suggest, go as far as allowing students themselves to set the agenda in terms of how and what they learn. Taking the example of the Young Enterprise Programme as a student learning opportunity, then here the environment is less formal, learning is fluid and flexible (often involving work outside the classroom), and students drive the learning agenda. The findings from the research indicate that it was this approach, which gave students the opportunity to take more risks and experience failure, and that in turn this helped them learn more effectively.

Von Glasersfeld (2009) has argued that the responsibility of learning should reside increasingly with the learner. This viewpoint is centered on the theory

of social constructivism, which emphasises the importance of the learner being actively involved in the learning process. This is unlike the educational view that the responsibility rests with the teacher or lecturer to teach and where the student takes a more passive role. Von Glasersfeld also makes the point that learners construct their own understanding and that they do not simply mirror and reflect what they read. Learners look for meaning and will try to find regularity and order in the events of the world even in the absence of full or complete information. Another crucial assumption regarding the nature of the learner concerns the level and source of motivation for learning. According to Von Glasersfeld sustaining motivation to learn is strongly dependent on the learner's confidence in his or her potential for learning. These feelings of competence and belief in potential to solve new problems are derived from first-hand experience of mastery of problems in the past, and are much more powerful than any external acknowledgment and motivation. This links up with Vygotsky's (1978) zone of proximal development where learners are challenged within close proximity to, yet slightly above, their current level of development.

One of the most significant aspects of an education system is the ability to is to provide a flexible, adaptable, and skilled workforce in order that the UK can compete effectively in the 21st cen tury. This has been referred to in the literature review earlier. Engagement and achievement in the education system is also important in terms of social equality and opportunity. The socio-political context has been mentioned earlier, and evidence was provided that

the percentage of young people form socially deprived backgrounds entering high ranking universities has actually fallen between 2003 and 2009. Education is 'pivotal' in determining a person's success in life and social mobility will only improve if gaps in educational attainment between different groups of children can be closed (Johnson, 2007). Young people from lower socioeconomic groups may have different background knowledge, skills and interests, which are not reflected in the curriculum. These young people may find the curriculum irrelevant to their future and unchallenging and/or un-engaging They are also less likely to have the kinds of social connections, which offer inspiration and opportunities (DCSF, 2009e). In terms of educational participation and achievement, for many young people from socially deprived backgrounds the current educational offer does not work. Encouraging these young people to stay in education and achieve, might be better served by providing experiences which give them more ownership and autonomy and which provide learning opportunities to undertake risk and experience failure. The findings from this research study do suggest that such opportunities do have a positive impact on student learning and motivation.

It would appear then that the provision of opportunities for risk taking and experiencing failure in helping to encourage students to be enterprising is an area, which provides significant potential for further research. Of course, encouraging enterprise in schools and colleges is not new. Projects such as setting up virtual companies (including the Young Enterprise Programme), mini-start ups, business games, and inviting motivational speakers into the classroom, have been around for a long time. However, what has emerged

from this research is that a more coordinated approach is needed, which may involve a certain amount of letting go. There is perhaps a paradox here in that do students take risks because they are told to do so, or do they take risks because the environment they work in requires risk taking in order for them to succeed. There are a growing number of academies and business and enterprise schools in Britain, which aim to develop an entrepreneurial ethos in their students. There is no doubt that the curriculum in these institutions is different however many of the activities they promote could be described simply as extra-curricular, but they have been re-branded as developing enterprise skills. Whether or not such activities encourage risk taking and provide real opportunities to experience failure is a matter for debate, and certainly something that would benefit from further investigation.

11.3 Emerging Theme 2

Students working and learning in groups in a more informal way and in so doing forming their own knowledge and way of working.

This theme relates closely to the concept of action learning, and it is will be useful to briefly revisit this in order to set some context for the discussion of this theme. Action learning can be described as an educational process whereby students study their own actions and experience in order to improve performance. The concept is not far removed from the notion of learning by doing. Revans (1998) who has been a key proponent of the concept, wanted to show that much powerful learning comes from people learning with and from others. Action learning is usually undertaken in small groups, which are sometimes referred to as action learning sets. It is often seen as being more

suitable for adults, as it enables each person to reflect on and review the action they have taken and the learning points arising. The outcome of all of this is that it should then guide future action, and lead to an improvement in performance. Action learning and the establishment of action learning sets to facilitate the process does stand in contrast with more traditional teaching methods. Firstly, it does not focus on the presentation of knowledge and skills, and secondly it does not have to take place within the confines of a classroom. Action learning focuses on reflection into what has happened in a particular circumstance and then encourages the development of knowledge, which in turn should lead to the improvement of skills and performance.

One of the challenges of action learning, noted by Revans, was achieving both action and learning in an action learning project. The problem here is that usually the urgency of the problem or task decreases or eliminates the reflective time necessary for learning. In a Young Enterprise setting this perhaps is not the case as the commercial urgency for reaching a decision is not as significant. More and more organisations have recognised the critical importance of an action learning coach in the process, someone who has the authority and responsibility of creating time and space for the group to learn at the individual, group and organisational level. There is controversy relative to the need for an action learning coach. Revans was against the use of learning coaches and, in general, of interventionist facilitators. He believed the action learning set or group could practice action learning on its own. Neither did he want a group to become dependent on a coach. Moreover, reflection was always a fundamental component of action learning for him and did not, therefore, have to be emphasised. In our scenario it would be the teacher or

lecturer who would carry out this role.

One of the main findings from the interviews conducted with students on the Young Enterprise Programme was the importance that was given to teamwork, having responsibility within a realistic scenario and ownership of the process, which in this case relates to the running of the Young Enterprise Company itself. More interestingly, when comparing the results from students in schools to those from Sixth Form and FE Colleges it appears that informal learning was more helpful to students in Further Education than those in school. Although, for incidental learning the opposite appears to be the case with students in schools scoring this more highly than students in Sixth Form and FE Colleges.

Teachers viewed the change of environment provided by a work experience placement as being important in respect of student motivation, along with the additional responsibility that is often given to students on work experience. Although it has to be said that this was not always the case and that some teachers did point to some work experience placements being routine and not sufficiently demanding. It was clear also that for certain groups of students being treated as an adult in a business setting, and being able to observe and follow professional people/role models, encouraged positive behaviour and ensured strong motivation from the young people. Interestingly, and as mentioned in the previous section, some of the new academies and business and enterprise schools in Britain are organising and running their curriculum along business lines. In some of these schools, pupil uniforms are almost

similar to business-style suits. There are links here to with issues surrounding social mobility and deprivation referred to as part of the discussion on emerging theme one.

Enterprising classrooms, seminar rooms, workshops, laboratories and work spaces where students can explore their own creativity, develop a positive view of risk, whilst also developing resourcefulness and resilience should be the basis upon which Enterprise Education is based and developed across the UK educational system. Such an approach seems more in keeping with the vision of enterprise as part of a wider cultural change (Beresford, 2009). Some writers in this field have noted that self-managed action learning (Bourner et al, 2000; O'Hara and Bourner, 2004) is a variant of action learning that dispenses with the need for a facilitator of the action learning set. It would appear from the findings from this research study that the aspect of students working and learning in groups and in so doing forming their own knowledge and way of working, is one which would benefit from further study. This does perhaps however, call into question the notion of an organised enterprise curriculum, which does not give scope for students to work in this way. The scenario of students working more independently in small groups and benefiting from more informal and incidental learning, which is not prescribed by specified lesson learning outcomes, is one, which appears to have considerable potential. Of course, there are many implications of organising student learning in this way. One of these, the need for teachers, trainers, and employers (should they be involved) to be appropriately trained, has been referred to earlier and it will be discussed in more detail later under the heading of Professional Relevance and Implications for Practice.

11.4 Summary

This chapter began by considering a number of aspects, which had been identified as the research progressed. These were then refined into two emerging themes. The final chapter will return to these two emerging themes and show how they also have implications in terms of professional relevance and practice. The final chapter will also draw together the main recommendations and conclusions that have come out of this research study, as well as pointing to some of the limitations of the research

CHAPTER 12

Recommendations and Conclusions

This chapter will briefly reiterate the context and aims of the study. It will then note any professional relevance and recommendations for practice, and point out the limitations of the research. The chapter will then draw some conclusions.

12.1 Context and Aims of the Study

At the start of this study it was noted that the world of work is changing fast and that employers increasingly want recruits who are going to be effective in a future, changing world. The pace of this change is showing no signs of slowing down. The recent world recession has brought greater focus on the need to manage risk and show resilience when things go wrong. In a competitive world, the skills and attitudes of the workforce have never been more important, and yet so uncertain, as the skills required continue to change. At the same time there are conflicting perspectives on how this change and development in skills and attitudes can be achieved. As was noted previously, in February 2009, the UK Commission for Employment and Skills (UKCES) published a report, which argued that publicly funded education and training should help 'recession-proof' learners by making them more employable. The reports' findings pointed to that, although some schools, colleges, universities and training providers prepare their students well for the workplace, too many do not. Consequently, employers have to

spend time and money on new recruits to provide them with everyday skills, such as how to take a telephone message or write a report.

An example of how difficult making these changes will be can perhaps be illustrated by reference to a scheme for 16 year old pupils, which has attempted to do this. It is a scheme, which encouraged pupil success and aimed to secure participation. It has however been widely criticised. Matthew Taylor (Guardian newspaper, July 2007) cites the example of a secondary school, which opened an on-site call centre, where pupils can practise selling mobile phone contracts and answering customer complaints. Pupils taking the so called preparation course - worth half a GCSE - answer queries from computer-generated customers. The scheme was set-up with the aim of giving 16 year old pupils a wide range of skills that would help them to get a job or continue with their education. In spite of the criticism, the scheme appears to have been a success. The school worked in partnership with the EDF Energy Company to develop the scheme, and pupils who have graduated from it have stated that they feel more confident and that they have had a taste of a real working environment.

The original aim of this study (to consider student learning in Business Education in the 16-19 age group) led to a focus on two things: namely, how Experiential Learning might impact on business courses and student learning in the 16-19 age range, and secondly the extent to which holistic whole business approaches could enhance the learning experience and how they might better prepare students for a rapidly changing world. The study was

then further developed to consider how alternative approaches to teaching students about business (with a focus on the Young Enterprise scheme) might provide a more effective learning experience, and how two aspects of this approach, the concepts of risk and failure, might be forces for further advances student learning. Key themes for investigation were identified in order to provide a focus for the main study, and following the main study and analysis of findings, a number of new aspects were identified. These were refined into two emerging themes. From these emerging themes, and from the analysis of the findings from the main study, it is now felt that the professional relevance and implications for practice of these is worthy of some discussion.

12.2 Professional Relevance and Implications for Practice

The following section identifies 3 areas where, in the opinion of the researcher, the findings from this research study have implications for professional practice. This relates to the curriculum offer for 16-19 year old students, the training of teachers for both schools and the Lifelong Learning Sector, and the provision of work experience for 16-19 year old students. In each of the following 3 sections the findings will be discussed and then there will be a statement at the end of each section, which highlights the implication.

12. 3 The Curriculum Offer: Risk and Failure

In the 21st century, the need to be able to cope with risk and failure has never been clearer. With global recession it has become increasingly important to engage employees and emphasise the crucial role they play in ensuring organisations can identify and analyse risks effectively. For many employers,

the need for everyone to be able to identify and cope with risk has become paramount in order to aid survival in a competitive world market. Understanding the importance of risk needs to be put into a language and context that all employees understand, and then in turn know how they can play a part in the process of managing that risk. There is a growing demand from both the private and public sectors of the economy for employees who can demonstrate transparency and evidence of strong risk management.

Risk and reward of course are two sides of the same coin. Uncoupling risk and reward has a potential downside in the sense that it may encourage risk aversion. Effective employees in the 21st century need to be able to undertake intelligent risk taking and not risk avoidance. This study has indicated that risk taking is a force for positive learning, and so developing tendencies towards risk aversion is something that should be avoided. However, this does need to be carefully balanced. For example, in 1982, Nick Leeson, coming from an unremarkable working class background, landed a job in the City of London. He worked his way up, and became established in the hardworking atmosphere of the Far Eastern currency markets, and soon, he was Barings Bank's star Singapore trader, bringing substantial profits from the Singapore International Monetary Exchange. By 1993, a year after he had arrived in Asia, Leeson had made more than £10m - about 10% of Barings' total profit for that year. In 1994, the markets turned against him, the downturn accelerated by the economic impact of the earthquake in Japan, and by autumn that year, the losses stood at £208m. By February 1995, losses amounted to more than £800m, almost the entire assets of the bank. Dozens

of executives who were implicated in the failure to control Leeson resigned or were sacked. Leeson pleaded guilty to fraud and was sentenced to six and a half years in prison. After his conviction, Leeson wrote *Rogue Trader*, in which he condemned the practices that allowed him to gamble with such large amounts of money unchecked. The example of Nick Leeson is an example of risk taking at a high level, and whilst interesting it is perhaps not likely to be typical of the experiences for most employees. However, it is important to note also that the most critical parts of a business can be at any level and therefore coping and managing risk is likely to become a key skill for more and more employees, and not just for those in high-ranking managerial positions. Furthermore, as risk cannot be eliminated entirely then employees need to be able to think about what to do and how to respond when failure happens. Assessing risk and putting in place controls that deal with both prevention and protection is likely to be required of more and more employees (Gardner, 2009). Clearly then, being aware of the damage that uncontrolled risk taking can cause is a vital skill for employees. If one goes along with the arguments put forward in this thesis that risk taking is a positive force in terms of student learning, then there are implications here for the training not just of teachers, but for all of those (including employers) who might be involved in supporting young people as they engage in risk taking activity, in order to ensure that first of all it does not end in disaster, and secondly that the students involved are able to derive maximum benefit from it.

According to Goodwin (2006) failure is insidious. Failure can occur because of one single incident, or it can build up over time. In the latter case it may be

that people/employees do not notice what is going wrong and by the time it is ready to implode then they are unable to stop it. Individuals/employees will be more knowledgeable and will develop more effectively if we can reconcile ourselves to failure both in our work and personal lives. Students who have had exposure to failure in the past are less likely to be destabilised by it when it occurs in their work or personal lives. They will develop the ability to understand their own feelings when failure comes but also the feelings of others. They will then be able to look dispassionately at what went wrong and then extract the learning from that particular situation.

Successful students, and in turn successful employees, need to be both active and reflective. If failure is meaningful then those experiencing the failure will understand the nature of the failure and will ensure they increase the probability of success in the future. History shows that some of the greatest successes emerge from failure and perseverance. For example, as a child Richard Branson grew Christmas trees and bred budgerigars to make money. He failed in the latter however, he was undeterred and he tried to set up a national magazine for students while he was still at school (Branson, 2009). Reflecting upon Richard Branson's subsequent success as a business entrepreneur then the real question perhaps is not whether someone fails but how they handle it when they do. For some people, failure is a spur. Students, who have overcome hurdles as part of their education, have often developed ways of dealing with adversity, which stands them in good stead when hit by a failure in later life. They bounce back quickly and use failure as a learning experience. According to Piaget et al (1969) this happens through the process

of accommodation and assimilation, whereby individuals construct new knowledge from their experiences. Accommodation is the process of reframing one's mental representation of the external world to fit new experiences. Accommodation can be understood as the mechanism by which failure leads to learning: when we act on the expectation that the world operates in one way and it violates our expectations, we often fail, but by accommodating this new experience and reframing our model of the way the world works, we learn from the experience of failure, or others' failure. The contrast to this, according to Piaget, is when individuals assimilate, and they incorporate the new experience into an already existing framework without changing that framework. This may occur when individuals' experiences are aligned with their internal representations of the world, but may also occur as a failure to change a faulty understanding; for example, they may not notice events, may misunderstand input from others, or may decide that an event is unimportant. Again the implication here is similar to that noted for risk taking in that opportunities for students to experience failure need to be adequately supported.

Implication for practice: opportunities for risk and failure should be built in to the curriculum for 16-19 year old students. Students who engage in such activities need to be adequately supported and mentored in order that the postive effects of such activities can be maximised.

12.4 Training for Teachers/Trainers and Employers

Currently, Teacher Training in the UK comes under the umbrella of either

training for the primary and secondary sectors, or training to work in the Post-Compulsory sector. In the first case, the guidelines for training are provided by the Training and Development Agency for Schools (TDA) and are embodied in the qualified teacher status (QTS) standards for Initial Teacher Training. Training to teach in the Further Education system, and the programmes that are in place to provide that training is guided by standards provided by Lifelong Learning UK (LLUK).

The Qualified Teacher Status standards and Initial Teacher Training requirements apply to all programmes of primary and secondary teacher training. The standards framework comprises of three interrelated sections covering professional attributes, professional knowledge and understanding and professional skills. Trainee teachers must meet the Qualified Teacher Status standards, before they can be awarded Qualified Teacher Status. It is also a requirement that training providers, who make recommendations for the award of Qualified Teacher Status, adhere to them as part of their training programmes. Only those trainee teachers who have met all of the standards will be awarded Qualified Teacher Status. These standards are relevant to anyone involved in Initial Teacher Training, which includes trainee teachers, teacher training providers, qualified teachers and those who employ and support newly qualified teachers. Two examples of the standards are as follows:

1. Standard Q22 requires trainee teachers to be able to demonstrate that they can plan for progression across the age and ability range for which

2. they are trained, designing effective learning sequences within lessons and across a series of lessons and demonstrating secure subject/curriculum knowledge.

3. Standard Q28 requires trainee teachers to be able to support and guide learners to reflect on their learning, identify the progress they have made and identify their emerging learning needs.

The Professional Standards for Teachers, Tutors and Trainers in the Lifelong Learning sector were developed specifically to respond to calls from Ofsted for clearer standards that new entrants to teaching should be expected to demonstrate and that are relevant to teachers, tutors and trainers across the whole FE sector (LLUK, 2007). The standards describe in generic terms the skills, knowledge and attributes required of those who perform the wide variety of teaching and training roles within the sector. The professional standards are divided into six domains (professional values and practice; learning and teaching; specialist learning and teaching; planning for learning; assessment for learning; and access and progression) and within each domain there are specific standards which all entrants must demonstrate as they progress through their training. Two examples of the standards in Domain A, Professional Values and Practice, are that teachers in the Lifelong Learning Sector should:

1. Use opportunities to highlight the potential for learning to positively transform lives and contribute to effective citizenship (AP 2.1).

2. Encourage learners to recognise and reflect on ways in which learning can empower them as individuals and make a difference in their communities (AP 2.2).

Considering the both the Qualified Teacher Status standards and Initial Teacher Training requirements, and the Professional Standards for Teachers, Tutors and Trainers in the Lifelong Learning sector, one can find little evidence that teachers in training are required to think about (either in their theoretical or practice based training) how they might encourage their learners to risk take and/or experience failure.

The findings from this research study have indicated that some form of more structured and meaningful work related learning is vital for students in the 14-19 age range. The study has also indicated that this learning should encompass opportunities for risk taking and experiencing failure. There are important implications here for partnership between education and employers, and for employers to be equal partners too in the support and mentoring of students in the workplace.

Implication for practice: both the Qualified Teacher Status standards and Initial Teacher Training requirements, and the Professional Standards for Teachers, Tutors and Trainers in the Lifelong Learning sector need to be reconsidered, so that teachers in training are actively encouraged to think more deeply about how they can plan for opportunities for their learners to experience risk and failure as part of their learning. In turn, and if one agrees with the argument in this thesis that opportunities for risk taking and experiencing failure are of benefit to student learning, then teachers in training, and teachers already in service, need to be themselves trained in being able to support students to ensure they obtain the maximum benefit

when they are engaged in such activities (risk and failure). Such training might also usefully include some form of structured secondment to industry/commerce in order to ensure that teachers and trainers are fully conversant with the types of risk taking and experience of failure activity that students might experience. Finally, given the role that employers need to play in all of this, then any training in relation to supporting students in the workplace needs to apply to them also.

12.5 Work Experience for Students

Work experience is intended to give students experience of working life, to learn about the world of work and to develop workplace skills. The choice of a work experience placement is usually based upon the perceived benefit that will accrue in respect of a student's education, rather than for job sampling or recruitment purposes. Work-related learning has been a key part of the curriculum since September 2004 when it became a statutory requirement for all students to experience work-related learning between the ages of 14-16, often referred to as Key Stage 4. The 14-19 reforms build on this requirement by extending links between employers and educators in order to provide work-related provision across the 14-19 curriculum and beyond. This supported by Education Business Partnerships whose role is to support employers and schools in delivering work experience. This, along with other work-related activities, is a key part of the Diploma learning experience. The Diploma aims to combine classroom learning with practical, hands-on experience including at least 10 days working for an employer.

Data obtained from both teachers and students has indicated that periods spent on work experience are not always beneficial. Perhaps more importantly, and if one accepts the findings on the importance of students experiencing risk and failure, then work experience did not come out strongly in this respect. For example, employers were not always convinced that the context of work experience always provided sufficient opportunity for risk taking. This is not to dismiss completely the value of work experience. Many of the students interviewed were able to point to the positive benefits of work experience. It was clear also that teachers viewed the change of environment as being important in respect of student motivation, along with the additional responsibility that is often given to students on work experience. Although it has to be said that this was not always the case and that some teachers did point to some work experience placements being routine and not sufficiently demanding. However, it is clear that work experience did not always give clear opportunities for learning to happen through the mechanisms of risk and failure.

Implication for practice: ensure that work experience placements are provided to ensure sufficient opportunities for students to experience risk and failure during the time they spend with employers. It is worth noting at this point that in October 2009, DCSF published a new strategy (Quality, Choice and Aspiration) on information, careers and guidance services, as part of the Children's Plan. The information, advice and guidance strategy is a part of the Children's Plan, the central DCSF strategy for under-19s. The strategy references the Leitch Agenda, and recalls Leitch's arguments around making

Britain more competitive internationally. As part of this strategy the DCSF plans a review of work experience, and several other measures to improve work experience programmes (Learning and Skills Improvement Service, 2009). One should infer from this review that there are concerns about what work experience is currently providing, and certainly, the findings from this research study would indicate that any review needs to consider how more opportunities for risk taking and experiencing failure could be built into work experience programmes.

12.6 Limitations of the Research

During the course of this research study a number of limitations have come to light. This is not to suggest that the research has been undertaken in a haphazard manner. Following the initial investigation, the issue to be researched was clarified and the research methods were selected. Clarifying the question and the methods enabled decisions to be made about sample sizes and the amount of data to be calculated. Interviews and questionnaires were 2 of the main instruments that were used. Some of the samples used were relatively easy to access given the role of the researcher as a teacher educator and a member of the Merseyside Strategic Board for Young Enterprise. Inevitably, there can be disadvantages to this insider research and these have been addressed in an earlier chapter. Once all the data was collected, then it was organised, analysed and interpreted according to the research question. This was essential as questions that are unclear or too broad cannot be easily answered. The research was then undertaken according to plan.

Yet even though the research was carefully planned, limitations have appeared. For example, the use of Young Enterprise Company Reports turned out to yield relatively little in terms of further illuminating the research themes. These reports of course were secondary data, which can be general and vague and often the information and data may not be accurate. There were more significant limitations and the following two aspects will be discussed further. These are the age range for the research, and the composition of the sample.

Age Range for the Research

The age range chosen for the research was 16-19 years. One problem that emerged with this is about establishing at what point students move into adulthood and how might this impact on the research. Certain adult milestones are clearly biological and so in all cultures humans reach puberty, mate, have children, begin to age, age further and then die. However, according to Gleitman (2007) the kinds of situations that confront persons at different points in the life cycle depend on the society in which they find themselves, or the socio-economic background of their own situation. Andragogy is a term that has been used since the 19th century although it was only popularised in the 1970s by Malcolm Knowles who described it as the art and science of helping adults to learn (Knowles, 1989). The work of Knowles has been referred to earlier in Chapter 2. The theory of andragogy is based upon a number of assumptions that Knowles made about adult learners. These relate to the adult's need to know, self-concept, store of experience, readiness and orientation to learning. Furthermore, andragogy suggests that

the learning activities from which adult learners derive the most benefit are experiential in nature. Adults identify strongly with their experiences. These form part of their identity and to acknowledge experience is to also acknowledge the person (Gould, 2009). Adults do not learn what they ought to, but are more ready to learn what they see as necessary to maintain and/or enhance their lives (ibid.). In this respect, one particular aspect of this research (that relating to risk and failure) does have a different implication for students depending on their level of maturity. How one actually conceptualises a schema going from pedagogy towards andragogy and at what point one becomes the other is difficult to pinpoint. In other words, at what level of maturity do students become more receptive to the principles of andragogy as opposed to pedagogy.

Of course, students will respond to tutor stimuli in a different way. This can be illustrated by quickly returning to the model of experiential learning proposed by Dennison and Kirk (1990) shown in fig 12a.
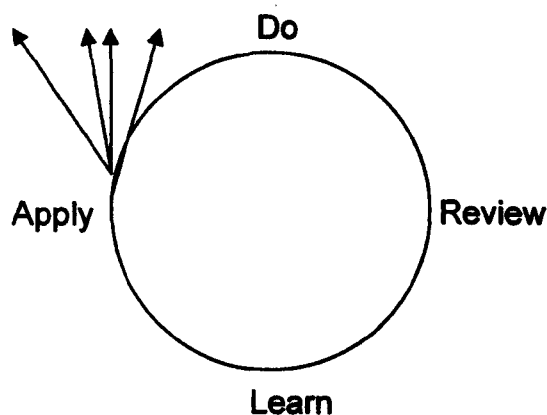
Fig: 12a A Model of Experiential Learning

Based on Dennison, W. F. and Kirk, R. (1990)

The different arrows arising from the apply stage reflect the variety of different situations in which skills and knowledge can be applied, as well as the possibility of linking one learning cycle to the next. While the do and review stages can be a shared experience organised by the tutor for all students, the two subsequent stages are internal to the learner and beyond influence or control (Dennison and Kirk, 1990). How adults extract learning will be different from how younger students extract learning and it is this, which on reflection perhaps would have benefited from a closer definition in this research study.

Composition of the Sample

In selecting the students from schools, colleges and from those engaged in the Young Enterprise Programme no account was taken with regard to differences in age, and how that might impact on the answers given in interviews and to questionnaires. It was assumed that the category of the 16-19 age range comprised a cohesive group and one whose characteristics would not bring any bias to the data. Also, no account was taken of gender, region/area of origin and educational attainment. There was a distinction made between vocational and A-level programmes and indeed this did indicate some important differences. Similarly, for questionnaires and interviews a distinction was made between schools and further education, and again this did lead to the identification of some important differences. However, a large part of the focus of this research study has been on student experiences of risk and failure and how this impacts on their learning. Clearly, when one is talking about these 2 concepts then this is not far removed from the concept of enterprise and entrepreneurship. Indeed, these 2 concepts

have also been referred to extensively throughout this project. It is of course well known that enterprising attitudes can often be linked to cultural background and/or family background. The researcher gathered no data on whether or not students came from an entrepreneurial family background. Nor was it established if students were working in part time employment or even more significantly if they were working/involved in enterprising activities such as voluntary work/running sports clubs etc. On reflection, this will have impacted on the reliability of the data obtained. Research by Comres on behalf of Enterprise UK (2009) will further illustrate this point. Comres analysed the social grade of young people as part of a survey into enterprise. It found that young people from social groups A, B and C1 are more likely to have undertaken informal enterprising activities than their cohorts from C2, D and E. Also, respondents were not asked about their future aspirations. For the majority of young people (63% according to Comres, 2009) a further educational qualification was at the top of their agenda, while 72% felt a professional qualification was the most likely thing they would do.

In terms of the likelihood of setting up a business in the next five years then there are differences in the proportions of young people who are likely to set up their own business depending on the educational level they have achieved. The greater the educational achievement of a young person, the more likely a young person is to be planning to start up their own business. For example, it has been noted by Comres (2009) that 36% of those with a professional qualification think business start-up is likely, compared to 21% of those with 5 GCSEs or less.

12.7 Conclusion

At the beginning of this thesis reference was made to the challenge facing the UK in respect of economic improvement and the need to raise international competitiveness (Deuchar, 2007). The pace of change has never been faster. The provision of high level education and skills development for all are essential not just for economic recovery, but also to enable young people to cope with the increasing demands that will be placed upon them as they enter the employment market in the 21st century. The ability to take the initiative, cope with failure, and take reasonable risk/reward decisions have now become the new key skills for all employees. At the same time, major curriculum, structural and policy changes are under way. The political profile of the 14-19 curriculum is very high, and this has been put into even sharper focus with the recent rise in youth unemployment. All of this presents opportunities to build a system, based upon partnership between schools, colleges and employers, which will equip young people for the challenges that lie ahead.

The aim of this research study was to try and get answers to some key aspects of the above challenges. In formulating the methodology and instruments and then subsequently undertaking this research study the researcher feels that the essential characteristics of a rigorous research study have been met. The methodology outlined was devised with the objectives of the study in focus at all times. The beginning of the research included a great deal of exploratory work, which was often speculative and fragmented. Some of the initial ideas were vague and ill defined however, this did eventually lead

to a more precise problem definition and formulation of the themes for investigation. The pattern and progress of the research has not always been systematic; for example, the results of some of the preliminary work led to additions to the original themes, and in particular, the theme on risk and failure. This pattern is similar to an idea put forward by Cohen, et al (2007) who referred to symbolic interactionism when describing the nature of interaction and the dynamic activities taking place between people. Interaction implies human beings acting in relation to each other, taking each other into account, acting, perceiving, interpreting, and acting again. It was precisely the dynamics of the preliminary research that led to changes and additions to the original themes for investigation. Thus the research process was not always as clear-cut as the literature on research design would imply however, from the researcher's point of view this was not unexpected. One of the underlying ideas of the research was not to try to discover general laws but rather to put emphasis on the particular and the individual in an attempt to understand individual behaviour and developments in that behaviour (Cohen, et al, 2007). As such, the majority of the project focused on interpretative approaches, which concentrate on action. This may be thought of behaviour with meaning; it is intentional behaviour, and as such, is future oriented.

The evidence that has been found has not always been consistent. For example, not all of the instruments used to investigate the research themes were effective, and some yielded more information than others. The questionnaire to students in schools, colleges and to those on the Young

Enterprise Programme provided some interesting information in relation to risk and failure. The limitation of the questionnaire was that it was focused on the 16-19 age range, and so only partly encompassed the 14-19 agenda.

The findings from the research have yielded some very valuable information in relation to the concepts of risk and failure as powerful forces for learning in the 16-19 curriculum. The thesis argues that serious consideration needs to be given on how these can be usefully incorporated into the educational offer for the 16-19 age group. The thesis also argues that work experience in its current form does not always meet the needs and aspirations of young people that the work experience package is often an inconsistent offering, and it is not properly managed and mentored. The recommendation is a more structured form of work-related learning, which has some direct contact with the workplace, and which is carefully planned, structured and supported by both teachers and employers. The learning environment in which all of this happens needs to be fluid and flexible.

It should be stated that it is the opinion of the researcher that the findings of this study should not just be limited to students in the 16-19 age range. It should be the case that, if any changes were introduced to encourage experiences of risk and failure in the curriculum then they should span a much broader age group. To limit them simply to the 16-19 age group would be short sighted, and would impact on consistency and continuity. Of course, this might well imply the need for a further study, carried out across a broader age range.

In the latter stages of the initial study, the researcher met with a group of three students in a Further Education college. The conversation moved to work experience placements, and two of those students bemoaned the lack of opportunity to fully express themselves whilst engaged in work experience placement. It was this along with other evidence from the initial study that prompted the researcher to take the initial study further. The main study, which followed, has led to evidence being gathered from a range of stakeholders linked to the 16-19 age range. These included employers, teachers and the students themselves. The findings from the main study have led the researcher to argue that there are strong reasons for including aspects of risk taking and experiencing failure in the curriculum offer for 16-19 year olds. The researcher has also argued that how this offer, of risk taking and experience of failure, is presented will, in order to be fully effective, require much more collaborative learning. This entails more thought being given to how students can work more effectively as part of a group and how, within that group, they are allowed to take to more ownership of their learning. The question then is how to best translate the knowledge, capabilities and qualities that risk taking and experiencing failure can provide into an effective learning experience (Pring, et al, 2009). This presents a huge challenge. However, if we are serious about ensuring that young people are fully equipped to cope with the demands that will face them in the future, then it is something that needs to be addressed. This research study has indicated that providing such experiences, as part of the educational offer is relevant, motivating, and exciting for the young people involved.

The researcher hopes that this study will add a little more to the understanding of learning and how to best ensure the motivation and achievement of students in the 16-19 age range. It is also hoped that, as a result of this study, enabling students to risk take and experience failure in more informal educational settings will be more fully appreciated in terms of the impact it can have, not just on motivation and achievement, but also in ensuring that students are fully prepared for the challenges of the 21st century. Finally, two quotations, taken from interviews with students during the research, will illustrate students' perspective on the effectiveness of working in such ways:

"Learning in an informal way meant that for the first time I really felt part of things, other people listened to me and they really appreciated my input"

"Being able to take risks gave me more confidence when things went right, and really motivated me to succeed. It also brought us together as a team"

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APPENDIX 1

A REVIEW OF ENTERPRISE AND EDUCATION IN THE ECONOMY

HOWARD DAVIES: FEBRUARY 2002

A REVIEW OF ENTERPRISE AND EDUCATION IN THE ECONOMY

Summary

The world of work is changing fast. Over the last two decades the number of people working in small firms or who are self-employed has grown sharply, while jobs in the public sector and large firms have been cut back. These trends, at least in the private sector, seem set to continue- Looking forward, therefore, young people seeking work In the future are likely to need to be more flexible and entrepreneurial in their attitudes. Even in larger firms and in the public and voluntary sectors entrepreneurial skills are more highly valued than they were in the past.

The education system plays a crucial role in preparing young people for the world of work and employability. How well is it adapting to these changes, and how effective are schools and colleges in developing an understanding of the economy, and of enterprise, among their students?

Almost all offer work experience opportunities, and many facilitate other contacts with business. But our research also shows that whilst young people recognise the ch allenges and rewards involved in starting and running a business, many are unsure of their own ability to meet the challenges successfully. They lack the skills and confidence to turn positive attitudes into action during their future careers.

Those confidences, and those skills, are more likely to be developed through involvement in enterprise activities, such as mini-company schemes or enterprise projects undertaken as part of a curricular course. It is also clear that few school children are exposed to basic concepts about finance and the economy, which form part of die essential toolkit of the effective entrepreneur.

The reorganisation of the 14-19 curriculum offers an opening to revisit the place of enterprise learning in schools. For example, we see considerable scope to upgrade work experience, by adding a participative element of

enterprise learning, making it a richer experience for students, one which imparts skills as well as a basic familiarity with the world of work.

Education has a responsibility to contribute to the preparation of young people for the world of work. But the world of work has changed significantly over the past two decades. Overall, there are more opportunities than ever before, as the total number of jobs in the UK has increased by 11% since 1981. But the pattern of growth has not been even. The number of public sector jobs has fallen by almost two million, offset by four million new jobs in the private sector. The fastest growth has been amongst small businesses, which now account for over 4 in 10 of business jobs, and in self- employment, which accounts for almost one in eight jobs in the economy as a whole. International experience suggests that these are likely to be the most dynamic areas of the economy in the foreseeable future.

It is also likely that young people in education now will face greater economic uncertainty and more frequent change in their future working lives than did their predecessors. Against that background, all young people will need more enterprising skills and attitudes, not just to set up businesses (or enter self-employment), but also to build their own careers and to stay employable. In addition, enterprise may be seen as a set of skills, attitudes and capabilities, which can help weaken the link between economic uncertainty and social exclusion.

With the decline of the state pension and other benefits as a proportion of retirement income, and the diversification of personal saving options, Young people will also need to make more personal provision for their own financial futures. Education therefore has a responsibility not only to contribute to the preparation of young people for the world of work, putting them in touch with the range of opportunities open to them, but also to develop their financial literacy and ability to make choices and manage risk.

We see employability as the knowledge and understanding, skills, attitudes and qualities that young people will need to thrive in their future working lives. For everyone, the challenge to maintain and update employability lasts

throughout life. Employability comprises many different components. Those which fall within the remit of this Review are:

Enterprise capability
Financial literacy
Economic and business understanding

Enterprise capability: the capability to handle uncertainty and respond positively to change, to create and implement new ideas and new ways of doing things, to make reasonable risk/ reward assessments and act upon them in one's personal and working life. This depends on the development of:

Knowledge and understanding of concepts - organisation, innovation, risk, change;
Skills – decision-making (particularly under conditions of uncertainly), personal and social, leadership, risk management, presentational;
Attitudes - self-reliance, open-mindedness, respect for evidence, pragmatism, commitment to making a difference;
Qualities - adaptability, perseverance, determination, flexibility, creativeness, Improvisation, confidence, initiative, self-confidence, autonomy, action-orientation.

Financial/ Literacy: the knowledge, skills and attitudes necessary to become a questioning and informed consumer of financial services and the ability to manage one's finances effectively. Financial literacy can be divided into three interrelated themes:

Knowledge and understanding - familiarity with a range of concepts such as money, credit and investment;
Skills and competence - budgeting, financial planning and personal risk management;
Attitudes - taking responsibility for the wider impact and implications of money and financial decisions on individuals, business and the community

Economic and business understanding: a process of enquiry, focused on the context of business, central to which is the idea that resources are scarce so that choices have to be made between alternative uses. This includes:

Knowledge and understanding - familiarity with a range of economic concepts such as the market, competition, price, efficiency and economic growth

Skills - the ability to take decisions and make judgements on issues with an economic dimension, investigate simple hypotheses and apply theoretical understanding to practical situations.

Attitudes - an interest and concern in: economic affairs, responsible use of resources, challenges of business and its importance to society, responsibility of employers to the community and the environment

In the reality of the school environment, the development of young people' s enterprise capability, financial literacy and economic and business understanding takes place in a range of curriculum programmes, often containing one or more of three strands of activity.

The first strand focuses on education about work and the way business functions. Including vocationally-related courses such as design and technology, leisure and tourism, performing arts, health and social care, manufacturing and engineering.

The second stand emphasises education for work and is concerned with improving the transition of young people to adult and working life, particularly through careers education and guidance and provision of the Key Skills of literacy and application of number.

The third strand, education through work, provides opportunities for pupils to gain experience of work in a range of ways. For example, placements or work experience in using firms to carry out particular work-related tasks, work shadowing, work role-play, "mini-enterprise" activities, art and technology projects undertaken in Partnership with employers, mentoring of pupils by business personnel, and work simulations. Most often, such experiences are organised in co-operation with employers. Many schools have formal partnerships with employers to facilitate their cooperation.

Many of the learning opportunities in these strands involve an element of work- related learning which according to the Qualifications and Curriculum Authority (QCA) occurs where there are planned activities that use work as a context for learning. Links between business and education provide the vehicle for some of these activities, and these links are often facilitated by intermediary organisations referred to in this report as 'brokers'. These organisations are also sometimes referred to as education-business link organisations (EBLOs)'. Examples include Young Enterprise, business dynamics, SATROs, the Trident Trust and Education Business Partnerships. Some brokers, but not all, provide and run their own programmes.

Work experience is a well-established part of young people's education, and takes up a significant portion of time: Ofsted estimate that on average a placement takes up two weeks, or the equivalent of 50-60 hours of school time. Ofsted found that work experience is well organised in over 90% of schools; that three quarters of placements are well-matched to pupils' abilities and that two thirds provide an appropriate level of challenge. But they also found that one fifth of pupils find their placement unsatisfactory, largely because of limited scope for taking responsibility, and that links to curricular outcomes are sometimes unclear.

Other education-business link activity: It is more difficult to establish reliable figures for how many young people are involved in education-business link activity other than work experience. However, we estimate that somewhere between 15% and 30% of young people have some Involvement every year.
In order to understand young people's perceptions, we asked them to assess a number of occupations based' on a range of job-related characteristics. But we also found a mismatch between the characteristics young people associated with enterprise and what many of them were looking for in their own career. We found that young people attach varying levels of desirability to attributes of jobs, roughly into three tiers:
Top tier (more than 92% of respondents see attribute as essential or important in choice of career): have secure jobs; do interesting work; work hard; valued and trusted; pleasant work colleagues; receive good pay

Middle tier (75-87% of respondents see attribute as essential or important in choice of career): responsibility; control over own work; make important decisions; work directly with clients; be creative / innovative; contribute to society.

Bottom tier (less than 60% of respondents see attribute as essential or important in choice of career): take risks; routine work; work set hours / nine-to-five

Relative to the other occupations we looked at, careers in large business were not thought to offer particularly interesting work, nor the opportunity to work directly with clients. They were also perceived as being relatively routine, and as making least contribution to society. On the other hand, they were seen as well paid and secure, both attributes to which young people attached a high level of importance when thinking about their own careers.

In contrast, running your own business scores relatively well on many of the 'middle tier' attributes. For example, entrepreneurs are reckoned to have a higher than average degree of control over their own work, to do interesting work that also involves being creative and innovative, and have the opportunity to work directly with clients. On the other hand, young people associate lack of job security, working long hours, and risk- taking as features of running your own business. These are the areas where there is the greatest mismatch between what young people want in their own careers, and what they perceive to be the characteristics of an entrepreneurial role.

We think that these distinctive attributes associated with running your own business are relevant to a wide range of occupations and roles. They also suggest to us that there are significant barriers to be overcome if more young people are to translate positive attitudes into the confidence and ability to take on entrepreneurial roles, and to be more enterprising in their careers. For example, while young people think job security is important, it seems to us that given the wider trends in the economy, this preference will be increasingly to difficult to fulfill. Equally, risk taking (and the ability to manage risk) is likely

to increase in importance in all jobs, even for the many young people who do not at present seek roles associated with this characteristic.

Respondents to our Call for Evidence generally agreed that effective enterprise activities should be student-led and experiential. They should offer opportunities to manage and evaluate risk. Wherever possible projects should involve local businesspeople, and be self-contained with clear results and conclusions.

The best businesses - particularly smaller ones - are often the most enterprising. They are where young people can see the relevance, excitement and challenge of enterprise brought to life. Entrepreneurs have a highly developed set of enterprise skills; working with educational professionals they can use these skills to inspire, coach and nurture similar abilities in young people. And in areas such as work-related learning, real business problems provide ideal opportunities for young people to apply what they have learned within education, often with outstanding results for their development and confidence.

Summary taken from:

Howard Davies, (2002) A *Review of Enterprise and Education in the Economy*, HMSO.

APPENDIX 2

EXAMPLE QUESTIONNAIRE

STUDENT QUESTIONNAIRE: WORK RELATED LEARNING AND BUSINESS EDUCATION IN THE 16-19 AGE RANGE

The questions that follow are about how students can learn most effectively in business studies: and how certain aspects of your learning happened; the importance of learning by doing (experiential learning); and how it might be possible to link academic with more work related approaches to learning. The questions also ask you to consider if some of the learning opportunities provided by employment/work experience could be replicated in the classroom.

Name: ………………………………………………………………

School: …………………………………………………………

Course of study: ………………………………………………

WORK EXPERIENCE AND YOUR LEARNING

Would you say that work experience helped you to learn about business. Please tick….

Yes	
Sometimes	
No	

Depending on which category you circled, then in your opinion what was it about work experience that helped you to learn/not learn about business?

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Learning activities can sometimes be divided into 3 broad types: formal, informal and incidental learning. The last two could also be better referred to as learning by doing or experiential learning.

Thinking about your work experience, how much time would you estimate that you spent on each type of learning?
(use % figures next to each one).

Category	%
a. Formal Learning (information passed on from employer to employee/student)	
b. Informal Learning (in a group/less structured situation)	
c. Incidental learning (unplanned/happens as you do things)	

Which of these methods of learning was most effective for you? Rate in order 1, 2, and 3.

Category	Rating
a. Formal Learning (information passed on from employer to employee/student)	
b. Informal Learning (in a group/less structured situation)	
c. Incidental learning (unplanned/happens as you do things)	

How important to your learning on work experience was collaboration and social interaction with others (such as employees)? Please tick...

Very important	
Important	
Not important	

6. Do you have any further comments on the importance of social interaction and collaboration to your learning whilst on work experience?

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WORK EXPERIENCE AND RISK TAKING

An example of risk in this sense would be if you were on work experience and you had to decide whether or not to go ahead with a press advert, balancing the costs and benefits.

7. Can you give any examples of where you were able to take risks during work experience?

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8. Did taking risks help you in your learning? Can you say how?

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WORK EXPERIENCE AND EXPERIENCING FAILURE

An example of failure in this sense would be if you were on work experience did not respond correctly to a telephone enquiry.

9. Can you give any examples of where you were able to experience failure during work experience?

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10. Did experiencing failure help you in your learning? Can you say how?

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RISK AND FAILURE IN BUSINESS STUDIES LESSONS

1. When studying in business studies lessons (in any format: role play, case study etc) are you given opportunities to learn by taking risks? Please tick...

Yes	
Sometimes	
Never	

12. If yes or sometimes, can you give any examples of how this happens?

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13. When studying in business studies lessons (in any format: role play, case study etc) are you given opportunities to learn by experiencing failure? Please tick...

Yes	
Sometimes	
Never	

14. If yes or sometimes, can you give any examples of how this happens?

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15. In terms of opportunities for risk and failure as learning experiences would you say this is easier in some lessons than in others? Do you have an example?

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16. Do you think involving persons, other than teachers, in your business studies lessons, would be of benefit?

17. Similar to question 3 and thinking about business studies lessons, then over an average term, how much time would you estimate that you spent on each type of learning? (use % figures next to each one).

Category	%
a. Formal Learning (information passed on from teacher to student)	
b. Informal Learning (in a group/less structured situation)	
c. Incidental learning (unplanned/happens as you do things)	

18. How important to your learning in business studies lessons are collaboration and social interaction with other students? Please tick...

Very important	
Important	
Not important	

19. Do you have any further comments on the importance of social interaction and collaboration to your learning whilst in business studies lessons?

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....

20. With all the above questions in mind could you list 5 components of a business studies lesson, which you think would be an ideal and interesting way to learn?