“Understanding what factors influence a student’s initial and developing choices on a course combining academic and vocational features: the case of BTEC Level 3 Science”

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Rowley Alexander Hutchinson

School of Environment, Education and Development
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Abstract

Why do students choose to study particular courses and what is the impact of these choices on their later progression? Quite often the reason for the choice appears to be obvious and straightforward, and their after course trajectory is already determined. The education system has, what some may view as an easy to follow progression route when students reach the end of Key Stage 4, i.e. GCSE to A level, and then university for those who meet the criteria. With A levels considered by many to be the ‘gold standard’, there is probably no expectation by schools, parents and students that they will do anything else. But what about those who may not meet the criteria and A levels may not be the most appropriate progression route for them?

This thesis examines the factors that influence the choices made by students who have decided to study a course other than A level. This is done through longitudinal case studies derived from the use of questionnaires, focus groups and individual interviews using BTEC L3 Science as a vehicle. Four educational establishments agreed to participate in the research to varying degrees, with one establishment providing the participants who provided the case studies. Many previous studies that have investigated student choice have often done so from either the perspective of structural factors or individual agency, but not usually both. Hemsley-Brown and Fosketts’ 2001 Integrated Model of Educational Choice has been used to provide a theoretical framework as it allows consideration of both structural factors and individual agency. The model was used at two different points in the research, but in a different way at each point.

The result was a series of individual stories that gave an insight into the factors that influence student choice and also how the balance of power in the decision making process shifted in favour of the student as they progressed through the course. At the start of the course structural factors such as the systems that exist within education had a significant role in the choice of course for the students, to the point where it was effectively a ‘non-choice’ for them. By the end of the course individual agency played a significant role and the students were able to adapt and make the systems work for them to enable them to make the best possible choices to meet their own needs.
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1. INTRODUCTION

“Don’t be put off from applying to university if you’re taking BTECs rather than A-levels. More than 100,000 BTEC students apply to UK universities each year” (HELOA, 2014).

In this thesis, I aim to explore the factors that influence students’ choices regarding studying the BTEC L3 Science course and to gain a better understanding of the educational implications related to these choices, including their proposed trajectories at the end of the course which may, or may not, include university application. The number of university acceptances of UK students holding BTEC qualifications has increased from 4.9% in 1999 to 11.4% of applicants who had a BTEC National Diploma and no A levels, and a further 1.7% a BTEC National plus A levels in 2010 (Wolf, 2011). This possibly indicates that this is becoming a more popular end of course trajectory for those studying BTECs and that universities are more prepared to accept them. While not indicating how many BTEC students are actually accepted by universities, HELOA (2014) presents a very positive picture of the situation. This is illustrated below:

“Ninety-five per cent of universities and colleges in the UK accept BTEC students, including competitive universities from the Russell Group. More than 50% of 20- to 30-year-olds going on to higher education have progressed via studying a BTEC. Nearly all universities accept BTECs in relevant subject areas, similar to how they would with equivalent A-level qualifications. BTEC students can often be better prepared in terms of the independent studying that’s required at degree level, due to the portfolio-based nature of BTEC courses. The time management and self-organisation you’ll pick up on a BTEC course can also give you an added edge” (HELOA, 2014). Although the source is 2014, it reflects an issue that I have personally noticed since it appears to have existed at least from the 1980s.

Having been involved with the post-compulsory sector, in several roles, since the early 1980s teaching Biology, Science and ‘science’ related subjects on a range of courses, I have noticed that there is a perception in FE staffrooms that I have worked in that BTECs, and other courses with a ‘vocational’ tag associated with it, are solely for students who cannot cope with the traditional academic subject and courses, and that these qualifications are not as valued by universities, employers and parents.

My own move into teaching was more by accident than design initially, starting at a time of high unemployment in the early 1980s. Having completed a Biology degree, my first job
was as a part-lecturer in a local college and then moved on to be a part-time biochemist in a local hospital. The reason why I left my employment as a biochemist to teach was because of the satisfaction and enjoyment of interacting with the students during teaching sessions and this has always remained despite the politics of the job. When I started in my first teaching job in an FE college, I was the only Biologist in the department and probably had a very naive view of education at the time. It was at a time when FE was seen as a genuine alternative to school, a stepping stone for those wanting to go to university due to the teaching approaches and the feeling was that the students were there because they wanted to be. The staff also seemed to have a lot of autonomy over what they did. An example of this was the delivery of three different A level Biology syllabi by different exam boards to specifically target the needs of specific groups of students. This was also a time of high teenage unemployment which resulted in the introduction of schemes such as YTS and TVEI. My main role was to deliver on Biology courses (O level, GCSE, A level, year 0 degree) and science based courses that were mainly vocational (hairdressing, catering). Mixed in with this was the full-time BTEC National Diploma Science course which, at the time, included an exam type assessment. It was a course that we took pride in delivering and even developed stand-alone units (again demonstrating the autonomy we had), such as Biochemistry and Biotechnology, specifically to increase the potential of students to be accepted by Russell Group universities.

The political climate, during the 1980s and early 1990s, was that of Conservative governments and neoliberalism which filtered through the FE system in several ways. My experience of the Governments’ policies included re-branding of the college that I worked at in 1990, FE college incorporation (independence from local authority control) in 1993 and the introduction of ALF (average levels of funding), all of which led to new contracts, high levels of redundancy and what appeared to be a shift in emphasis towards management at the expense of teaching. There was also the introduction of inspection regimes, firstly by the FEFC and ALI which was then taken over by Ofsted and as a result the FE system seemed to take on a more schools based regime in its approach to education. With changes to benefits, etc., it seemed that the days of when students aged 16 – 19 were at college because they wanted to be were beginning to disappear. With the introduction of schools based regimes, including Ofsted, the autonomy of the teaching staff was also disappearing and I felt that we had moved from autonomy to automaton. Even the use of the term post-compulsory may be considered no longer appropriate since the Raising of the Participation Age in September 2013 to 17 and then 18 in 2015, where
all 16 – 19 year old students are expected to participate in at least part-time education even if they are in employment (National Audit Office 2014). Many of what used to be post-compulsory teaching qualifications now refer to 14+ provision due to the blurring of the boundaries of post-compulsory and compulsory sectors. In observing this shift I moved from what was initially a very naive to a more critical view of the FE system in terms of the way it operated and the influence of politics on it.

As McNeill (1994, p381) commented “the speed of change at 16+ shows little sign of slowing down, whether in terms of the organization, funding and governance of colleges, or of the structure and delivery of the curriculum both in schools and in colleges”, highlighting the issue generally. Well into the 21st Century it seems as if the only thing that hasn’t changed is the pace of change.

1.1 How socio-economic factors have led to changes that have greatly increased the number of students studying in post-16 establishments.

A lot of the argument for change focuses on the UK economy, international competitiveness and the UK’s position in international skills and educational league tables. Typical of the argument to improve the UK’s skills base is that put forward by the Leitch Report (2006) as “to achieve world class prosperity and fairness in the new global economy, the UK must achieve world class skills. Without world class skills, UK businesses will find it increasingly difficult to compete and innovate” (p9). In 2006, out of a comparison of 30 countries, the UK was 17th on low skills, 20th on intermediate and 11th on high skills. Seven million adults lacked functional numeracy and five million lacked functional literacy, with the proportion of people with low, or no qualifications, being more than double that in Sweden, Japan and Canada (OECD, 2006 cited in Leitch 2006 p10). Even by 2020, Leitch suggested that “4 million people will still lack functional literacy skills, and over 6 million will lack functional numeracy skills”, and that “the UK will be 15th out of 30 OECD countries in low skills … 13th in intermediate skills … 13th in terms of those aged over 25 who have attained high qualifications” (Leitch, 2006 p13-14). Other, more recent, studies support Leitch’s conclusions, for example Bosworth (2014). The 2012 results for the Programme for International Student Assessment (PISA) for 15 year olds placed the UK’s international position as 26th in Maths, 23rd in reading and 20th in Science. The performance in the three areas remained the same as those for 2006 and 2009. Although there is debate as to the value of the PISA data, many use it as an indicator of the UK’s international educational performance. Bosworth (2014) summed up
the situation as “it could be argued that the most pressing priority is to accelerate the rate of reduction in the size of the long “tail” of the low skilled in the UK population; both by supporting the progression of those already in the labour force and helping them to move up into the intermediate band, as well as by minimising the proportion of new entrants to the labour market who lack attainment at upper secondary level” (p vii).

One way of reducing the ‘size of the long tail’ is to ensure that students leave education with appropriate qualifications which will usually involve them continuing their education post-16. However, there is a need to overcome what can be referred to as intergenerational persistence. It is argued that life outcomes for children tend to reflect their family’s characteristics. For instance, if a child’s background is one of lower socio-economic status, poor parental income and parental education, that child’s life outcomes will mirror this (Johnson and Kossykh, 2008; OECD, 2010). Intergenerational persistence is usually discussed in terms of two generations, but Lindahl, et al (2015) argue that the effects, in terms of earnings and attainment, may be observed over three or four generations. It is suggested that social class is the strongest predictor of educational achievement in the UK, but it does not operate in isolation as other factors such as gender and ethnicity also have an influence (Perry and Francis, 2010). However the influence of socio-economic factors on a student’s progression is not straightforward.

In terms of ethnicity, the parents of ethnic minority students often have high aspirations for their children, as well as providing a good home learning environment, with many groups overtaking White pupils in terms of attainment. These students, apart from Black Caribbean students, are more likely to continue into post-16 education than the equivalent White students. The only case where there isn’t a difference is for White and non-White girls undertaking vocational education (Payne, 2003; Johnson and Kossykh, 2008; Tackey, Barnes, and Khamb, 2011). Disadvantaged White children, defined as those entitled to free school meals, are the lowest performing ethnic group, with the gap widening as they get older (House of Commons, 2014). These students highlight the effects intergenerational persistence, reflecting the importance of background as an important determinant of success for White students. However, this is not reflected by those from ethnic minority groups. Platt (2007) suggests that this is because these groups take a more meritocratic approach with educational qualifications being thought of as important for success and upward mobility, but the effect does vary between different ethnic groups.
As well as the differences arising between girls and boys regarding ethnicity, the gap between girls and boys, regarding attainment, appears to have increased significantly after the introduction of GCSEs with girls out performing boys (DfES, 2007, cited in Johnson and Kossykh, 2008). However, the gap in attainment is stable across socio-economic groupings but varies by ethnicity and subject. Girls are more likely to stay in education after KS4, especially when they have poorer GCSE results (Payne 2003; Sammons, Toth and Sylva, 2015).

Disabled people are less likely to have educational qualifications, while being more likely to live in poverty and be economically inactive. However, the level of participation and attainment for these students is lower than for non-disabled students, while their aspirations are very similar (Johnson and Kossykh, 2008)

A student’s socio-economic background may reflect where a student attends post-16 and can highlight the effects of intergenerational persistence. The UK is one of the countries in the world where socio-economic background appears to have the largest influence on students’ performance and this is reflected in the UK’s PISA test scores (OECD, 2010). The OECD also suggests that intergenerational persistence is demonstrated by secondary educational achievement being reflected by post-secondary educational attainment. Sammons, Toth and Sylva (2015) suggest that students who live in poor neighbourhoods are less likely to go on to advanced level courses than those who live in more affluent neighbourhoods, while Hemsley-Brown (1999) described how a young person’s choice of which college to attend after age 16 was influenced by the social class of the students there. Johnson and Kossykh (2008) argue that the expansion of higher education has disproportionately benefited people from richer families, leading to them gaining higher educational qualifications and higher wages. They also suggest that this is helped by the better social skills these students possess compared to those from poorer backgrounds.

It is against this background of differing socio-economic factors that successive governments have acted to increase the numbers of students in post-16 education. There is a consensus that policy reform which includes a combination of policies and interventions that follow students through their education is more effective than ones that target specific groups of students. If done effectively, obstacles to intergenerational social mobility can be removed and thereby promote equality of opportunities for individuals and therefore enhance economic growth (Johnson and Kossykh, 2008; OECD, 2010). Since
the early 1980s, there has been the implementation of various policies and legislation that appear to be aimed at tackling youth unemployment, offering a greater variety of different types of qualifications, increasing attainment and increasing the numbers who continue their education after the age of 16.

These appear to have been responsible for an increase in the number of students continuing into post-16 education but the official government figures (Funding Skills Agency, 2016) stating exactly how many 16 – 19 year olds have done this is confusing due to the move from recording the numbers by academic level up to 2011/12, which will include 19+ students, to one of recording the numbers by age from 2012/13 onwards. Figures by the LGA (2015 p9), however, illustrate the general trend, with numbers for what are described as ‘FE sector learning aims’ increasing from 771,708 starters in 2006/07 to 898,140 in 2012/13, an increase of 16.4%. This is illustrated more dramatically by a rise from 28% in 1980/81 to 81.2% of students staying on in full-time education after 16 at the end of 2013. However, this has been matched by a proportional decrease in those going into full-time employment, with 16 – 18 year olds appearing to have swapped the workplace for the classroom, which may, in part, have been due to economic recessions. The increase was most rapid in the late 1980s and early 1990s and one reason for this may have been the introduction of GCSEs in 1986 and the subsequent increase in academic attainment, leading to a more positive attitude towards school and so encouraging students to continue their education after 16 (Maychell et al, 1998). However, during the 1980s and early 1990s, the numbers of 16 – 18 year olds who were not in employment, education or training (NEET) remained static at about 20%, but has now dropped to 7.6% at end of 2013 (Payne 2001; DfES, 2007a; Bolton, 2012; National Audit Office, 2014) which may reflect this pattern.

The number of children living in poverty in the UK has dropped from 3.4 million in 1998/99 to around 2.3 million for 2013/14 (DWP, 2015) and Sammons, Toth and Sylva (2015) highlight the importance of the pupil premium to help improve the attainment of disadvantage pupils. It would be reasonable to assume that financial considerations can deter many young people in the lowest income bands from staying on in education (Legard, Woodfield and White, 2001, cited in Payne 2003; Haywood et al, 2009) and that students who are eligible for free school meals are unlikely to move into advanced level education (Sammons, Toth and Sylva, 2015). To encourage students to continue their education after KS4, there have been a series of policies that were linked to ‘incentives’ to encourage success such as the tinkering with, and removal of, benefits available to the young unemployed in the mid-1980s (Brown, 1990) and the introduction of the
Educational Maintenance Allowance in 1999, a means-tested allowance paid to students aged 16 to 19 if they stayed on in full time education (Machin and Vignoles, 2006). I was part of the pilot and it did appear to influence some students to remain in education, while others would have clearly stayed in education even if they hadn’t received the allowance. In September 2012, the EMA was replaced by the 16–19 Bursary Fund, with the emphasis of distribution being moved from Local Education Authorities to post-16 education providers. It could be argued that this change may remove the financial incentive to stay in education for some students, but this could have been counter-acted by the Raising of the Participation Age (RPA) to 18 in 2015.

Other changes and policies have included encouraging students to consider their future beyond the age of 19 with initiatives such as Aim Higher and widening participation, apprenticeships and making changes to qualifications which are now discussed.

1.2 Subject related changes

The subject related changes and the consequences of them may have an impact on the choices that students make when choosing courses. Some of these qualification related changes include (in no particular order or importance):

- The move from ‘O’ levels / CSEs to GCSEs in 1986
- The modularisation of ‘A’ levels into Curriculum 2000 (AS / A2) and then the recent return to the ‘long and thin’ approach with a terminal exam in recent years.
- Vocational and Applied ‘A’ levels and GCSEs
- The introduction of Single / Dual award Science, with the decline of single Science subjects in many schools at one point.
- Changes in syllabus content (leading to accusations of ‘dumbing’ the subjects down)
- GNVQs - Piloted in 1992/93 and launched nationally a year later, with Science offered 1994/95 (Williams 1999)
- AVCEs replaced GNVQs in 2000 and became vocational A levels (Creative steps, 2015)
- Subjects required for entry to some Science based University courses, e.g., a move away from three ‘sciences’ for some courses.
This perception of regular change to the qualifications offered to students becomes more real when the Wolf report notes that “Educational reform of the last thirty years is littered with qualification reforms, of which perhaps two have been genuinely successful, and many others an expensive failure. And the two that succeeded – the introduction of GCSE and the development of BTEC awards, created by the Technician and Business Education Councils – were successful because they responded to a broad and irreversible change in aspirations, for progress to further and higher education ....” (Wolf, 2011 p139)

In the middle of this, students have to make choices about progression routes, hoping that they make the appropriate choice that will lead them onto the desired educational or career route. It is the tensions that have arisen from the range of post-16 qualifications offered over the years, including the BTEC L3 Science qualifications, and the official, suggested or perceived equivalences between them that have helped to inform the reasoning behind the research undertaken.

Two qualifications that were introduced to provide different, more vocationally based routes of learning, while at the same time being an equivalent to their academic counterparts, e.g. A level, are discussed below. GNVQs were introduced in the early 1990s, while the 'new' Diplomas were introduced in 2007. Both represent a continuing trend from 1986 with the introduction of GCSEs by successive governments to try and bridge the perceived gap between those who may be viewed as taking ‘elitist’ qualifications and those who are not.

1.3 GNVQs
The introduction of GNVQs raised further uncertainties in the system. From the late 1980s, vocational qualifications (low status) were seen as struggling with A levels (high status), especially when students were applying for university. The, then, Conservative government introduced GNVQs in an attempt to address the problem, hoping that they would have the same status as A levels and would “be a bridge from A levels to NVQs, from education to employment, and from compulsory schooling to higher education” (Hodkinson & Mattinson 1994, p324). As Gleeson and Hodkinson (1995, p5) also noted “Their hope is that GNVQs will have equivalent status to A levels, encourage staying on and achieve reskilling, thereby bridging the academic/vocational divide”.

These were developed in conjunction with major vocational awarding bodies, including BTEC. Ron Dearing, in 1996, recommended that the GNVQ be re-named Applied A
levels at the advanced level but the New Labour government, after being elected in 1997, did not follow through with this suggestion (Williams, 1999). [Although rejected in the early stages of the New Labour government, the term was introduced in the later stages of their three terms of office].

One concern that was raised with GNVQs was the methods of assessment used when compared to (high status) A levels (Ecclestone, 2000). The assessment method for Science at Advanced GNVQ involved a combination of a multiple choice test and coursework. This was something that was regularly discussed in the staffroom and seemed to impact on students applying to university. Indeed, the experience of one of my own students reflected this when one (Russell Group) university not only wanted a Distinction for his Advanced GNVQ, but also an A in Chemistry A level and a B grade in Physics. This was an impossible request for this student as he was well into the second (final) year of his GNVQ. As I will show later, similar issues can arise with respect to BTEC.

Ecclestone goes on to argue that that the “ideological disagreement about whether different types of assessment should have higher social status” led to the government “producing assessment policy which panders to, and fuels, the annual media hysteria around A-level results whilst simultaneously setting targets to motivate more people to achieve formal qualifications (Ecclestone, 2000 p540). This is something that still seems to occur every year when the A level results are released.

The AVCEs, which replaced GNVQs, didn’t fare much better as “the AVCE is not a popular qualification with learners, and is doing little to achieve the objectives of Curriculum 2000. Take-up is low, and though the qualification is intended for a broader range of ability than GCE A level, the survey found evidence of colleges raising entry requirements in the belief that the AVCE was more demanding than the GNVQ Advanced it replaced ……. The AVCE is not well designed. It is neither seriously vocational, nor consistently advanced. The aims of the AVCE are not clearly understood by many teachers and students. A good deal of the course work is trivial, while some of it is excessively demanding. In some subjects, course specifications lack vocational content and are therefore too similar to GCE A level. Little use is made of work experience, which, when well planned, can transform students’ experience of a course” (Ofsted, 2005 p7). Again, these qualifications were relatively short-lived and had disappeared by 2007, being replaced by Applied A levels over a period of several years before this. The comments by
Ofsted seemed to reflect what the thoughts of certain sections of the teaching profession were, i.e. it seemed as if like was being replaced by like and aimed at the same groups of students, i.e. those not capable of doing academic A levels, which seemed to also be the attitude towards the Applied A levels. These courses appeared to be popular with educational establishments under pressure to keep recruitment and student numbers high in a competitive environment where students, and their success, equated to funding. Staff, where I worked, was under pressure to keep these students both on the course and also to ensure their success.

1.4 ‘New’ Diplomas

Whilst GNVQs were replaced by AVCEs in 2000, the ‘new’ Diplomas were introduced in 2008 as part of the New Labour Government’s 14 – 19 agenda. It was described as “a combination of existing qualifications and purpose-designed qualifications to make up a two year course. The Diploma is designed to support your next move – whether that's further study at school or college, work-related training, going on to university or a job with training” (Directgov, 2009).

The diplomas were sold as an alternative to the purely academic route of A levels and students would be able to ‘mix and match’ the two, according to their needs. Their position was described as follows: “The 14–19 education reform programme aims to increase young people’s participation in education and training beyond age 16 and raise their educational attainment ……… young people have a complex choice of qualifications at ages 14 and 16. The Diploma is seeking to provide a qualification that will be attractive to them, to higher education institutions and future employers” (House of Commons, 2008 p1). One employers’ organisation described them as “a real alternative to more traditional education and qualifications, and are the most important change to the country’s education system since the introduction of GCSEs”, with them being “developed by employers, schools, colleges and universities to help young people realise their potential and gain knowledge and skills in a ‘real world’ environment ….. an all-round package which gives students the right knowledge, experience, insight and attitude to prepare them for the next stage in life – whether that’s university, college or work …. are equally suitable for the most able pupils preparing for demanding university courses; for young people who find the existing education system doesn’t suit them and for those who want to go straight into work after leaving school” (Energy & Utility Skills, 2006 p2).
These were developed at a time when the then New Labour Government had a definite 14–19 agenda. Previously a range of initiatives had been introduced for 14–19 year olds, e.g. the 14-19 Pathfinders programme that ran between 2003 and 2005, in an effort to keep them engaged in education or to try and address the issue of equivalency between academic and vocational qualifications. The involvement of employers in the development of courses at this time also led to the design and introduction of Foundation Degrees aimed primarily at those already in employment, e.g. the Health Service. They were an attempt to merge aspects of vocational education, e.g. work placement, and academic education. The students were to be able to mix and match qualifications, and this would provide qualifications that are not seen as targeted at less academically able students in a way that previous initiatives may have been viewed.

The ‘new’ Diplomas were introduced over several years, with several subjects being introduced each year and the proposal was for Science to run in 2011. However, the introduction of Science (along with Humanities and Modern Languages), was put back to 2012 (RCS, 2009). The then shadow Education Secretary, Michael Gove, cast doubts on the Science Diploma running (Gove, 2008) and then the Conservative opposition stated that the introduction of Science would be scrapped if they won the next election (Paton, 2010) which the Conservative – Lib Dem Coalition did as soon as they came to power in May 2010.

One issue that the Diplomas did highlight is the lack of information provided by governments when they introduce new initiatives, even to those who are expected to know. This is not helped by political differences, illustrated by the Diplomas discussed above, which can cause confusion, especially with parents and the public in general.

One teacher, who agreed to distribute a questionnaire to her students asking the reasons why students chose to study the ‘new’ diplomas, admitted later that she didn’t know what the ‘new’ Diplomas were. Indeed, both her and her husband were teachers and Heads of Subject in different schools, thought that the Diplomas were referring to the long established BTEC Diploma qualifications. This is something I came across on different occasions and illustrated potential problems in terms of communication when new qualifications are introduced. Was the term ‘new’ initially used when referring to the Diplomas to avoid confusion with the BTEC qualifications? Even the terms for the different levels, i.e. foundation, higher and advanced, could cause confusion due to the variety of courses / qualifications that also use these terms.
At the same time, some schools that were involved regarded the ‘new’ Diploma as a pilot and raised concern as to how the new qualifications were being viewed. A brief interview with the Deputy Head of a school highlighted this point. He admitted that the students didn’t have an open choice and that one of the senior staff suggested which students would be suitable for the ‘new’ Diplomas but the criteria that this decision is based on was not offered, except to say that the students were counselled or guided onto the course. He also admitted that at least one parent had objected to their child doing the ‘new’ Diplomas as they weren’t a valued qualification, and any child whose parent raised concerns was offered an alternative course (Hutchinson, 2009).

1.5 In light of the above
For any new qualification to be successful, and seen as equivalent to the traditional academic route, they must have the support not only of universities and employers but also of pupils and their parents (Gaskell et al, cited in Donnelly, 2009). By implication this would suggest that the parents and pupils would make the decision for the pupil to study any ‘new’ qualification, not the school or teachers on the basis of them being seen as an easier option to GCSEs or ‘A’ levels.

From my own experience of working with a range of students in the 16 – 19 age group, the expectations of those studying ‘A’ levels usually meant going to university and the vocational subjects led directly into a career, e.g. nursery nursing, but those of the students studying BTECs were less clear. Some clearly wanted to progress on to University, including those of the Russell Group, while others wanted to gain employment, both with varying degrees of success and disappointment. Often, from my own perspective, the students seemed to be too ambitious in their expectations. One reason for this might be due to BTEC Level 3 Science courses moving to assessment that is purely coursework. This could be a continuation of the trend, started in KS4, of using coursework for the assessment of a course, which could ultimately disadvantage the student when it comes to applying for certain types of University courses, or disqualify them from an entire establishment, especially if assessment by exam is the norm. It may also be that employers and parents didn’t really appreciate the nature of the course that the students were following, or that some courses “are largely restricted to low-attaining pupils in a significant minority of schools” (Ofsted, 2005 p2).
While working in the 16 + education sector there has always been a perception that A levels are the ‘gold standard’ which all other level 3 qualifications should ‘aspire’ to in terms of status. For years it seemed that there has been political wrangling over qualifications and their ‘worth’ and this is highlighted in the media, giving the impression that any qualification that is not GCSE, or A level, is aimed at ‘weaker’ students who cannot do them. This apparent constant arguing about status would, one assume, eventually imprint itself in the minds of educationalists, employers, parents and students. Wolf (2011) commented on how valued BTEC National Diplomas are, but the fact that this praise has been stated in a report, which would probably only be read by politicians and interested educational professionals, is unlikely to have been picked up by parents and students, and possibly to a lesser extent employers and universities, so any positive comment about non A level courses just disappears ‘into the ether’.

As a lecturer and a tutor who has dealt with BTEC students, including level 3, I have always had the perception that it would be academically ‘weaker’ students would do courses such as BTECs, GNVQs and, if it had been introduced, the Science Diploma. With such an apparent poor perception generally of qualifications that have the term ‘vocational’ associated with them, including ones such as BTECs that seem to fit somewhere in between ‘gold standard’ academic qualifications and vocational qualifications, I have wondered why students choose to do the BTEC Science course. The course itself has always proved popular and has outlived qualifications such as GNVQ which were intended to replace it. Many colleges ran BTECs alongside GNVQs.

The current entry requirements for BTEC Science at L3 are usually five GCSEs at C or above, including English, Maths and Science or Applied Science, or English and Maths GCSE at C or above, with BTEC First Diploma in Science (at Merit or above). Based on these requirements, it would be assumed that all the science based qualifications would be equivalent to each other. However, Wolf’s (2011) comments relating to the value of the BTEC First Diploma are not complementary, and there is an interesting reflection by a 6th Form College deputy principal on the value of GCSE Applied Science which is briefly discussed in the next chapter.

The aim of the research is to examine the factors that influence BTEC Level 3 Science students’ decisions to study that particular course, with the four main research questions stated below:
1. How do students' perspectives on their previous schooling and prior attainment influence their decision to study BTEC Level 3 Science?

2. What other factors, personal or otherwise, influence this decision?

3. At the start of the course what are the students' anticipated trajectories after completion of the course?

4. Do these anticipated trajectories alter as the students progress through the course and, if so, why?

The thesis will follow the format below with a brief summary of each chapter also provided:

Chapter 2 – a review of literature relating to theories of student choice is undertaken looking at the issue of student choice in terms of both structural dimensions and agency, with habitus briefly discussed as a tool that has informed the model used for the research. The final section discusses the Integrated Model of Educational Choice that is used as a vehicle to discuss the findings.

Chapter 3 – this discusses the methodology and the reasons for its use, linking it to the research questions. The main strategy was that of longitudinal case studies that utilised questionnaires, focus groups and 1:1 interviews to inform them. The questionnaires were used to provide a broad base which could then be used to highlight potential areas that could be explored in more detail in the focus groups, and then more narrowly in the 1:1 interviews.

Chapter 4 – this chapter analyses and interprets the findings of the methods discussed in the previous chapter forming the case studies for the individual students. It presents the finding of the questionnaires and then the individual case studies of the students interviewed as part of the research.

Chapter 5 – within this chapter the case studies and questionnaire findings are discussed within the framework of the Integrated Model of Educational Choice, linked to the relevant educational context and previous research.
Chapter 6 – this concludes the research and discusses the implications that arise from it.
2. Review of literature relating to student choice

The introductory part of this chapter highlights the decision that students must make when they are at the end of KS4, i.e. whether, or not, to continue in education and if they decide to continue, what their options are regarding Science. Decision making processes that students may employ when in this situation are then discussed based on the literatures. This is followed by a discussion of how Bourdieu’s concept of habitus may be used as a tool to help explain what influences students to make the decisions that they do. Hemsley-Brown and Foskett’s 2001 ‘Integrated Model of Educational Choice’ is used to demonstrate how the different strands of the proceeding discussion can be integrated and will be the framework used. Helmsley-Brown (1999) suggests that pupils, when making decisions, have a ‘preliminary search’ (non-utilitarian factors - social, cultural, etc. leading to informal information gathering) stage and a ‘refined search’ (utilitarian factors – facts / concrete information) stage and it is this idea that led to the utilisation of the model.

2.1 What is Choice?

When pupils, or students, are expected to make decisions, it could be argued that it would be reasonable to expect that the pupils would have all the relevant information that will allow them to make an informed choice. But what is implied by choice?

The Oxford English Dictionary defines choice as “preferential determination between things proposed” (OED, 2015). Matthews and Hansen (1995, p71) summarise that “real choice means that students have options and alternatives”. Therefore the definition can be thought of as having two aspects to it. The first is the idea of having alternatives and the second is that of having a preference, with the former being objective in nature and the second being subjective.

Wright (2005) highlights the issue of terminology due to the use of the terms ‘decisions’ or ‘choice’. While discussing why students choose particular educational trajectories, she highlights the problem as “the concept of ‘choice’ is commonly used in the research literature, and is often elided with the concept of decision, but is rejected here because the experience of many 14-19 year olds does not seem to tally with the degree of agency and rationality implied by this term. This report uses the term ‘decision’ as this allows for the influence of external factors (structural, institutional, other individuals). However, ‘decision’ serves as a shorthand for a continuum between those who ‘fall’ into what they end up doing on the basis of long standing assumptions and do not consider alternatives, and
those who gather information and weigh up different options. Also, one individual may
gather information and weigh up options at one time, but ‘fall’ into what they end up doing
on at another time. The concept of ‘decision’ is inadequate to convey this range, but there
is probably no better English language alternative”. The exception to this is subject choice
as “all 14 - 19 year-olds select themselves (to a greater or lesser degree) between
different subjects” (p3).

Wright does raise a relevant point, especially when she refers to those who ‘fall’ into what
they end up doing. The interpretation of this could be that the students have no real
alternatives open to them and therefore ‘had no choice’ but to do it. If there are no
alternatives available, then the students could not make a decision if the term 'decision' is
taken to mean that it is “a conclusion or resolution reached after consideration” (OED,
2015) as there is nothing to consider. The use of the term 'decision' in this research is
used assuming that there is always an alternative, even if it is only the alternative of not
‘falling’ into what they end up doing, being able to say “no”. This is assuming though that
the students are aware of that alternative, but it is probable that for at least some young
people, a ‘real choice’ as defined by Matthews and Hansen (1995) is impossible.

To understand how a student makes a choice to study a particular course, the course
choices available and the influences involved in choosing a course need to be examined.
Newman (1986), while discussing the choices available to pupils at 14+, suggests that “it
would seem that pupils' degree of choice varies according to ability” (p146). Twenty years
on Newman's concerns are reflected by Özbilgin et al (2005, p2001) who, although
discussing career choice, suggest that “the constrained and variable nature of available …
routes in real life makes … ‘choice’ in its pure form – i.e. free and unconstrained choice
based on individual will – a rare commodity, a naïve expectation or even a misguided
belief”. It could be argued that the same applies to students in terms of choices for
GCSEs, course choice at 16, or even throughout their academic life.

Shaw (2012 p120), suggests that choices “are not in any sense ‘free’, nor are they simply
a question of rationally matching qualifications with opportunities to achieve the most
favourable outcome”. This could be taken further when parental influence is considered.
Costello (2004b, p2) highlights this when reviewing the future of education in Northern
Ireland, as ‘the first main decision point about learning pathways will be at age 14 and
should also be based on informed parental and pupil choice’. A word of warning, though,
comes from Newman (1986) who suggests that ultimately the pupils’ choice isn’t their real
‘desire’, but really reflects those of the people advising them, including ‘inconsiderate or overambitious parents’ (p147).

2.2 Choice at the end of Key Stage 4

Prior to September 2013, put in simple terms, the choices a pupil at school reaching the end of year 11 (Key Stage 4) had, in terms of progression, evolved into staying on at school, go to college / 6th form college, do an apprenticeship or get a job. Pupils could go ‘unemployed’ and fall into the category that was known as NEET (not in education, employment or training). Could Hagel and Shaw’s view, although writing in 1996, still be applicable today? “It should not be assumed, however, that staying on was necessarily a positive choice; it was simply the best of the options open to them. It may only delay the point when they have to face the depressed employment market and in many cases it was leading to money and debt problems.” (Hagel and Shaw, 1996, cited in Sutherland and Purdy, 2006)

However, students who drop out of the education system and are classed as NEET are not a desirable statistic for governments. Research for the DfES (2007b) indicated that many students decided to leave education and training at 16 due to a build-up of disaffection. This was particularly the case with young people of moderate or low ability for which the curriculum, qualifications system and associated teaching styles were unsuited to their ability. Marks (2007) suggests that this may be of concern as “not completing school is associated with poorer labour market outcomes. Early school leavers are more likely to become unemployed, stay unemployed for longer, have lower earnings, and over the life course accumulate less wealth …… Therefore, early school leaving contributes to the intergeneration reproduction of socioeconomic inequality because of its association with disadvantaged social backgrounds” (p429-430). Even in the US, president Obama, in his inauguration speech, proclaimed that ‘dropping out of high school is no longer an option’ (De Witte and Van Klaveren, 2012 p3679).

Prior to 2013, girls had a higher staying on rate than boys in post-16 education generally. One explanation offered for this is that they appear to enjoy school more than boys and are more willing to accept educational values. Some also argue that teaching styles, which involve a lot of reading, writing and listening, favours girls more (DfES, 2007b). As well as that, they maintain that attainment is the best predictor of post-16 participation, with gender, ethnicity, and socio-economic group also having an influence with the biggest effect on those with average and low attainment levels.
One way that the UK government has tried to reduce the number of young people being classed as NEET has been to ‘raise the participation age’ (RPA) to 18 in 2015. With a variety of choices available to pupils at 16, educational choices could be viewed as ‘investment decisions’ (Payne, 2003 p12) and that pupils will make ‘rational calculations’ in light of the different options open to them. There must be an assumption that pupils will have all the information available to them for this to be effective, but can it take into account factors outside the pupils’ control? Payne (2003, p13) also suggests that ‘dissonance’ or the ‘existence of contradictory ideas that the individual cannot reconcile’ lead to decisions that are made by what might be termed as adjustment strategies to justify the choice made. It could be that the ‘ideological’ view that the government holds in terms of how individuals, including 14 – 16 year olds, make decisions is at odds with what happens in reality.

It might be reasonable to assume that pupils at 16 would base decisions on some sort of calculation by weighing up advantages and disadvantages, and that decisions at this age involve both ‘subjective and objective reasoning skills’ (Payne, 2003 p14; Helmsley-Brown, 1999). Banks et al (1992, cited in Payne 2003) suggest that choice at 16 is “a rational process that is constrained by a realistic perception of opportunities and shaped by individual personality” (p14).

When students reached the end of KS4, they had to decide whether, or not, to carry on in education. If they decide to do so, they then have another choice, that is whether, or not, to continue to study Science and if so, which route they will choose.

2.3 Science choices
Government research (DfES, 2007b) indicates that most 13 – 14 year olds, at the end of Key Stage 3, didn’t know what career they wanted in later life, and only concentrated on what subjects they wanted to do at Key Stage 4. But, more importantly, they concluded that “by 13/14, under the influence of their parents, they will have already ruled out a number of options. At 14–16 they begin to consider post- 16 options. Most do not narrow this down into a final decision until Year 11. Many low and moderate achievers adopt a strategy of waiting to see how well they do in their GCSEs before making any decisions because they fear that these results will limit their aspirations. In addition, many have not set any career goals simply because they have so little experience of the working world upon which to base a judgement” (DfES, 2007b p4). This may result in what Hemsley-
Brown and Foskett (2001 p9) see as students’ choices as being “second best options, or are simply a default residual after other options have been rejected or have simply not been acted upon”.

What are the current alternatives available to students at the end of KS4 in terms of science courses?

The range of Science qualifications available to students are:

- AS / A levels
- BTEC Nationals - Extended Diploma, Diploma, 90 credit Diploma, BTEC Subsidiary Diploma, BTEC Certificate
- BTEC Apprenticeships – levels 2 & 3
- NVQ / competence qualifications – level 3

Given the range of options available to the students based on the qualifications listed, it would be assumed that students would have a wide range of choice open to them. However, students, for whatever reason, tend to believe they have a ‘restricted choice’, even when they have an open choice and didn’t feel that they have the required skills for decision making (Blenkinsop et al, 2006; Atherton et al, 2009).

The choices offered to students as to which subjects they continue to study has been the subject of critical scrutiny for many years. Newman (1986), at the time an education advisor for the City of Coventry, raised concerns regarding the issue of subject choice for students when choosing what, were then ‘O’ levels and CSEs, to study in their last two years of their compulsory schooling. This issue would have developed over a period of time after the UK increased the compulsory school leaving age to 16 in 1972. He questioned how much real choice school pupils had, noting that “while the idea of pupils participating in the decision-making process is an admirable one, the selections do not always reflect their real desires, but more the wishes and desires of the persons advising them” (Newman, 1986 p147).
2.4 Should I consider vocational?

When discussing qualifications, whether in education, politics or the media, there is constant reference to academic and vocational qualifications. Yet, how many people, including those who may have to make choices based on these terms, really know or understand what they mean?

Donnelly (2009 p229) suggests that academic qualifications are those that are “usually understood in terms of personal development for its own sake, most usually through the vehicle of traditional disciplines”. From the above list, traditional AS and ‘A’ levels would be regarded as ‘academic’ qualifications, while Bell and Donnelly (2006 p1389) argue that vocational qualifications are ones that are “ostensibly characterised by a strong relationship to the workplace” while focussing “directly on preparing the student for some form of occupation” (Donnelly, 2009 p229). BTEC Apprenticeships, NVQ / competence qualifications and Cambridge Technicals would match these criteria. VRQs, although there are no Science qualifications currently offered through this route, would also fit into this category.

BTEC Nationals do not appear to fit cleanly into either of the academic or vocational categories, raising the question of how does BTEC Science fit into the mix of programmes and subjects available to students? Is it an ‘academic’ or ‘vocational’ qualification, or somewhere in between? Pearson, who run the Edexcel exam board, describe BTEC Nationals as providing “specialist, work-related learning across a range of sectors. Delivering the knowledge, skills and understanding students need to prepare for their chosen career, BTEC Nationals offer progression to higher or further education or into employment” (Pearson, 2015).

Studential.com, a website for UK students that explains the application procedure for applying to university, describes BTEC Nationals as “vocational and work-related courses, designed to accommodate the needs of employers and allow students to progress to further and higher education. A BTEC takes a practical approach to learning, without missing any of the important theory on the subject. BTECs are extremely reputable, having been around for 25 years now, so rest assured you will be embarking on an excellent course” (Studential.com, 2015). The fact that there are websites, like this one, that are offering re-assurance to prospective UCAS applicants regarding BTEC qualifications that they might be intending to study, possibly illustrates a perceived issue with the qualification generally. From this it could be implied that there is a general lack of knowledge, or acceptance, of the BTEC as a qualification by both prospective BTEC
students and their parents. This is not helped by the media, when politicians and others, keep referring to A levels as the ‘gold standard’ and, as suggested by Helmsley-Brown and Foskett (2001, p5), non-academic qualifications are seen as being undertaken by “those not able or willing to access academic routes”. If this is the case, it then raises questions about how courses like BTECs are marketed by the Government, Ofqual and educational institutions. If they are to be seen as genuine alternatives to A levels, they will need to be supported at the highest levels and to be seen so by students and parents.

Unlike NVQs, BTEC Nationals are quite broad in their title and approach, and are not aimed at specific trades or professions, which NVQs and VRQs are. They have, as suggested above, a large element of theoretical knowledge contained within them, but there is no work experience involved. They do, however, carry UCAS points which NVQs don’t appear to do (UCAS, 2015). It could be argued that, as a result, BTEC Science at level 3 loses out both in terms of status and going directly into employment.

An example of this could be illustrated by the following discussion with a Deputy Principal at a 6th Form College. This related to progression routes in 14 – 19 education and led to the revelation that, just because a student has GCSEs in Science when they applied to the College, it didn’t automatically mean that the student would be allowed to study ‘A’ level Sciences. This was based on whether the student had studied single (triple) Sciences, Additional Science or Additional Applied Science. Students who applied with GCSE Additional Applied Science were directed onto non-‘A’ level Science courses or Applied Science ‘A’ level. The reason for this was apparently to do with the methods of assessment used for GCSE Additional Applied Science (mainly portfolio based), which does not supposedly ‘prepare’ those students for studying the ‘traditional’ Science ‘A’ level (exam) courses. It should be noted that at the time of the conversation, the assessment regime for Additional Applied Science consisted of 40% ‘written’ paper and 60% portfolio (OCR 2012). Since 2014 the assessment regime has changed as “For assessments and subject awards after June 2013 there is a requirement that 100% of the assessment is terminal” (AQA 2012 p5).

This example highlights the subjective nature of the usefulness of qualifications that may restrict student choice. The student still had Science GCSEs with relevant grades but, despite this, still have avenues closed to them.
2.5 Is there true equivalency between qualifications?

The concept of equal status for ‘academic’ and ‘vocational’ pathways can be hard to sell due to past perceptions. Newman (1986) suggests that the choices available to students at 14 vary according to ability. He also argues that pupils denied ‘access’ to prestigious subjects might have two possible causes for grievance. Firstly, pupils may feel that they have “less personal worth in the school system” and, secondly “they might perceive that their choice subject as less important in the curriculum” (p146). The end result is that the “seeds of dissatisfaction” may develop from this process during the fourth and fifth years (years 10 and 11). Harris et al (1995, cited in Harkin, 2005) found that “year 10 brings about a significant parting of the ways between students who can cope with the mounting pressures of GCSE preparation and those who find this too difficult”.

Since the turn of the Century, the value of qualifications and their equivalence to A levels and GCSEs has come to the forefront of educational debate especially when new qualifications are proposed and introduced. One situation where equivalencies were considered important is that of school performance tables. In 2010, the achievement in the following qualifications could be reported in performance tables for pupils of compulsory school age: Entry level qualifications; Level 1 and Level 2 qualifications e.g. GCSEs; iGCSEs; Vocationally Related Qualifications; NVQs; Functional Skills; AS levels; Advanced Free Standing Mathematics and the Asset Language Level 3 qualifications taken early (DfE, 2010). According to Wolf (2011) “a BTEC First Certificate is worth 2 and a First Diploma is worth 4 GCSEs A*-C in current performance measure calculations”. From 2016, the way that school performance tables are compiled will alter with only non GCSE qualifications that are at least an equivalent size (guided learning hours) allowed and only as the equivalent of one GCSE. This initiative is referred to as ‘Progress 8’ (DfE, 2014).

In 2000, the then Education Secretary, David Blunkett, announced the introduction of new ‘vocational’ GCSEs and ‘A’ levels (AVCEs), for 2002, while asking the Qualifications and Curriculum Authority (QCA), from 2001, to bring them “to the same grading scales as GCSEs”, in an attempt to make them equivalent to the ‘academic’ GCSEs and ‘A’ levels (Blunkett 2000). The term ‘vocational’ has since been replaced by the term ‘applied’. The equivalency of qualifications began with the development of the National Qualifications Framework (NQF), which was replaced by the Qualifications and Credit Framework (QCF) in 2011, and internationally through the development of the European Qualification Framework (EQF) in 2012. For the QCF to function, all qualifications have a credit value
and allow qualifications with the same credit value to be classed as equivalent (Wolf, 2011).

Young (2007) suggested that the benefits of NQFs for learners would be that “their qualifications will be recognised by an NQF on a broader basis and their informal learning will, at least in theory, also be able to be accredited; for employers and admission tutors, an NQF will provide an officially recognised basis for comparing different qualifications; for regional organisations, such as the EU, a European Qualifications Framework will help to reduce barriers to the free movement of labour between member states” (p445). It is interesting that Young uses the term “in theory” even at this early stage of the NQF. Young’s implication would appear to be that, for some qualifications, while they would be officially recognised as comparable to other qualifications, the reality would be that unofficially they would be dismissed as not being comparable and the existing status quo would continue.

Miller, Edwards and Priestley (2009) highlighted the complexity of translating a prescribed curriculum within an NQF to the enacted curriculum due to the range of individual and organizational factors that are involved. This was not helped by the NQF being outcomes based, which raised issues relating to “the much broader problem of assessment methods that are based on criteria or standards rather than examinations” (Young, 2007 p452). As a result of this, the BTEC awards were re-designed to meet the QCF requirements but Wolf (2011, p86) argues that “formal equivalencies of ‘level’ and ‘credit’ cannot and do not translate into substantive equivalence”, and that it was developed for adults in the employment market. This focus on employer needs is reflected in Lester’s (2011) comment that the QCF framework is “limited to vocational qualifications outside of universities; it is not particularly well integrated with the higher education, professional, and at present, school sectors; and it lacks responsiveness to innovations in qualification design” (p205). But Wilson (2006) suggests that these qualifications do not meet the needs of employers either as it is the Government that makes many of the decisions, implying that there is a watering down of employer proposals.

Consideration of similar issues led Gaskell et al (cited in Donnelly, 2009) to suggest that for vocational qualifications to be seen as equivalent to the traditional academic ones, they must not only have “strong political support”, but that they also “need to align a wide range of support from universities, teachers’ organisations and other groups” (p235), which could include employers, pupils and their parents. This type of debate, especially when it finds its way into the popular media must cause problems for those trying to
convince parents and students of the value of BTECs, and other qualifications, when compared to A levels. This was an issue raised in a House of Commons (2008) report referring to the Diplomas introduced in 2007 that commented that “As new qualifications, there is still much work to be done to convince parents, employers and universities that Diplomas are a credible alternative to existing qualifications” (p1).

The case for equivalency isn’t helped when organisations such as Ofsted (2005) conclude that “while the new vocational GCSE courses are supporting the government’s intentions to diversify the curriculum and make it more vocationally relevant to pupils, there is too much variability and, in spite of examples of high achievement in all subjects, the courses are largely restricted to low-attaining pupils in a significant minority of schools” (p2), thus supporting the view of Helmsley-Brown and Foskett (2001) about who undertakes these courses. Ofsted’s critique raises questions regarding the genuine equivalency of qualifications and puts Young’s ‘in theory’ comment above in perspective. Surely all GCSEs are equal? This perception of ‘non-equivalence’ is also supported by the conversation with the 6th Form deputy principal related previously. If qualifications have true equivalence, it would be expected that whatever the Science qualification a student had obtained, it would allow that student to study the course of their choice, provided they had the appropriate grade for the entry requirement.

This issue of convincing parents, etc., to accept new initiatives and qualifications, even if they are brought in through legislation, is something that affects education generally. Also, the pace of change is an issue as “the lag in response of the education and training environment to labour market needs is a particularly problematic issue. Labour market needs change in timescales of months, or 1 or 2 years, whereas response times of education and training, in identifying needs, creating programmes and delivering them to completion are generally over timescales of several years” (Hemsley-Brown and Foskett, 1999 p422). Not only this, but Helmsley-Brown and Foskett (2001, p3) also noted that “any desire at a policy level to alter the macro scale patterns of choice preferences requires actions that will change perceptions and understandings both amongst all the influencing factors in choice (young people, parents, teachers and the media, for example) and across the whole time span of choice”. One example of the failure to achieve this was the introduction of GNVQs which, while gaining ‘praise’ from many quarters, failed to change the perceptions of parents and universities, which were the death knell for the qualification.
When reading the advice booklet for applying to Russell Group universities, there is a general theme with regard to applying with qualifications such as BTECs. It is generally one of having additional qualifications such as named A levels and that some university courses will not accept vocational qualifications. Applicants are also warned that they may need very high grades, as well as a high grade in an extra A-level, to be considered by most Russell Group universities (Russell Group, 2013/14). While this is aimed at students choosing their 16+ courses, I suspect that many students on vocational courses will not have read, or be aware of, this information and be taken by surprise when it comes to choosing university courses or applying for them. This must be especially confusing for students when some courses, e.g. the BTEC Extended Diploma at level 3, have top grades of 3 x Distinction*, which is the equivalent of 420 UCAS points.

The situation is not helped as some qualifications, to meet QCF criteria, have had to change their name. For example, the BTEC National Diploma name is now the Extended Diploma. This, in turn, is causing confusion for university admission tutors as they try to work out which old and new qualifications equate to each other (Wolf, 2011).

Costello (2004a) although reviewing educational provision in Northern Ireland, described a problem that faces those who promote equal status for academic and vocational routes as follows: “The Group finds the ‘academic’ or ‘vocational’ labels unsatisfactory and to some extent misleading. Pupils who take, say, science courses with the aim of pursuing a career in medicine are taking ‘vocational’ subjects just as surely as those taking business studies or economics. Alternative descriptors such as ‘pure’ and ‘applied’ are felt to be inadequate for similar reasons. The terms academic and vocational are used here and elsewhere in this document as convenient, if imperfect, shorthand to denote on the one hand those subjects which have traditionally been the main focus of schools and, on the other hand, those subjects which are seen as having a more direct vocational, technical or occupational bias. The Group believes that both deserve equal status and recognition” (p21). The issue ‘the Group’ has is that they are not operating in the ‘real’ world of education, politics, family, etc. Anyone who has an interest in education, whether in terms of deciding policy, delivering education or being a stakeholder in whatever sense, will have their own definition of the terms ‘academic’ or ‘vocational’ that meets their needs.

The issue of qualification equivalency can be a minefield for students, especially if they are considering applying to university. The impression can be that all qualifications at a
particular level, e.g. level 3, are equal, but the reality appears to be that some qualifications are more equal than others.

The issue of equivalency of qualifications is often linked to the political climate at that time, e.g. the removal of Science from the Diploma programme by the 2010 coalition government, and the introduction of the English Baccalaureate in Oct 2010. This may reflect the assessment methods used within courses, which may have an influence on the courses students study after KS4. Linked to this Wilde and Wright (2007) have reviewed the perceptions of higher education staff regarding 14 – 19 education and training. They refer to the compatibility, or lack of, between both the learners’ and the institutions’ expectations in terms of teaching and learning (including assessment) as well as the information, advice and guidance given from the age of 14. Issues over the equivalency of qualifications may lead to confusion as to a course’s ‘worth’ and aspects of equivalency has been discussed by Greatorex, 2001; Young 2007; Raffe, 2007; Millar et al, 2009. However, this issue of ‘real equivalence’ can occur for some students while they are still in KS4 or possibly sooner if they study non-GCSE type qualifications. Against this background the review will now concentrate on possible decision making processes that may be undertaken by students when deciding which course to study post-16.

2.6 The decision making processes that students may employ

2.6.1 ‘Official’ vs ‘grapevine’

Ball, Reay and David (2002), although looking at ethnic students choosing whether, or not, to go to university, determined that there were two types of chooser, referring to them as ‘contingent’ and ‘embedded’ choosers. The dividing line between the two is blurred in places, but contingent users rely more on what was referred to as ‘cold’ knowledge, whereas an embedded user will utilise both ‘cold’ and what is also referred to as ‘hot’ knowledge.

‘Cold’ knowledge is described as the ‘official knowledge’ presented by an organisation for public consumption and may be presented as results, data sets, policies, etc. (Ball and Vincent, 1998 p380). The sort of impersonal information that will “not have a personal interest in the recipient of the information’ (Shaw, 2012 p117). ‘Hot’ knowledge, by contrast, is based on ‘recommendation, personal experience, feelings and other subjective knowledge’, according to Ball and Vincent (1998 p380). As a result, this often
works as a grapevine system and is considered, by those involved, as a more trustworthy source than the official ones.

The characteristics of contingent choosers, as represented in Table 1, especially if considering continuing their education into post-16 or possibly HE, seemed to mimic the characteristics of those groups who are targeted for widening participation. That is, students who would be the first generation to consider Higher Education, tend to come from lower socio-economic groups and have low participation in schools and neighbourhoods (University of Edinburgh, 2015). These students would have minimal social capital, would use minimal sources of information and their perspective and horizons tend to be local. The characteristics of contingent and embedded choosers are shown in Table 1.

**Table 1 - characteristics of contingent and embedded choosers**

<table>
<thead>
<tr>
<th>Contingent choosers</th>
<th>Embedded choosers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choice uses minimal information</td>
<td>Choice is based on extensive and diverse sources of information</td>
</tr>
<tr>
<td>Choice is distant or ‘unreal’</td>
<td>Choice is part of a cultural script, a ‘normal biography’</td>
</tr>
<tr>
<td>Few variables are called up</td>
<td>A diverse array of variables are deployed</td>
</tr>
<tr>
<td>Choice is general/abstract</td>
<td>Choice is specialist/detailed</td>
</tr>
<tr>
<td>Minimal support (social capital) is used</td>
<td>Extensive support (social capital) is mobilised</td>
</tr>
<tr>
<td>‘Culture’ is an active variable in choosing</td>
<td>‘Culture’ is marginal or irrelevant to choice</td>
</tr>
<tr>
<td>Choosing is short term and weakly linked to ‘imagined futures’ — part of an incomplete or incoherent narrative</td>
<td>Choosing is long-term and often relates to vivid and extensive ‘imagined futures’ — part of a coherent and planned narrative</td>
</tr>
<tr>
<td>First-time choosers with no family tradition</td>
<td>‘Followers’ embedded in a ‘deep grammar’</td>
</tr>
</tbody>
</table>

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of education of ‘aspiration’ which makes education normal and necessary

Narrowly defined socioscapes and spatial horizons — choices are ‘local’ / distance is a friction

Broad socioscapes and social horizons — choices are ‘national’ / distance is not an issue

Parents as ‘onlookers’ or ‘weak framers’ / mothers may give practical support on families making the choice

Parents as ‘strong framers’ and active participants in choice

(adapted from Ball, Reay and David, 2002 p337)

Linked to this, and already eluded to above, is the perceived value of the ‘grapevine’ by some choosers and this can be identified within the embedded choosers.

Ball and Vincent (1998) highlighted the potential of informal social networks to mediate choice-making by individuals and suggested that the ‘grapevine’ is “a collective attempt to make sense of the locality and particular features within it … it works through and is animated by story-telling, rumour and gossip” (p379). They argue, however, that the grapevine is ‘fickle’ and one item that may be in favour one day may be out of favour the next but that it may be considered more reliable than the official sources of information. It can be “a powerful way in which parents can circumvent professional control over information and the resulting selective public presentation” (p381). Although discussing parental choice regarding schools, it can be argued that this idea could be applied to any grapevine that operates in relation to education.

When it comes to making decisions where the grapevine is operating, what Wellman et al (1988, cited in Ball and Vincent 1998) describe as “the ‘fuzzy reality’ of personal relationships, with all the idiosyncrasies, messiness and complexity inherent in relations between friends and family” will have a bearing on the decision made but also that “such networks are crucial to individuals, both in terms of their day to day living and also in times of crisis”.

Ball and Vincent’s (1998) comparison of official and grapevine knowledge is provided in Table 2.
Table 2 - Comparisons between official information and grapevine knowledge

<table>
<thead>
<tr>
<th>Official</th>
<th>Grapevine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logic</td>
<td>Feel / emotion</td>
</tr>
<tr>
<td>Abstract information</td>
<td>direct knowledge</td>
</tr>
<tr>
<td>Evidence</td>
<td>anecdote</td>
</tr>
<tr>
<td>Results</td>
<td>impressions</td>
</tr>
<tr>
<td>Proffered</td>
<td>experiential</td>
</tr>
</tbody>
</table>

(Ball and Vincent, 1998 p379)

This idea of educational choosers using either ‘official’ information, information coming from a grapevine or a combination of both, follows through the research in a variety of guises.

2.6.2 Structure and agency

Blenkinsop et al (2006), when reviewing students’ decision making at 14 and 16, refers to both ‘structural dimensions’ and ‘agency’. They suggested that ‘structural dimensions’ can “broadly be identified as those specifically related to institutions and to particular support mechanisms [outside the family]” (p48) which includes teachers and agencies, such as careers, that provide Information and Guidance (IAG). An institution’s reputation, specialisms, environment (atmosphere), location (especially if conveniently situated) and finance were those highlighted by the students that influenced their post – 16 destinations.

‘Agency’, on the other hand, includes the student’s perception of a subject (intrinsic value / interest / usefulness); their perception of their ability at a subject; the influence of family (including extended family), friends and teachers; subject appropriateness; influence of the media.

Interestingly, the role of friends was not always considered beneficial by family and teachers. Could this be due to a fear that the student could be led down a route that was considered unsuitable by those who might ‘know better’? And yet, the students’ friends would probably be the very ones who might make up a grapevine if it existed. If the role of friends, or the grapevine, is removed by those who ‘know better’, could it be that a student’s ability to make decisions is restricted? The role of friends fit into what Hemsley-
Brown and Foskett (2001) describe as the ‘social context’ of the Integrated Model of Educational Choice and is explored within the research. The whole model allows both ‘structural dimensions’ and ‘agency’ to be explored and the whole model is discussed further on.

2.6.3 Types of choosers and influences on them

Macrae et al (1996, cited in Payne 2003) also suggest that students may be divided into different types of ‘choosers’ other than those mentioned previously. This ranges from ‘active choosers’ who are fairly high achievers and are well informed, through ‘choosers-otherwise’, ‘choice avoiders’, ‘unstable choosers’ to ‘pre-emptive choosers’ depending on what depth the available information is processed. Hodkinson and Sparkes (1997) speculate that there can even be a ‘non-decision’ when the possibility of a choice is removed.

While exploring reasons for college choice, Hossler, Braxton, and Coopersmith (1989, cited in Hossler and Stage 1992) identified four models of choice: econometric, consumer, sociological, and combined. From Hossler and Stages’ (1992) review of the four models it is clear that there are unclear boundaries, or overlap, between them.

The econometric model assumes that an individual will make an educational choice based on its perceived benefits. This could be related to costs (direct and indirect), future earnings, the student’s background characteristics, the school’s / college’s characteristics. This is similar to what Payne (2003) referred to as the economic (rational) choice model, also called the human capital model which was derived from the original economic models of the 1940s (Nesslein, 2008). Daoud and Puaca (2011, p603) suggest that rational choice theory “explains choice based on relatively simple principles, namely the principles of minimization of costs and maximization of gains”. For Levin and Milgrom (2004) it is “the process of determining what options are available and then choosing the most preferred one according to some consistent criterion” (p1) and “starts with the idea that individuals have preferences and choose according to those” (p3), a view echoed by Scott (2000). From the economic perspective, the choices regarding education and training are seen as investment decisions (Becker, 1975 cited in Payne 2003). The students weigh the benefits, cost and risks attached to their decisions and “individuals will seek to maximise the benefits they will gain from the choices they make” (Foskett and Hemsley-Brown, 2001 p29).
Helmsley-Brown (1999) suggested that the economic rational decision-making model underpinned the New Labour “rhetoric and legislation in connection with post-compulsory education and training issues” (p86). It still appears to be the model of choice for successive governments, especially now that there have been increases to university tuition fees, increases in the school leaving age, perceived increased educational alternatives at 16 and that leaving school after KS4 and getting benefits are no longer an option. However, while the pure economic model may work in business, money markets, etc., in education other factors may encroach on the process, therefore appearing to dilute the model. Daoud and Puaca (2011 p604) suggest that the main weakness of the rational choice model is the role of “preferences or wants and their role in educational choice-making”. If this is taken to its conclusion, the decision becomes a mix of objective and subjective elements and led to the concept of pragmatic rationality.

As well as the economic model and the pragmatic rationality model of choice, Payne (2003) suggested that there was another model of choice that may apply to the choices made at the age of 16 for school pupils, i.e. the structuralist model. Gambetta (1996, cited in Payne 2003 p11) defined the structuralist model of decision-making as “the view that these choices are predominantly the result of constraints - institutional, economic or cultural - over which the young person has no control”. It was a popular model during the 1970s and 80s, at a time when A levels were the only real academic alternative and most young people left school at 16. It “reflected the conditions of the time” (Payne 2003, p 11), but it lost favour to both the economic or rational choice model and the pragmatic rationality model. Although referring to choice at the end of compulsory schooling, it could be argued that all three models could be applied to course choice, or learning pathways, generally.

As well as the econometric model suggested by Hossler, Braxton, and Coopersmith (1989, cited in Hossler and Stag 1992), the consumer model employs a marketing perspective and the decision is made based on risks and costs, with the initial interest being started by the influence of parental and peer expectations rather than monetary influences. By contrast, the sociological model relates to status attainment, focussing on factors that influence aspirations and an individual’s position in terms of status or prestige. These factors are deemed to have a positive effect and include students’ parents, socioeconomic background, the student’s academic ability, teachers, and peers. There is clear overlap between the consumer and sociological models, particularly regarding peer influence. Could this be the effect of the grapevine?
Foskett, Dyke and Maringe (2004b, p7) suggest that schools adopt different strategies to help students make their choices at 16 / end of KS4. They characterised these into four overlapping ‘strategic orientations’ based. These are:

- **school/image** - schools with sixth forms in high socioeconomic status localities with a strong academic tradition and a focus on university entrance
- **student-centred** - schools with no 6th form and while using outside agencies such as Connexions, there is a whole school commitment to the process of post-16 choices
- **functional / administrative** - schools with no 6th form that tend to be in low socio-economic areas and use outside agencies such as Connexions to help students make post-16 choices, but students do not rate the school highly in helping them make post-16 decisions
- **strategic/policy orientations** - these schools have a proactive, early responsiveness to changing external policy circumstances - reflect the motivation of such schools to optimise the opportunities and entitlements of their pupils

The strategies of the student-centred and functional / administrative schools in terms of their post-16 decision making strategies support research that suggests that there is a bias in the Connexions service towards NEETs, schools in poorer areas, and schools without 6th forms. The suggestion is that Connexions is targeting its limited resources in those areas where the students are from lower socio-economic backgrounds, or receive less effective IAG (DfES, 2007b).

However, Atherton et al (2009) and Shaw (2012) found that for students, tutors were one of the main sources of IAG about future study, whereas the general IAG available to the students “was mentioned in vague and unenthusiastic terms”( Shaw, 2012 p117). When making a decision, it would seem obvious that the ideal approach would be a “realistic evaluation of possibilities and choosing the best from among the possible choices” as suggested by Musto (2007 p36). This assumes that the individual has all the information to hand and that they can influence other factors that may affect the decision.

But, it isn’t as straightforward as Musto suggests. Gordon (1981, cited in Sutherland and Purdy, 2006), although writing at a time when leaving school at 16, and not going into training was still an option, refers to choices being determined by ‘push and pull’ factors (p93). These refer to the students’ attitudes towards their school experience. If it was
negative, the student would be ‘pushed’ towards an alternative to school, or if earning money was an attraction, the student would be pulled towards employment. This concept could also be applied to the current end of KS4 choices in terms of the alternatives available to students. ‘Push and pull’ factors are also used to describe issues relating to career choices (Barrett et al., 1996; Bates, 1999; Borooah and Hart, 1999; Clark and Drinkwater, 2000, all cited in Özbilgin et al., 2005; Mazzoral and Soutar, 2002)

Other aspects, such as a student’s personal circumstances, attitudes, beliefs and other factors, that may impact on the decision making process led Payne (2003) to suggest that the pragmatic rationality model is a middle position between the other two models. There could also be conflicting ideas that have to be taken into account. Haynes (1975 p1) describes this as a move away from “systematicity, fixed guiding principles or logical systems”. The complexity of ‘choice’ and the existence of other factors, such as peers, parents, marketing materials, etc., will affect the decision, (Helmsley-Brown, 1999), while Hodkinson and Sparkes (1997) suggest that choice is context-based and cannot be separated from family-background, etc. This, if taken to its logical conclusion moves us towards the ideas of Bourdieu and the concept of habitus.

The importance of pupils and parent involvement in decision making appears to be a theme pursued by Costello (2004a, p27) as ‘all pupils must be aware of the choices of subjects and learning pathways available to them if they are to reach their full potential. Pupils and parents must also be given sound advice to support them in exercising choice. Moreover, exercising well-informed choice should not be a one-off event, recognising that pupils’ interests and career orientation may change over time, in line with increasing maturity’. In fact, this involvement of parents is supported by a range of research that suggests students of school age generally benefit from parental involvement in their schooling (Patrikakou, 2004; Deslandes and Cloutier, 2002; Xu 2002). Some argue that most of the research that relates to parents and children, in terms of schooling, seems to focus mainly on mothers and children but some such as Winquist Nord, Brimhall and West (1997) concluded that “Children do better in school when their fathers are involved in their schools, regardless of whether their fathers live with them” (p77). Costello (2004b, p2) highlights the importance of parental views as ‘the first main decision point about learning pathways will be at age 14 and should also be based on informed parental and pupil choice’. But as Newman (1986) suggests the pupils’ choice isn’t their real ‘desire’, but really reflects those of the people advising them, including ‘inconsiderate or overambitious
parents’. The ideas behind parental involvement benefitting children’s schooling is also discussed by Patriakou, 2004; Deslandes and Cloutier, 2002 and Xu 2002.

2.7 Hemsley-Brown and Foskett’s 2001 ‘Integrated Model of Educational Choice’ and Bourdieu’s concept of habitus

The preceding discussion focused on the choices available to students at the end of KS4 in terms of whether, or not, to stay in education and what options are available if they decided to stay on and study Science. Possible decision making mechanisms were also discussed. While the research into the structural perspective probably deals with decision making, resulting in a choice at one point in time, Hemsley-Brown and Foskett (2001) point out that choice doesn’t occur at one discrete point but is a process that continues over a period of time with many different themes and links that lead up to it. They point out that research done on student choice usually only focuses on one point in time which suggests that only one perspective is researched at a time. They suggest that agency and structural dimensions contradict each other and conclude that the findings of the studies featured in their research “are congruent with the argument that individual agency cannot be considered in isolation from contextual factors and that there is an interplay between the two in shaping … ‘choices’” (p2002). This reflects my own view, using the definition of Blenkinsop et al (2006), that quite often, the discussion of the issue of choice within the literature is viewed either from the perspective of individual agency or from a structural dimension perspective; a view also supported by Özbilgin et al, (2005).

Hemsley-Brown and Foskett’s 2001 ‘Integrated Model of Educational Choice’ (Figure 1) allows the interplay between structural factors and individual agency to be considered when exploring the factors that influence student choice and reflects the perspective that will inform the methodology used for the research. They base their model on what they refer to as the Four Cs, i.e. Context, Choice Influencers, Choosers and Choice. The context is regarded as the background of the individual, is passive in the process but sets the scene within which the choice is made. The elements within it are made up of “people, processes, culture and values” (p8). The choice influencers are an active component of the model and may be represented either by people, e.g. teachers, or processes that occur, e.g. different types of communication. Although the model was put forward in 2001, I would suggest that this aspect is constantly developing, illustrated by the current use of social media such as Facebook.

The chooser will be the person who makes the choice but they may not be making it for themselves. The chooser for an individual may change depending on the stage of life the
individual is at and if they are capable of making an informed choice. Examples where an individual may not make a decision that affects them directly could be a child or a person suffering from dementia. What would be expected is that the student’s participation in the decision making process will increase as the student matures, until a point is reached when there is a real partnership between the student and anyone else when they make decisions, but eventually the student would become the dominant partner. The choice evolves from the interaction of the three previous ‘Cs’, but is itself dynamic and subject to change as there is constant interaction between all the ‘Cs’.

Figure 1- Hemsley-Brown and Foskett’s 2001 Integrated Model of Educational Choice

The interplay between structural aspects and individual agency within the model can also be viewed through the lens of Bourdieu’s concept of habitus which can lead to an understanding of how students make the educational decisions that they do, for as Nash (1999, p176) suggests “One of the declared functions of habitus is to mediate between structure and agency”.

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Bourdieu originated his concept of habitus as an explanation of class inequalities in France and how the dominant classes maintained their position through the educational system (Sullivan, 2002; Blunden, 2004). It is now widely regarded as both a powerful theoretical tool and dynamic concept (Reay, 1998; Hilgers, 2009). Reay, Crozier and James (2011) explain its use as a theoretical tool in that it “helps us understand practices for what they are, namely complex, situated actions with a range of precursors and a range of consequences, anticipated, unanticipated, highly visible or less visible …. Is also a dynamic concept, in that it is subject to continuous re-adjustment (p26/7)”. Nunez and Bowers (2011, p1290) suggest that Bourdieu developed habitus as a concept to “explain how individuals negotiate their educational trajectories” and this can be considered within the model, both as the context of a student’s background (passive) and the choice influencers (active). As Bourdieu argues, “if there exists a structural affinity between individuals who share a common belonging, we must still admit that each one’s relationship to contexts will be different” (Hilgers, 2009 p731), and within the research this would merit the exploration of areas such as students’ past experience, family expectations, their views of Science, progression and career aspirations.

Scott and Marshall (2009) define habitus as a “set of socially learnt dispositions, skills and ways of acting, that are often taken for granted, and which are acquired through the activities and experiences of everyday life”, and that it is a “complex concept, but in its simplest usage could be understood as a structure of the mind characterized by a set of acquired schemata, sensibilities, dispositions and taste”. Reay (2004) puts it more simply in that individuals could be predisposed towards certain ways of behaving which would link to the passive aspects of the model. This is reinforced by Hodkinson and Sparkes (1997 p33) who describe it as a concept that “encapsulates the ways in which a person’s schematic beliefs, ideas and preferences are individually subjective but also inevitably permeated by the objective social structures and cultural or sub-cultural traditions in which that person lives” and Bourdieu describes it as a set of “durable, transposable dispositions”, while Harker defines it as “the active presence of past experiences …. in the schemes of perception, thought and action” (Bourdieu, 1977; Harker, 1992; both cited in Reay, Crozier and James 2011). Nash (1999) suggests that habitus is acquired through socialisation during childhood due to family members exposing the student, as suggested by Nunez and Bowers (2011), “to beliefs or experiences that shape a student’s sense of educational possibilities” (p1290). As Bourdieu argued, habitus functions “below the level of consciousness and language, beyond the reach of introspective scrutiny or control by the will” (Bourdieu, 1984 cited in New Learning, 2014).
The rich sense of interplay between agency and structure which this concept of habitus identifies is very much what Hemsley-Brown and Foskett (2001) are pointing to in their model. Research suggests that students of school age generally benefit from parental involvement in their schooling (Winquist Nord, Brimhall and West, 1997; Deslandes and Cloutier, 2002; Xu 2002; Patriakakou, 2004) and that there is a relationship between young people staying on and their parents’ educational levels (Paterson and Raffe, 1995; NIERC, 1997; both cited in Sutherland and Purdy, 2006). For young people, parents are seen as the most influential source of advice on careers and education/training pathways. However, parents from lower socio-economic backgrounds, while being very influential are viewed as less capable of providing IAG to their children (DFES, 2007).

It would be expected therefore, that the context of a student’s background would result in expectations on that student, either at the conscious or unconscious level, and would show through when they come to make what, in popular culture, are assumed to be their own educational decisions, especially up to KS4.

But habitus may also be “a power of adaptation … to the outside world” (Bourdieu, 1993 cited in Reay, David and Ball, 2001). This supports the idea that it is dynamic, able to re-adjust and as such “it is the source of day to day practices” (Reay, David and Ball, 2001 p1 [1.2]). They go on to argue that institutional effects cannot be separated from individual effects (family, peers, etc.) and these are continuously altering. An individual’s position in relation to an institutional habitus is also affected by the extent the influence of family and peers are matched to those of the institution (also Reay, 2004). This would have a great influence especially if “the family is a primary influence on the development of habitus” (Nunez and Bowers, 2011 p1290). The active aspect is represented by the choice influencers within the Integrated Model, but who actually makes the choice will alter as the student gets older as they become more dominant in the decision making process.

Callaghan (2005), although researching the relationship between class and gender, suggests that members of a relevant group have understandings that exist between them which allow them to interact without the need to continually undertake a process of defining and clarifying what would need to be undertaken if they were outside the group. Habitus is therefore seen as a concept that enables an understanding of the relationship between the individual and collective level and relates to the social aspects of the
Integrated Model. If group, in the context of the research, is taken to mean the group at KS4, would it therefore be reasonable to expect that the findings of the research show that the decisions made to study the BTEC L3 Science course was made in a collective, as well as in an individual way? Could decisions made in the context of the research also be influenced by the grapevine, for as Foskett, Dyke and Maringe (2004a, p4) suggest “Cultural reproduction and the reality of pupils' lives and experiences the 'street wisdom' of young people form part of a complex web of information and experience that shapes the pupils decision making”.

But what features of a young person’s life might come to bear on a student’s decision making process? Linked to Foskett, Dyke and Maringe above, the main ones would involve the power of social networks and social relationships (Sullivan, 2002; Nunez and Bowers, 2011), which would link into grapevines, etc. If, as Bourdieu & Wacquant (1992, cited in Gauntlett, 2011) suggest, it is “the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition”, it would be expected that these relationships would come to the fore when students are making the decision to study the BTEC L3. Likewise, if the students also possess relevant “information necessary to navigate the educational system that privileged families pass on to their offspring that is not necessarily taught in schools” as suggested by Nunez and Bowers (2011 p1290), they would be expected to be able to secure the course of their choice. However, if the students don’t have the information and are unable to successfully navigate the system, they will not be able to study the course of their choice (Goldthorpe, 2007). It is difficult to separate these different aspects out from each other, but the analysis of a student’s choice can utilise their thoughts, language, perception and meaning (MacDonald, 1997).

The influence of the school may be highlighted through organisational or institutional habitus. It can be seen as a “school’s capacity to academically prepare and to frame students' perceptions and knowledge about various college options” (Nunez and Bowers, 2011 p1290). This may be reflected through the school environment / geography, school resources such as IAG, relationships with teachers and peers (who may also be part of their social network) and the curriculum offered or proposed. Within the Integrated Model, when the students have reached the end of KS4, the school will have both a passive and active influence in the decision making process but, as with the home environment, this influence may decrease as the student gets older. Again, there is the debate about
whether schools are there to conserve, perpetuate and transmit a particular culture (MacDonald, 1977), as argued by Bourdieu, but that is not the intended primary purpose of this research.

The chooser, as mentioned earlier, is the person who makes the decision and the subsections within the Integrated Model, such as ‘estimation of net personal gain’, are aspects that they may take into consideration during the decision making process. The chooser may be influenced by the passive context of their background. As the child moves through the school system the dominant partner in the decision making process will be the adult(s), usually the parent(s), who will bring their values and expectations to bear on the process. As the child grows older, they will generally start to have more influence on the process, and while their values and expectations may initially reflect those of the adult(s), they will begin to adapt and re-adjust in light of their experiences, thus reflecting the ideas of Reay, Crozier and James (2011). The child will eventually reach the point where they become the dominant person in the decision making process.

The recent trend by successive governments to make changes to the education system to ‘encourage’ staying on rates can be summed up by Paterson and Raffe’s (1995, cited in Sutherland and Purdy, 2006) observation that there is “a relative democratisation of education and a greater acceptance that continued learning is appropriate for all young people and not only for the academically able or the socially advantaged”. This could be viewed as a move to go some way to reversing what Bourdieu saw as inequalities in the education system.

The Integrated Model, utilising the interplay between structure and individual agency, will allow a student’s choice to study the BTEC L3 Science course not only to be explored in terms of individual agency, but also in terms of the establishment students attend, their families’ capacity to support their education, and students’ evolving beliefs about what educational opportunities are possible, desirable, and available. The use of the Integrated Model will allow the determination of whether the factors that influence a student’s choice to study BTEC L3 Science, and other choices made throughout the course, are due to structural factors, individual agency or a combination of both.

As a result, it would be expected that the research findings would show that the decision making process that students use to make a choice is a mix of structural dimensions and
individual ‘agency’ to differing degrees on an individual basis. The use of the model, research questions and their development is discussed in the next chapter.
3. Longitudinal Case Studies – the methodology used to produce them

3.1 Introduction

A good qualitative study can help us “understand a situation that would otherwise be enigmatic or confusing” (Eisner, 1991 cited in Golafshani, 2003 p601), and that “qualitative research requires robust data collection techniques and the documentation of the research procedure. Detailed information about how the study was designed and conducted should be provided in the research report” (Bowen, 2009 p29).

The purpose of the research undertaken is encapsulated by the overarching title which is to “Understand what factors influence a student’s initial and developing choices on a course combining academic and vocational features: the case of BTEC Level 3 Science”. The research strategy and methodology used needed to be such to allow this ‘understanding’ to occur. The use of language is important here as it helps to understand the reasoning behind the approach taken. The phrase ‘initial and developing choices’ implies a long term process to make ‘choices’.

This, combined with Helmsley-Brown and Foskett’s (2001, p2) observation that “choice points are not discrete, unique experiences but are simply part of a complex web of choice and decision-making that links every choice and decision from birth to labour market entry … decisions at each point can shape, and may ultimately strongly determine, the opportunities that fall into the individual’s choice environment in the future”, implies a long term approach to the process of decision making.

As discussed in the previous chapter, research on student choice often focuses on one point in time, especially if structural factors are considered. This could give rise to a reductionist view of decision making. But if the development of choice is part of the research focus, then the development of a choice would be expected to develop over a period of time, along what might be described as a time line continuum, and would probably be linked to agency, thus possibly allowing a holistic view to be gained (Özbilgin, Kuskü and Erdoğan, 2005).

In terms of time scale the research would explore the development of choice over a minimum of a three year time scale. Students on the BTEC L3 Science course would usually study on the course for two years, but the influences that affect their choice to
study that course would start, even if they don’t realise it, before entry onto the course, certainly in the last year of KS4 (year 11) or possibly before then. This may imply that a student’s decision to study the BTEC L3 Science course is a process that is both historical and socially developed, for example family expectation?

The research questions that were developed had to reflect the exploration of the possible long-term nature of the students’ development of their choices. They allowed both the exploration of the ‘historical’ perspective (in the sense that the lead up to the decision making process may have started well before the student began the BTEC course) and the possible immediate future implications of the choices made, such as career, university application, etc., as these may be directly influenced by the historical perspectives of the students.

The use of Hemsley-Brown and Foskett’s 2001 Integrated Model of Educational Choice allows both the structural and individual agency aspects of the decision making process to be explored in terms of both the context and active influences. If the model is used as a tool at different points during a student’s L3 BTEC course, it will allow a longitudinal view of the decision making process and the factors affecting it to be gained and show how the process may change over time. As the Integrated Model utilises the interplay between structure and individual agency, the questions needed to reflect and address the issues of the influence of family, friends and social networks, as well as exploring the influence of organisations such as the school or college, Connexions, etc.

Other questions that were explored were along the lines of the following: do the students feel that they have not fulfilled their full potential? Are they disappointed that they may not have followed particular routes? Do they expect to have the same opportunities as those who are following more traditional subjects / courses? Do they feel that they are regarded in the same ‘light’ as students on more ‘academic’ courses?

The research questions are stated below.

3.2 Research Questions
To address the title of the research there will be four research questions:

1. How do students’ perspectives on their previous schooling and prior attainment influence their decision to study BTEC Level 3 Science?
a) How do students’ previous experiences at school influence their course choice?
b) What influence does advice by teachers have on their course choice?
c) How does previous attainment influence their course choice?
d) Does the method of assessment for BTEC courses influence their course choice?

2. What other factors, personal or otherwise, influence this decision?

a) To what extent do parental influences affect a student’s choice of course?
b) To what extent do siblings / family affect a student’s choice of course?
c) What factors external to friends, family and school influences a student’s choice of course?

3. At the start of the course what are the students’ anticipated trajectories after completion of the course?

a) What are the students’ anticipated trajectories at the start of the course?
b) What factors have influenced the student to anticipate these trajectories?

4. Do these anticipated trajectories alter as the students progress through the course and, if so, why?

a) What are the students’ anticipated trajectories after the end of the course?
b) What has influenced the students’ expectations regarding these trajectories?
c) Has the students’ experiences throughout the course changed their expectations?

In order to address the research questions, the most appropriate approach had to be taken as the choice of using specific research methods is “no longer an ideological matter, but rather a rational choice with respect to the subject of investigation” (Gläser-Zikuda and Järvalä, 2008 p80).

The main strategy was that of longitudinal case studies, with the methods being used to develop these being questionnaires, focus groups and 1:1 interviews.
3.3 Case studies

MacDonald and Walker (1975) suggested that many aspects in education cannot be researched and answered by experimental methods or numerical analysis, especially if the research related to the experience of the participants and that a different approach was required. There were points in the questionnaire where the weakness of a quantitative approach showed through, even when open questions were used. When one wants to know the ‘why’ of something or to get a feel for what the experiences of the participants were, a more personal approach is required to draw the participants out and if they feel confident with the interviewer they will explain in detail what a number cannot relay. One approach to this is use of the case study as it focuses on gaining an in-depth understanding of a particular phenomenon, or case, using a variety of sources of data (Baxter and Jack, 2008; Harvard University 2008; Sharp, 2012). The number of cases studied at a time are either one, or a very small number, for as Stecher and Borko (2002, p3) suggest “they are far too labor intensive to use on a large scale”.

But what is then classed as a case, as they “are not characterized by the methods used to collect and analyze data” (Willig (2008, cited in Harvard University, 2008))? They are quite often thought of as a unit of one, e.g. an individual, a class, department or school. This may be true but a case study is more than this. Merriem (1998) suggests that a case is a bounded system and suggests that it is surrounded by a fence that not only encloses what is to be studied, but also defines what isn’t to be studied. She then goes on to suggest that there are three types of case study, one of which is descriptive. She describes it as providing a “‘thick’ description of the phenomenon under study” and can “include as many variables as possible and portray their interaction, often over a period of time” (p29). This approach is longitudinal.

The strategy used within the research is a longitudinal, multiple case study design based on the rationale that understanding complex situations will, as Smith (1997 p9), although looking at school reform, describes as requiring “long-term and close-up examination of local practice within bounded social settings”, and that “one case provides interpretive context for the others … in looking at one case at a time, the events and phenomena one notices may be mistakenly seen as causal. Seeing two case studies in parallel can alert the two researchers of features taken for granted or overlooked in one” (p10). Knapp (1997, p257) emphasised the “need for large-sample research that can locate case study patterns in a larger system wide context” and to do this, Stecher and Borko (2002), although discussing surveys and case studies specifically, imply that the use of multiple
approaches can “provide both breadth and depth of analysis within a single investigation” (p2).

As case studies are complex situations, the analysis of the information gained from the research will also be complex (Smith (1997). The use of Hemsley-Brown and Foskett’s 2001 Integrated Model of Educational Choice allows the information obtained for each case to be analysed in terms of both the context and active influences, allowing something of a reductionist approach to be utilised, while still allowing a holistic overview.

From this can come what Stake (1978, p6) describes as ‘naturalistic generalisation’, which is brought about by recognising similarities both within the case and also out of context of the case studied. This doesn’t imply that there will be a definite extrapolation of the findings or results to a whole population, but the generalisations develop over time resulting from experience, derived from ‘tacit knowledge’, leading to expectation and can guide future action. The holistic view provided by the use of the Integrated Model can allow ‘naturalistic generalisation’ between the cases in School 4, but due to the unique situation regarding that establishment, when compared to the other colleges in the study, it will not be possible to extrapolate findings to these establishments.

In the context of the research, the bounded system was the group of students studying the BTEC L3 Science course within a school, and from Merriem’s perspective excluded anyone who wasn’t.

The methods used for the longitudinal case studies involved questionnaires being completed by 1st year BTEC Level 3 students, followed by a smaller number being individually interviewed after they had participated in a focus group. The focus groups and first individual interviews occurred during the 1st year of their BTEC studies. The students were again interviewed during the 2nd year of their BTEC Science course after they had decisions made regarding their UCAS applications (if they applied to university). The end result is a series of longitudinal case studies which help to give an in depth insight into factors that influence students to choose to study BTEC Level 3 Science, supported by the responses to questionnaires at a broader, less in depth level.

Based on the above, the samples are too small to be able to extrapolate any findings to all students in the country who are studying BTEC L3 Science, but there will be ‘naturalistic generalisations’ that may be applied derived from tacit knowledge.
3.4 The sample

Landreneau (2005, p1) defines a sampling strategy as the “plan you set forth to be sure that the sample you use in your research study represents the population from which you drew your sample”, while Choppin (1974), Cohen, Manion and Morrison (2008) and Denscombe (2008) discuss the importance of implementing the correct sampling strategy as it affects the overall quality of the research being undertaken.

When deciding on the sample to be used, Cohen, Manion and Morrison (2008) and Denscombe (2008) suggest that the following need to be taken into consideration: size of sample (depending on whether the research is quantitative or qualitative), how representative the sample is, access and sampling strategy. Choppin (1974, p218) argues that “all relevant variations among the population must be reflected in the sample”. Getting the sampling strategy correct is emphasised within the literature as it affects the overall quality of the research being undertaken (Choppin, 1974; Cohen, Manion and Morrison, 2008; Denscombe, 2008; Wilmot, no date).

The research was mainly qualitative, with some aspects of the questionnaire providing quantitative data, due to the questionnaire using a mix of open and closed questions. The proposed sample potentially gave a sample size of over 30 which would allow statistical analysis of some aspects of the questionnaire if appropriate (Cohen, Manion and Morrison, 2008; Denscombe, 2008). Random, or probability sampling, as defined by Wilmot (no date) was considered inappropriate for this research as a purely random sample would include participants whose views were not sought or relevant as all the participants were expected to be doing BTEC Level 3 Science. As a result non-random, convenience / purposive sampling were used as the criteria used to choose the sample was more important than the numbers within the sample (Cohen, Manion and Morrison, 2008; Denscombe, 2008; Wilmot, no date).

The educational establishments approached to be part of the sample used for the research were done so on both a purposive and convenience basis as the researcher used ‘contacts’ as a method to gain access. As Choppin (1974, p218) points out, “more frequently, samples are selected on the principle of convenience”. In all, 8 educational establishments were approached that met the criteria of being convenient (due to ease of access in terms of travel / distance), while also offering a BTEC level 3 Science course (purposive). Half of those approached did not acknowledge or respond to the request. Of the four that did respond, three were prepared to allow the questionnaires to be distributed but not allow their students to be interviewed, with one allowing its students to participate.
in full. These four establishments are also ones that I had links with either personally or through current / previous employment, and it may have been this that allowed access. In the end, 152 questionnaires were returned from four educational establishments.

Once access had been granted, it was the person who was acting as the liaison who highlighted appropriate participants. Clark, Maben and Jones (1996) warn that access may well have to be negotiated through several ‘gatekeepers’ who may grant access but also have their own agenda and the composition of the groups may reflect this. At each stage, it was the colleges’ and school’s representatives who distributed the questionnaires and asked the students if they wanted to participate in the interviews. Reflecting on Clark’s warning, it has to be borne in mind that, although students were allowed to participate by the establishments, they may not have been randomly chosen.

Initial thoughts were that the use of an online version of the questionnaire may prove easier in terms of access and distribution rather than paper copies, but it was discounted as there could have been difficulties using this method and co-ordinating the questionnaire to ensure that the ‘correct’ students complete it. There would also, possibly, have been issues relating to data protection and the e-mail addresses of students, or gaining access to an educational establishment’s intranet system to upload the questionnaires and informing students about its presence.

3.5 Ethical considerations and Access

Initial contact to gain access to educational establishments was by letter, either to the School Head or the Head of Department (college). A copy of the request letter is provided in Appendix 1. In all cases advice was sought as to the procedures that needed to be followed.

Ethical considerations that had to be considered were anonymity, confidentiality, regulatory frameworks, codes of practice, informed consent, protection of the interests of the participants, avoidance of misrepresentation and consideration of any legal issues (BSA, 2002; Cohen, Manion and Morrison, 2008; Denscombe, 2008, BPS, 2009; BERA, 2011).

In terms of time, cost and convenience, the questionnaires were distributed through gatekeepers, probably their tutors. As the students were all over the age of 16, the school or college was acting as gatekeeper and they had already seen the questionnaire and had
not raised any issues regarding it, it was not considered necessary to involve the parents of those aged 16 – 17.

Although it was explained to the school / colleges that participation by the students would be voluntary, they had the right to withdraw, etc., there was no guarantee that the gatekeepers had made the students aware of the relevant ethical information. As Lewis (2002 p111) suggests, for this to be given the person “has to

- have information about the chance to participate
- know about a right to withdraw from the activity
- know what the participant’s role will be, and
- know what the outcomes are intended to be.”

To ensure that the students were aware of their rights, and that they knew what the purpose of the research was, a passage explaining these points was included at the start of the questionnaire, the full version of which is to be found in Appendix 3.

As a large proportion of the participants were aged 16 – 17, the issue of who is to give consent is one which appears to be a ‘grey area’ when it came to the interviews and focus groups. Certainly if any of the students had been under 16, the parents of those students would have had to give permission if they were to participate in interviews.

Lewis (2002, p111) draws a distinction between consent and assent when wanting to interview children. “Consent may be given by the child or by another on the child’s behalf for (a) the child to be interviewed or (b) the researcher to ask the child to be interviewed. Assent refers to the child’s agreement to participation in the process when another has given consent ….. the adult being interviewed both consents and assents to the interview”. BERA (2011 p5) defines voluntary informed consent “to be the condition in which participants understand and agree to their participation without any duress, prior to the research getting underway”.

The students who participated in the focus groups and interviews had already answered the questionnaires, but at the start of each interview, whether focus group or individual, the right to withdraw, anonymity, etc., was again explained to the student and can be heard at the start of each interview recording. Although I was aware of the students’ first names for the purpose of addressing them during the interview, I was not aware of any other student details, which would have come under the Data Protection Act. For the purpose of the findings and discussion, all the students have been given pseudonyms.
At the start of each focus group it was also explained that any discussion, or comment, made by the participants, would not be disclosed outside the meeting either by myself to the staff, or by the students to others. This addressed the concerns raised by both Lewis (1992) and Clark, Maben and Jones (1996) in the almost impossible task of trying to maintain confidentiality if students make comments in a focus group situation rather than in an individual interview. The students had to agree at the start of the interview not to disclose what was said outside the focus group. Many commercial organisations use a confidentiality agreement to get around this problem, but this was considered unnecessary under these circumstances. To aid confidentiality, Wong (2008) suggests that participants introduce themselves using a pseudonym but again this was impractical, and unnecessary for these groups.

Another ethical consideration was the sensitivity of the subjects that may be raised. These could include a student’s family and their attitude towards the BTEC course and reasons why the students chose to do the course. The phrasing of the questions had to be such that they do not start to raise doubts within the students regarding the suitability of the course for their needs; awaken feelings of friction, or frustration, that may have occurred with other members of the family over their decision to do the BTEC, etc. It could also be that some students, who felt that they may not have done particularly well with their GCSEs, could have feelings of possible frustration, etc. It was important to handle the interviews as sensitively as possible and not to cause upset to the students.

Time and cost were important considerations, especially as I was working full-time and usually having to undertake the research during school / college hours. This can then impact on a variety of aspects relating to doing research, including accessibility, producing paper copies of questionnaires, etc. While educational institutions were willing to distribute the questionnaires through gatekeepers to their students, the process to get to that point was usually quite lengthy, often taking up to several months using e-mail communication. Occasionally, polite reminders were sent in an effort to speed the process up. The institutions that did not participate did not respond to any communication.

Ball (1993) reminds us that educational settings are complex and socially intricate, and that students are not one-dimensional characters, and that they will react in different ways depending on the circumstances. It may be that the membership of groups within an educational setting may change over time, and it would be important to conclude the
research over a short period of time to avoid too much change within the network. The length of the BTEC course itself (two years) would determine the length of time that could be allowed to follow a group of students completely through the course. Therefore the questionnaires, focus group and individual interviews were spread over a two academic year period, during that time there were small changes to the makeup of the original student cohort who participated.

3.6 Methods for generating data

3.6.1 Questionnaires
As mentioned a questionnaire was used to collect factual information from potentially a relatively large number of respondents as it addressed the issue of how to acquire information from an appropriate group and provide a large enough sample that would allow data to, theoretically, be extended to the population. It was also a cost effective way of collecting large amounts of data (Strange et al, 2003). This was the initial method of data collection and the results obtained from the questionnaires were then used to highlight areas that might be explored further in the focus groups and 1:1 interviews.

As the average age of the respondents completing the questionnaire was expected to be 16 – 17 years old, one consideration was keeping the students interested enough to complete it. To collect useful information from this sample group, the length, or size, of the questionnaire was considered, as well as accurately aiming the questionnaire, in terms of the questions asked, at the target group to encourage them to relay straightforward information, honest answers and standardised data (Denscombe, 2008). It was also important to pay "attention to the length, layout, readability, language used, order of questions and content of questionnaires" (Strange et al, 2003 p337). As Denscombe (2008, p161) warns that if the researcher gets the questionnaire wrong “the respondent is likely to run out of patience and consign the questionnaire to the waste paper bin”, which encouraged the researcher to initially attempt to keep the length of the questionnaire to no more than one side of A4. Taking into consideration “the implications of age, intellect and eyesight” (Denscombe, 2008 p154), this wasn't possible with the final design but an attempt was made to keep it simpler in terms of questions asked.

Not only did the length of the questionnaire have to be considered but also the layout of it. Pantel and Lewis (1987, cited in Van Laerhoven et al, 2004 p834) raise the issue of ‘position bias’ as the way that information, questions and possible responses are
orientated in relation to each other within a questionnaire can influence the responses given. As Coop (1979, p227) remarked that there is a “tendency for the eye and hand to move from left to right and top to bottom”. A copy of the questionnaire can be found in Appendix 3.

To keep the questionnaire as simple as possible, to keep the students interested and to keep the questionnaire straightforward to respond to, the majority of questions required either a tick (✓), one word response or short sentence. The initial questions were quite general in nature, establishing the gender, age and the course the respondent was studying.

A five point Likert-type question was used to explore what possible factors had influenced the students' choice of course. It allowed a concise way of exploring this aspect without using a series of repetitive questions. It uses a fixed choice, or ordered scale response format to measure attitudes or opinions, assumes that the strength or intensity of an experience is linear and makes the assumption that attitudes can be measured (McLeod, 2008; Losby and Wetmore, 2012). Van Laerhoven et al (2004) suggest that children of all ages find the Likert scale easier to complete. However, Hazelwood (1989) suggests that there is a correlation between general ability and the way that students respond to questionnaires using Likert-type scales. He argues that ‘lower’ ability students will consistently choose more extreme responses than those of ‘higher’ ability. He also suggested that some kind of an ability measure should be included to allow for this but, as the students would have a range of ability and there was no assumption as to the ability of students who undertook the BTEC L3 Science course, this approach was discounted. It would have labelled the students and might have led to bias. In terms of Hazelwood's construct, I worked on the basis that if the questions, and subject matter, were designed so that the students could understand what is being asked, see the relevance of it and have their interest held, they would answer the questions in an honest way and think about their responses.

The next section consisted of a mix of both open and closed questions to determine the sources of information used to inform the students about the BTEC course, possible careers and university application. Examples of these questions are given below:

- If you got information from the school / college was it from (please tick):
  
  Open days/evenings ✓ website □ leaflets □
• Any other influences not given in the table above …

• What do you want to do after completing this course

Go to university □ get a job □ other □

• If you are not planning to apply to university, what are your current plans after the end of the course? Please give some details …

The Integrated Model allows the context of the decision making process to be examined and the questionnaires were designed to provide initial contextual information that could be explored further on an individual basis. The Likert type questions, referred to above, and those relating to information sources, looked at recent influences on the students’ decision to study the BTEC course. It would have been expected that the students may have actively sought advice or information from friends, etc., which they would have consciously processed. By contrast the next series of questions were an attempt to gauge the influence of family background on the students’ decisions, which would have operated at the unconscious level. This included asking which family members had degrees and what current employment family members were currently engaged in. Several of the responses to these questions were in the form of lines through the answer section or left blank. These sections were treated as ‘none’ responses when being analysed. The final question was an open one allowing the students to make additional comment about their choice to study BTEC Science.

Before the questionnaires were formally distributed, the questionnaire was piloted.

3.6.2 Piloting of the questionnaires

A copy of the piloted questionnaire can be found in Appendix 2. The questionnaire was ‘piloted’ by 11 students who were part of a group of 1st year BTEC level 3 students at a college of Further Education in the Greater Manchester area. To gain access for the questionnaires I met with the Head of Science and explained the purpose of the questionnaires and asked what procedures needed to be followed. After viewing the questionnaires, the Head of Science agreed to distribute them through the students’ usual tutor for completion during a class session, with the completed ones being available for collection the following week. Allowing the questionnaires to be viewed at the time of initial contact was the procedure followed throughout the research with the questionnaire included with the request letter.
After analysis, several aspects of the questionnaire needed attention:

- Ask a student’s cultural background was one of the factors that might influence their decision to study the BTEC, it was felt that it was necessary to as how the student might describe their ethnicity. This was left open, with no descriptors provided as students may feel more comfortable answering the question.

- The Likert-type question was split into two sections, separated by a general open question. It was decided to merge the two sections for continuity and move the general open question into the next section where it fitted more appropriately.

- One student did mention that they were influenced by ‘friends attending the same college’, and it was decided that this be included, combined with the ‘knowing someone / friends attending the same course’ into one question within the Likert-type question.

- For the question relating to family who had degrees, the members mentioned included a ‘grandma’, uncles and cousins. As a result the definition of immediate family was broadened for the purpose of the question concerned as in some communities an extended family may represent ‘immediate’ family, especially if these members are seen on a regular basis or live together. The same change was considered for the following question on immediate families’ employment but was decided against as it made it too broad.

3.6.3 Focus groups

Although focus groups were used for the research, distinction has to be drawn between group interviews and focus groups as the boundaries between them appear to be quite blurred and the group interview could possibly being viewed as a middle ‘stage’ between the one-to-one interview and the focus group.

Group interviewing refers to interviewing several people at the same time with questions being put to the interviewees by the researcher with their responses being primarily directed to the researcher (Lewis 1992; Icology, 2009). Lewis (1992, p413) describes a group interview as a “group conversational encounter with a research purpose”.

Howard et al (1989, cited in Clark, Maben and Jones, 1996 p143) defined focus groups as “simply a discussion in which a small group of people under the guidance of a moderator, talk about topics selected for investigation. Participants answer the questions posed by the moderator, make comments, ask questions of other participants and respond to other
participants’ questions”. The individuals will interact within the group as part of the research and don’t necessarily direct their comments to the researcher (Powell and Single, 1996; Morgan, 1997 cited in Icology 2009; Gibbs, 1997; Catterall and Maclaren, 1997; Wilson, 1997; Cohen, Manion and Morrison, 2008; Denscombe, 2008).

Morgan and Spanish (1984, cited in Wilson 1997) suggest that focus groups are “an important tool for breaking down narrow methodological barriers”, while Wilson (1997, p216) goes on to argue that they “help researchers understand previous data collected by quantitative methods”. Lewis (1992, p414) argues that they can be used “to test a specific research question about consensus beliefs” and that many topics in education can be more clearly understood “if both individual and consensus views are assessed”. Jowett (1996) suggests that focus group interviews are “a well-established qualitative research method to investigate participants’ perceptions of defined areas of interest”. One reason why questionnaires were used was to help narrow the focus, and aid the direction of questioning during the focus group and individual interviews (Keegan & Powney, 1987, cited in Lewis, 1992).

Clark, Maben and Jones (1996, p151) suggest pointers for organising focus groups such as the size of the group, access and sampling issues. Some of the pointers suggested were taken into consideration and are discussed at various points below.

Due to the potential age group (16-17 year olds) who would participate in the research, and the fact that they would not have met the researcher previously and maybe would have felt shy, embarrassed or awkward and possibly threatened by someone who they may perceive as a figure in authority (Lewis, 1992; Clark, Maben and Jones, 1996), it was felt that the interaction between the students in a focus group, rather than group interviews, would generate more relevant information as the students would probably be more relaxed in a more informal setting. This issue of the moderator being perceived as a figure in authority was discussed with my peers. One solution that was suggested might be the use of a moderator who was one of the students’ peers. Due to time scales and practical considerations, this was discounted and the researcher acted as the moderator.

To settle the students at the start of each of the focus groups, and remove from the start any notions that I may be a ‘threat’ to them, I explained what my background was and made it clear that I had previously taught BTEC level 3 Science. This was also merged with reminding the students of confidentiality, anonymity, right to withdraw, etc. One strategy that seemed to work well was to appear relaxed with the students and use a
small amount of appropriate humour. I recorded the interviews, but again I asked the students' permission to do this. If asked questions about myself (but not personal questions), the research and any other relevant subjects, I answered them in a straightforward way. This extended into the individual interviews where the discussion would sometimes go beyond the interview and almost turned into a ‘tutorial’ / advice session but I was always careful not to assume the role of a teacher. I felt that this clearly indicated that the students felt relaxed with me and that I was interested in what they had to say. This was emphasised even more, when during one of the focus groups, a student made a comment and then asked me not to say anything to the teachers. This related to a question relating to BTEC work and if it got harder to do as the course progressed:

**AM:** if you take something like BTEC IT for example, the Science is a lot easier despite being a BTEC

**Moderator:** so, do you not feel like this might be the introductory stage

**AF:** it’s like you’re being given GCSE work

**Moderator:** do you not think it will get harder as you go on?

**Lucy:** no

**AM:** no because we’ve been told that the first unit is the longest and it’ll be the hardest

**Lucy:** and we’ve already done the work

**AM:** except the work you do on unit 8

**Moderator:** … (very long pause as collecting thoughts) … is there anything you want to add in this sense?

**Lucy:** you’d better not go and tell the teacher this so he goes and makes it harder! *(she starts to giggle and rest of group also laugh)*

This was 12 minutes into the focus group interview. During any interview it is important to show the participant(s) that you are interested in what they have to say and I did this using good eye contact, active listening, asking students to repeat / clarify points and asking relevant questions. Pearson et al (2006, cited in Louw, Watson and Jimakorn, 2011) define active listening as “involved listening with a purpose”, with the aim “to deepen the interviewer’s understanding of the speakers’ preoccupations and interests by creating empathy and making the speaker feel well listened to” (Louw, Watson and Jimakorn, 2011 p72). They suggest that that this also involves body language, gesture and back
channelling devices and that “the phrasing and intention of the interviewer's prompts to the speaker serve to facilitate the kind of reflection, insights and connections that help to make active listening successful” (p71).

Lewis (1992) and Clark, Maben and Jones (1996) highlight the need to be careful that the interviewer isn’t fooled into believing that what appears to be a consensus view isn’t. A view can be expressed by stronger personalities within the group and doesn’t necessarily reflect the views of ‘quieter’ students. This didn’t appear to happen as no one appeared to ‘force’ their views on to the rest of the group or speak over the top of others, although as with any group there were a couple who were maybe not as forthcoming. To resolve this, sometimes a targeted question approach, but not in an intimidating way, was used to encourage them with some success.

A consideration that needed to be taken into account was the use of language. If students feel forced to use a language style that they feel is appropriate to respond to an adult researcher, could it be the case that they won’t say what they really mean. The respondents were under no pressure to express themselves in a ‘non-personal’ way, and as a result this helped the focus group interview to be non-threatening and, hopefully, enjoyable (Arksey and Knight, 1999 cited in Cohen, Manion and Morrison, 2008).

The length of time allowed for a focus group interview, and the when and where, need careful consideration (Clark, Maben and Jones, 1996). General consensus seems to suggest that between one and two hours would be typical (Wilson, 1997; Denscombe, 2008). The reality is that this is probably determined by who is involved and when and where the focus group will take place. When dealing with schools, or colleges, Ball (1993) suggests that Monday morning and Friday afternoon are probably best avoided. From personal experience, students tend to be thinking / discussing what they will be doing at the weekend on Friday afternoon, and discussing what they did at the weekend on Monday morning. As only one educational establishment, a school, had agreed to allow their students to participate in the focus group interviews, it was assumed that the focus group would occur during the school day, probably during lunch time, or some other appropriate time, when the students would not be looking to get home, etc.

Lunch time was one expected option but the maximum time set aside for this would only be up to an hour, with many schools having only ¾ or even ½ an hour for lunch. If a shorter time period was allowed for the interview, it could possibly solve any issues
relating to possible short attention / concentration spans of the interviewees, as it might be reasonably expected for this to be short for this age-group. Possibly 30 minutes would be allowed to take the above into account.

The number of participants who make up a focus group seems to be a matter of debate; with any suggestions for group size taking into accounts the age and maturity of the expected participants. Morgan (1988, cited in Cohen, Manion and Morrison 2008) and Greenbaum (1988, cited in Clark, Maben and Jones 1996) suggest a wide range of between four and twelve per group, while over-recruiting by about 20% to compensate for those who don't turn up. Clark, Maben and Jones (1996) suggest between 50 % and 100% over-recruitment. Ebbutt (1987, cited in Lewis 1992) suggests a group of between nine and 15 when dealing with sixth-formers. Denscombe (2008) recommends between six and nine people, with three to five suggested by Waterhouse (1983) and Barnes & Todd (1977), both cited in Lewis (1992). The ideal appears to be to have enough participants to have a ‘lively’ discussion with everyone involved, without having so many that it is likely to lead to fragmentation of the group.

In reality, the timing and location of the focus group was dictated by the teacher of the BTEC students as the focus groups occurred during the BTEC sessions which lasted about 50 minutes. There were six students in each group which worked well. The interviews took place at points in the year when the students were working on assignments and the students would not miss any of the theory. BTEC assignments are usually spread over several sessions / weeks and the students work at their own pace. I was asked to arrive after the session had started and the students who attended the focus groups were asked if they wanted to do so by the teacher. The school’s Learning Resource Centre was used for the focus groups as the students are allowed to talk while studying there and it also allowed those not participating in the focus group a quiet environment in which to continue with their assignments. I had no contact with the students prior to the focus group convening. I was allowed about 30 minutes to set up and run the focus groups.

On reflection, the focus group interview was probably somewhere between a true focus group and a group interview. Although, at times the conversation was free flowing with everyone contributing, at other points, as mentioned previously, there was some targeted questioning to ensure that all were involved at that stage.
The focus group was a stepping stone between the questionnaires and the 1:1 interviews as it allowed points raised within the questionnaires to be explored on a more general basis. It also allowed information to be gained that wasn’t covered, or was only hinted at, by the questionnaires which could act as starting points for the more in-depth 1:1 interviews. It also allowed the participants to meet me and hopefully allow them to be more relaxed when in the 1:1 interview as I wouldn’t be seen as a ‘threat’. Within the Integrated Model, focus groups mainly allowed the recent past and current influences (active choice influencers) affecting the decision making process to be explored. The context to the students’ decision making, especially family background, was deliberately not discussed due to potential ethical issues that might arise in a group situation.

3.6.4 Individual Interviews

Interviews are more than conversations and have at least the following characteristics in that the interviewee consents to take part, interviews are ‘on / for the record’ and the researcher controls the agenda (Cohen, Manion and Morrison, 2008; Denscombe, 2008). Denscombe also suggests that while interviews can collect factual information, they are “better exploited when they are applied to the exploration of more complex and subtle phenomena” (p174). This occurred as the focus groups provided initial data and ideas that could be further explored with the interviewees. However, as he also acknowledges there is no point in deciding to use interviews unless the researcher can “gain direct access to the prospective interviewees” and that the interviews are “viable in terms of costs in terms of time and travel involved” (p175). The Integrated Model provided the framework that allowed the decision making process to be explored from each individual’s perspective. The individual interviews allowed the factors that influenced their choice, even if the interviewee hadn’t consciously recognised them as such, to be explored in greater detail. The passive contexts within the model provided areas of background information to be explored, while the active choice influencers and choosers provided the areas to explore regarding each student’s recent and current circumstances. As the intention was to interview students individually at two different points in the course after the focus groups occurred, changes in the factors that influence the decision making process as a student progresses through the course could be highlighted.

Of the differing types of individual interviews that may occur, i.e. structured, semi-structured and un-structured, it was the semi-structured interview that was used. Barribal and White (1994, cited in Carr and Worth 2001) note semi-structured interviews are “well suited for the exploration of the perceptions and opinions of respondents”. The interviews
were formal with a semi-structured approach, or as Cohen, Manion and Morrison (2008, p352) describe them “standardised open-ended interviews”.

The 1:1 interviews were the final stage of the research involving the participants, and the intention was to conduct them as soon as they could be organised after the focus groups. Flexibility was required to organise doing this, and to allow for this a variety of media were considered for the interview, made possible by modern technology. These included media such as e-mail, skype, webcam, etc., but these were discounted due to the practicalities of organising this and possibly the lack of visual clues (Carr and Worth, 2001; Denscombe 2008). As a result it was decided to undertake a more traditional approach. The interviews would be conducted at a mutual time and location agreed by both parties, i.e. the class teacher as he represented the point of contact, or gatekeeper, for the students. Where the interview takes place is an important consideration. Tang (2002, cited in McDermott, Vincentelli and Venus, 2005) while interviewing female academics, found that there was a difference depending on whether they were interviewed in their homes, or in a more formal situation

From the pilot study, it was anticipated that up to half an hour may be required for each interview. Setting up the interviews generally proved to be a lengthy business as, although initial dates for each group of students were organised, usually around the February half-term break, there would often be a break in communication with the member of staff concerned and when, eventually, there was further discussion the interviews would take place towards the end of the summer term when students were completing assignment work. This was probably the best time for the school and the students’ course as, at that point in the year, the theory work would have been completed and the students would be working on their own during time dedicated to completing assignments.

When the one-to-one interviews occurred, they were conducted face-to-face in a classroom, with the interview being digitally recorded and then transcribed as soon afterwards as was reasonably practical as delay can affect the quality of the research data (Carr and Worth, 2001). Face to face interviews allowed me to pick up on facial expressions and other signals arising from non-verbal communication. I also felt that it was easier to direct the conversation during the interview this way and ask other relevant questions that might not be possible using other methods.
One incident that possibly demonstrated inexperience as it was the first individual interview that I conducted was with David. Although discussing grades, he didn’t willingly tell me what grades he’d got in those subjects and a lack of experience of conducting this type of interview probably was the reason why I didn’t ask what grades he’d originally got for Geology and Sociology. Another student, Sajid, seemed to be irritated towards the end of his final interview when being asked about friends and the BTEC course. I recognised this immediately and moved on to another topic.

3.6.5 Piloting of the interview technique

The interview was with a male student who had done one year of ‘A’ levels at an 11 – 18 school in West Yorkshire, but has decided to change direction completely by starting a completely a BTEC course at a college in Lancashire.

As the student had left the local school he attended to do the BTEC course, permission was sought verbally from the student’s parents. This included an explanation of the purpose of the research after which they consented for me to approach the student. This was done by phone a few days later and a day / time was mutually agreed with the interview occurring at the student’s home with both parents present in the house. Both on the phone, and at the start of the interview, it was explained to the student the purpose of the interview as well as reminding him of his right to withdraw at any time, confidentiality and the anonymity of the interview. It was also explained that some of the information that he may provide may relate to the role of, or relationship with his parents, as well as being made clear that no information provided as part of the interview would be relayed to his parents. The offer to let the student have a copy of the transcript of the interview was also made but was not taken up.

The interview lasted just under 22 minutes and was digitally recorded with the student’s permission. No field notes were made. The interview was semi-structured in nature with the interviewer having some questions pre-prepared to act as a guide for the interview, but the actual responses provided acted as the main guide for the direction that the interview took. The interview was then transferred to a PC the same day and then transcribed into a word document a few days later. This was the format used for the 1:1 interviews that occurred later.

The transcript was reviewed and themes highlighted. The areas highlighted were those that link into the research questions.
The main themes that arose from the pilot interview were:

- Peer influence
- Pressure from school – the student’s view was that the school’s expectation was that he would continue his studies by going into the school’s 6th form to study ‘A’ levels through pressure via assemblies and teaching staff, including the Head
- Careers advice by specialists
- Disillusionment with school
- Parental influence

3.7 How the methods addressed the research questions

There are four main research questions (RQs), with each question having two, three or four sub-questions. The three methods allow the questions to be addressed, but no one method addressed all the questions. The questionnaires are to give a general feel for the research questions without providing in-depth knowledge, with the focus groups and 1:1 interviews providing an increasing depth of information respectively.

While the questionnaire doesn’t address RQ1 directly, some of the open questions allow the respondents to state other reasons for undertaking the course, allowing points highlighted to be explored further. Most of the information that will address RQ1 was gained through the interview stages of the research.

The questionnaire, using the first couple of main questions, allows RQ2 to be addressed through and gives an insight into what has possibly influenced the students’ decision to study BTEC L3 Science. The influence of family and culture can be explored in more depth through the focus groups, and especially through the 1:1 interviews as participants may not want to talk about family circumstances, or influences, in a more public setting.

RQ3 deals with anticipated trajectories and this is addressed directly by the questionnaire. However the factors that have influenced the student to anticipate these trajectories will only be able to be discussed with participants during the interview stage.

RQ4 is a topic that is really dealt within the second year of student study and considers how the students’ anticipated trajectories / aspirations may have altered during the course and can only really be dealt with through the interviews. However, the questionnaire does start the process as it asks the students what their current anticipated trajectories are.
3.8 Organising the data

152 questionnaires were returned for analysis. As they were returned from each educational establishment, the responses were noted and collated on an organisational basis, and then all the questionnaires were pooled to give overall responses. The responses were then also sub-divided into grouping which is discussed in more detail in the chapter on Findings. The data from the questionnaires was used as initial data to highlight points that should be considered and explored during the focus groups and individual interviews. The overall findings for the questionnaires are to be found in Appendix 4.

Recording, transcription and interpretation

Denscombe (2008 p287) suggests that qualitative analysis is based on four principles, i.e. grounding in the collected evidence; ‘the researcher’s explanation of the data should emerge from a careful and meticulous reading of the data’; ‘avoid introducing unwarranted preconceptions’ and that there should be an iterative process.

Lewis (1992) and Denscombe (2008) discuss the use of microphones but for the purposes of this research it was proposed to use only one digital audio-recorder and transcribe the interviews at a later date. She suggests that the interview could be supplemented by notes, especially in the cases of focus groups. The use of notes may go some way to counteracting the issue of loss of data from non-verbal communication which may give valuable information not relayed through verbal communication (Cohen, Manion and Morrison, 2008). Only occasionally were notes made during either the focus groups, or individual interviews, when a point may have arisen that maybe needed further exploration.

The interviews were transcribed and stored on a PC with backup, with a paper copy being analysed. A transcribed sample of the interviews of two students is provided in Appendix 5. The transcription occurred as soon as was practically possible shortly afterwards to avoid delay that could affect the quality of the research data (Carr and Worth, 2001). On the transcribed copy, the timing of the interview was indicated every 30 seconds for ease of location of quotes, or points of interest. A column to the right of the transcript allowed notes to be made at relevant points (Cohen, Manion and Morrison, 2008; Denscombe, 2008). Themes running through the interviews were indicated using highlight pens initially which were then further sub-divided, or sectioned, depending on the findings that arose.
from the interviews. One key aspect that needed to be taken into account was the need for holism, to avoid fragmenting the information of too much so that it becomes meaningless (Cohen, Manion and Morrison, 2008).

An advantage of the one-to-one interview, when it is recorded, is that there is only one voice to recognise, especially when the interviewer isn't familiar with the interviewees. This is a problem with transcribing the focus group interviews that is acknowledged by Denscombe (2008), and was a problem that initially confronted me. When the individual interviews were transcribed, it was then possible, in the majority of the interview to match the individual participants to voices on the focus group. One issue that did arise with this was that some of the original participants of the focus group didn't participate in the individual interviews because they had left the course. Each focus group consisted of six members, but for the first group five participated in the individual interviews and four for the second group.

After the interviews, all questionnaires and interviews were collated and transcribed, from which a profile of each participant was produced which was then used to build up the case studies, from which the discussion was developed. As Smith (1997, p9) suggests “the strength of the analysis is linking the data from the whole”.

3.9 Reflecting on validity of the process, at each stage

3.9.1 Reliability and Validity

Although the terms validity and reliability appear to be used quite widely, there is discussion about the meaning of these terms, their suitability in certain situations and proposed alternatives, e.g. Long and Johnson (2000); Golafshani, N. (2003); Shenton (2004). Even when the term validity is used, Cohen, Manion and Morrison (2008, p133) list 18 different types of validity that could be applicable to data collected. For any researcher, has it become a case reviewing the terms and definitions and then determining which are most applicable to their research perspectives?

The approach to the collection of data for this research was mainly qualitative, with two main methods, questionnaires and interviews, being used. Onwuegbuzie and Johnson (2006 p49) argue that “a primary focus" for qualitative research “is for researchers to capture authentically the lived experiences of people”. With the research exploring what could be, at times, quite personal detail about an individual's past and present
circumstances, the question needs to be asked “how do I know if the research is trustworthy?” (ECS and McREL, 2004).

### 3.9.2 Validity

Validity at its simplest demonstrates that a “particular instrument in fact measures what it purports to measure” (Cohen, Manion and Morrison, 2008 p133) but they argue that it is too simplistic a view with Winter (2000, cited in Cohen, Manion and Morrison 2008) suggesting that it “should be addressed through the honesty, depth, richness and scope of the data achieved, the participants approached, the extent of triangulation and the disinterestedness or objectivity of the researcher”. A similar theme is proposed by Cho and Trent (2006, p320) who assert that “validity in qualitative research involves determining the degree to which researchers’ claims about knowledge correspond to the reality (or research participants’ constructions of reality) being studied”.

Long and Johnson (2000 p31) maintain that “no knowledge can be counted as certain, and the best that we can do is to seek means of judging claims to knowledge in terms of their likely truth. These means are laid out as considering the plausibility of the claim, the credibility of the claim, and the weight of evidence for each of these”. As a result, for the qualitative researcher, should the realistic approach be one of being as certain as one can that you have gained the truth, even if it can never be achieved 100%? This is the approach that has been adopted with this research. Each participant at the end of the interview stage had three interviews (one focus group and two individual), and if they were knowingly providing false information, then it would be expected that there would be occasions when there would be a mismatch in the information they provided. However, I needed to be able to recognise the difference between when a student’s ideas had genuinely changed and when they were providing false information. The changing of a student’s ideas regarding career, or trajectories after the BTEC course, relates to RQ4. An example of this scenario would be Sajid who had originally, at the start of the course, wanted to do Dentistry, or a related subject, at university but by the end of the course had applied for, and been accepted to do, Primary Education. Often, a topic might be returned to later in the interview and again, any discrepancies would be highlighted and explored for clarification.

As there are two main types of methods used, questionnaires and interviews, each will dealt with separately.
3.9.3 Questionnaires

Terms often associated with validity are internal, external, content, construct, etc. Cohen, Manion and Morrison (2008) describe internal validity as “seeking to demonstrate that the explanation of a particular event ……. can actually be sustained by the data” (p135) and external validity referring “to the degree to which results can be generalised to the wider population, cases or situation” (p136).

Cohen, Manion and Morrison (2008) suggest that for content validity to be achieved, the instrument “must show that it fairly and comprehensively covers the domain or items that it purports to cover” (p137). For Due and Ottensen (2009, p36), content validity highlights the “questionnaire’s ability to reveal the most important characteristics of the target group”. To ensure construct validity, Magarey et al (2009) and Due and Ottensen (2009) asked panels of experts, or other interested parties, to review the items on the questionnaires they were using. As a result of this Due and Ottensen (2009) ended up with an appropriate questionnaire after four revisions.

For the questionnaire under discussion here, comment was sought from the research supervisor with initial alterations being made in light of this. Piloting the questionnaire with a small number from the expected sample also helped to strengthen the content validity.

The use of the interview is to serve two purposes. Firstly to check the validity of the responses obtained from the questionnaires, which are discussed below in terms of descriptive, interpretive and theoretical validity. Secondly to check the reliability of the questionnaire data compared to the interview data. This mixed methods approach allows for the triangulation of the research.

3.9.4 Interviews

As well as the definitions for validity discussed above, several authors have suggested alternative definitions for the term, e.g. Lincoln & Guba (1985, cited in Onwuegbuzie and Johnson 2006).

The terms and definitions suggested by Maxwell (1992) are, I feel, appropriate for the focus groups and interviews that have formed part of this research. Although he suggests that there are five types of validity in qualitative research which moves away from the more traditional definitions that emphasise measuring what it purports to measure, only
four of them are considered to be appropriate for the research undertaken. These are descriptive validity; interpretive validity; theoretical validity; generalizability.

For descriptive validity, the question is being asked whether, or not, the account presented is accurate or is the researcher misrepresenting what actually occurred, deliberately or otherwise. This links back to the ideas of honesty and trustworthiness as discussed earlier. What was done to generate a fair representation of the perspectives of the students? To achieve this, the participants had to feel comfortable during the interview and feel that they could trust me. I, hopefully, came across as relaxed and honest, answering any questions that the students asked regarding my background, research, etc., and I would also add anecdotes at appropriate points to demonstrate to them that I could relate to, and was interested in, what they were telling me. In a way it was a two way conversation, and if the students could feel relaxed with me they would provide information even though they thought that the school might not appreciate it, e.g. comments relating to the assessment system. Added to this, the interviews were transcribed as accurately as possible, using the language of the students and making available the original interviews and transcripts.

Maxwell (1992, p289/290) proposes that to assess interpretive validity, it should not be the researcher’s perspective that is taken into account, but can we comprehend phenomena from the perspective “of the participants in the situations studied” and that it “does not apply only to the conscious concepts of participants; it can also pertain to the unconscious intentions, beliefs, concepts, and values of these participants”. To achieve this, not only is the interpretation supported by direct quotes from the transcripts, but where an interpretation is made, the language used is such that it doesn’t claim to be definitively what the student’s values are, or what they definitely believe.

Theoretical validity “goes beyond concrete description and interpretation and explicitly addresses the theoretical constructions that the researcher brings to, or develops during, the study” (Maxwell, 1992 p291). The theoretical framework being used is Hemsley-Brown and Foskett’s (2001) Integrated Model of Educational Choice which combines both structural and agency factors and the interviews will allow both aspects to be explored.

“The extent to which one can extend the account of a particular situation or population to other persons, times, or settings than those directly studied” is what Maxwell (1992, p293) refers to as generalizability. He also splits it into internal and external generalizability.
The former refers to making a generalisation that applies to the setting, or group, being studied. The latter tries to extrapolate a generalisation to a wider population or context, which is similar to the definition of Cohen, Manion and Morrison (2008). Internal generalisability will be appropriate for this research but due to using longitudinal case studies and the small sample size, the results will not be able to be applied to a wider population, but may be able to be done in the form of ‘naturalistic generalisations’ (Stake, 1978). Flyvbjerg (2006), however, argues that total generalisation can be achieved as long as it is based on an “intimate experience with thousands of individual cases and on the ability to discriminate between situations, with all their nuances of difference, without distilling them into formulas or standard cases” (p23) which tends to be what the inexperienced try to do, and would certainly be unrealistic with this study.

3.9.5 Reliability
Cohen, Manion and Morrison (2009, p146) distinguishes between reliability for quantitative and qualitative research. For quantitative research they define reliability as research that can “demonstrate that if it were to be carried out on a similar group of respondents in a similar context (however defined), then similar results would be found”. But for qualitative research, the definition is a little more abstract as it can be regarded as “a fit between what researchers record as data and what actually occurs in the natural setting that is being researched” (Cohen, Manion and Morrison, 2008 p149). Issues to consider, or avoid, in order to ensure that the data is reliable would include interviewer bias, the characteristics and inter-relationships of the interviewer / interviewee, susceptibility to leading questions / questionnaires, distractibility of students and receptive / expressive language limitations (Hammersley, 1974; Lewis, 1992; Strange et al, 2003). The approach taken with the students is discussed briefly below.

Bias may arise in qualitative research for several reasons including actual or perceived power differences in the social relationships between researchers and participants (McDermott, Vincentelli and Venus, 2005; Carr and Worth, 2001). Having worked in the post-16 sector for a considerable period of time, I had developed my own opinions on certain subjects and care had to be taken that I did not influence the responses of the participants by expressing these. I achieved this by not entering into conversation about my thoughts on certain subjects and also by not giving it the opportunity to arise. Berger and Luckman (1966) and Haley (1962), both cited in Davis (1980), discuss how the expectations of the interviewee(s) could affect the information obtained. Questions asked and information obtained was done in a non-threatening way, which was one of the
benefits of the initial focus groups which allowed the students to meet me in a non-threatening environment. An open approach was taken with the interviewees so that they did not feel that there was a hidden agenda, and so did not feel the need to be defensive in their answers (van Teijlingen and Hundley, 2001).

The approach to the students for the interviews was one of someone who came across as relaxed, approachable, could be trusted, who would listen and talk to them from a position of equality. The indication for this was what happened during the interviews and the reactions of the students. Rachel giggled and laughed a lot, almost as if she had been guiltily caught out. Others asked why I was doing the research. One student, Lucy, was quite happy to continue even though the bell for break had sounded. While she was talking, I couldn’t help feeling that she was quite happy to be missing some of the next lesson. During her focus group, she even let some information slip about what they all thought of the assessment process and then half seriously, while giggling, asked me not to tell the teachers. With another student, Nosheen, there was a general chat after the interview about various courses she might consider applying for at university; it was almost like giving careers advice.

3.9.6 Triangulation
At its simplest, triangulation involves the use of different methods to validate results or findings (Long and Johnson, 2000; Denscombe, 2008; Kelle, 2001, cited in Gläser-Zikuda and Järvalä, 2008; Cohen, Manion and Morrison, 2008), and it reduces accusations that findings are simply the result of bias, or problems that have arisen due to using one research method (Long and Johnson, 2000; Patton, 1990, cited in Bowen 2009). This has been achieved through the use of three different methods.

3.10 Summary
To generate the data, questionnaires, focus groups and individual interviews were used. The questions used within each of these methods were influenced by the Integrated Model; the questionnaires were used to generate some general contextual and current information; the focus groups explored the students’ current circumstances in more focussed detail; the individual interviews allowed the four passive environments as well as the active choice influencers and choosers to be explored in detail on an individual basis. Of the eight educational establishments approached, four did not reply, three allowed the use of the questionnaires and only one allowed the full range of research activities to be undertaken with its students. Even then, however, access to the students was tightly controlled by gatekeepers who sorted the student sample and, in reality, dictated when
the focus groups and interviews could occur, which often resulted in scheduled interviews often being cancelled at short notice. The focus groups were of a manageable size and all the students contributed to varying degrees although, at times, it seemed more like a group interview rather than a free flowing focus group. The individual interviews generally went well and the students seemed to give open and honest information to the subjects discussed, which succeeded due in part to my approach to the students, helped probably by my having worked for a long time with students this age in colleges on this type of course and also in the knowledge that they were not under pressure to discuss areas they felt uncomfortable with. Utilising the data obtained allowed longitudinal case studies to be produced which told the stories of the journeys undertaken by the students in their decision making process. The use of a digital recorder helped to accurately transcribe the interviews, which was done using the students’ language and expressions, which gives the information an authenticity that helps with both the validity and reliability of the data obtained.
4. Questionnaire Findings & Longitudinal Case Studies

4.1 Introduction
There are two sections to this chapter. The first deals with the findings from the questionnaires. The second will present nine longitudinal case studies that highlight the main points arising from the interviews and questionnaires of the nine students who participated on an individual basis.

Four educational institutions, which are referred to as Colleges 1, 2 and 3 and School 4, agreed to allow their students to participate in the research to differing degrees. The entry requirements for the BTEC courses each offered were as follows:

**College 1** is a 6th Form College and offers both the Level 3 Extended Diploma at 18 units (≡ 3 A levels) and the Diploma at 12 units (≡ 2 A levels). The standard vocational course entry requirement is 5 GCSEs C or above. Specific course entry requirements were “C or above in GCSE Core and Additional Science or GCSE Applied Science. Alternatively, you’ll need at least a Merit in BTEC First Certificate or BTEC Diploma in Science. GCSE English and Maths are also preferable”.

The standard A level entry requirement is 6 GCSEs C or above. Their subject specific A level requirement varies depending on the subject. For Biology and Chemistry the requirements are virtually the same with a “(and a) minimum requirement in Core Science and a B or above in Additional Science or a least two B Grades from single science GCSEs, including a B Grade in Biology *including a B or above in Chemistry*. Grade C or above in Maths and English Language is also very desirable”. If wanting to study Physics “a B Grade in GCSE Maths and should study AS Maths/Use of Maths alongside Physics unless you have an A*/A Grade in GCSE Maths” is also stated.

**College 2** is a traditional FE college that has a 6th Form centre. It offers the BTEC Level 3 Extended Diploma in Applied Science. The entry requirements are “five or more GCSEs at grades A*-C, including Maths and English and Core and Additional Science or grade A*-C from two of the following subjects; Biology, Chemistry or Physics”. This establishment makes no reference to recognising L2 BTEC qualifications as an entry requirement.
To study A levels the following is stated “To take four or more AS subjects in your first year and carry through to three full A Levels in year two, you need six GCSEs at grades A*-C, including grade B or above in Core and Additional Science, and grade C or above in English and Maths”. Additionally “… you will be expected to study Core Maths if you are not enrolled onto AS Maths” was required if wanting to study Physics.

**College 3** is a traditional FE college that doesn’t offer A levels. It offers the Level 3 Diploma in Applied Science (Forensic/Medical) and BTEC 90-credit Diploma in Applied Science (QCF). The entry requirements were “GCSEs grade C or above to include English and Mathematics; BTEC Level 2 qualification; NVQ Level 2 or VRQ Level 2”.

**School 4** is a school that offers 11 – 18 provision and has a 6th Form centre. The BTEC Science courses offered are the Certificate (1 year) and the Sub Diploma (2 years). The entry requirements were the standard 6th Form entry requirements, i.e. “5 A*-C grades at GCSE to progress to Level 3 courses” with “C in GCSE Science (Core, Additional, Biology, Chemistry or Physics) OR PASS at BTEC Level 2 Applied Science” specifically stated for BTEC entry. The students who studied the BTEC Science courses being offered were doing so alongside other qualifications as part of their full-time programme.

For A levels the requirements are the 6th Form standard entry requirements plus, depending on the subject, “a minimum of two grade Bs or a grade B in Biology (or Chemistry / Physics) GCSE and a grade B in Mathematics”. Unlike colleges 1 and 2, there are no additional requirements to study Physics.

In terms of QCF BTEC level 2 equivalencies for entry requirements onto BTEC courses the following apply:

- BTEC level 2 Diploma ≡ 4 GCSEs A* - C
- BTEC level 2 Extended Certificate ≡ 2 GCSEs A* - C
- BTEC level 2 Certificate ≡ 1 GCSE A* - C

(Edexcel, 2010; I Know I Can, 2014)

In educational establishments 1, 2 and 4, that offer both L3 BTEC Science and Science A levels, there is a difference in the entry for the two courses, even though they are both level 3 programmes.

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Each establishment requires 6 GCSEs at minimum Grade C to study A levels, with B grades being required for the specific subjects. For the BTECs, they required 5 GCSEs at minimum Grade C, while establishments 1 and 4 would also accept L2 BTEC qualifications for the Science aspects. Although not offering A levels, establishment 3 also accepted L2 BTEC qualifications for the BTEC L3.

Establishment 3, until very recently, offered A level provision. Local A level provision is now offered by a newly created 6th Form college adjacent to establishment 3 and partly formed from 3’s old A level provision. As 3 is the only provider considered that doesn’t offer A levels, for the purposes of comparison and curiosity only, to study A levels at the new 6th Form college requires a minimum of 5 GCSEs at grade A* - C, covering at least four different subject areas. Two of the 5 A* - C grades must include GCSE Maths and English Language. You must also have Higher Tier GCSE Core AND Additional Science (GCSE Grade C or above), or Biology (Grade C or above) if you have studied the 3 separate Sciences. It is the only A level provider that doesn’t require B grades at GCSE and therefore, students who have 5 GCSEs at grade C, can apply to attend either establishment 3 to do BTEC Science or A levels at the adjacent 6th Form college.

This is not the case for the other three establishments where A levels have a higher entry requirement than for their own BTEC course. This, in itself, will push students, who do not achieve certain levels of attainment, onto particular types of course, which does raise questions as to how those establishments view equivalency between A level and BTEC qualifications.

Colleges 1, 2 and 3 and School 4 allowed their students to complete the questionnaire, with School 4 being the only one to allow its students to participate in the focus groups and 1:1 interviews. Although points will be raised in the findings, they will be discussed in more detail in the discussion chapter.

**4.2 Questionnaires**

The questionnaire results are presented at this point as they were used to identify key themes that were highlighted across the sample, which were then followed up and explored through interview data. 152 questionnaires were returned from six groups from four institutions, but as discussed in the previous chapter a return rate could not be determined.
Of the questionnaires returned:
- 64% of respondents are aged 16 or 17 years old at time questionnaire was distributed, with 25% being 18, 10% being 19 and one student who was 20 years old.
- 56% were male, 44% female.

The question relating to ethnicity was open with no prescribed descriptors being supplied, allowing the students to describe their ethnicity in their own terms. 85% of participants responded to the question about their ethnicity. Of these, 39% described themselves as (English / white) British. For the purposes of the analysis the term ‘white British’ will be used when referring to these students.

In the responses for the ethnicity of the respondents, a range of descriptors were used, i.e. Asian, Pakistani, British Pakistani, British Asian, (British) Bangladeshi was used by some of the respondents. The largest grouping of these was British Pakistani with 44 responses using this descriptor. Each of the rest of the descriptors was represented by quite small numbers of respondents. Also there was also no way of knowing if the students were born abroad, or were first, second or third generation born in this country. As culture is a possible factor that may have influenced students’ choices to study the BTEC Science, pooling these students in to one group may give a clearer picture of any influence that culture, in the sense of ethnicity, may have. For the purposes of analysis these students are pooled together using the term student of ‘Asian heritage’. 53% of those who responded were of Asian heritage.

The rest of the respondents (8%) were from several different ethnic groups, e.g. Black (African), Arab, Chinese, Mixed Asian/white, with the numbers in each group usually being 1 or 2 individuals. These small numbers would not allow a possible trend to be recognised with any certainty and these students could only be discussed on an individual basis. Out of the 152 participants, 23 (15%) didn’t respond to the question.

When asked which aspect of the BTEC Science the students were studying, 60% were doing Applied Science, 26% Medical Science and 8% Forensic Science. Several students (6) seemed to be unsure which course it was that they were actually doing as they indicated that they were doing two out of the three courses. Several others were indicating that they were doing one course while the majority of their peers were doing
another course. Only one institution, at the time, offered “Level 3 Diploma in Applied Science (Forensic/Medical)”, which doesn’t account for the results obtained.

Courses offered, regardless of option studied, are Extended Diploma, Diploma, 90 credits Diploma, BTEC Subsidiary Diploma, BTEC Certificate. Their UCAS values are given in Appendix 6.

4.2.1 Parental, relatives and friends’ influences
75% of the students who responded indicated that parent(s) / guardian had some influence on their decision to choose the course, with 16% being influenced very strongly. This influence may be expected up to a point as the majority of students are in the 16 – 18 age groups and would still be living at home. However, there is no way to determine, through the questionnaire, precisely what the nature of this influence is, and is therefore a limitation of the quantitative approach. If the ethnicity of the students is considered, there is little difference between those of ‘Asian heritage’ (77%) and ‘white British’ (73%) in terms of those who felt that there was parental / guardian influence in their decision to study the BTEC. There is, however, a substantial % difference in terms of those who thought that the overall parental / guardian influence was very strong: 17% for ‘Asian heritage’ students compared to 8% for ‘white British’ students. This may indicate that there are ethnic or cultural differences in terms of how much the students’ parents may influence the decision regarding studying the BTEC Science course.

The influence of other relatives was evenly split with 51% overall stating that they had no influence on their decision, with only 5% being strongly influenced by them. In terms of the groupings, 53% of ‘Asian heritage’ students suggested that other relatives had some influence in their decision compared to 44% for ‘white British’ students. Other relatives may not include only brothers and sisters but also an extended family. It may be that this difference is due to ethnic or cultural differences and the relationship that the students have with their other relatives.

When considering the influence of friends who have either done the course or attending the same course, the results are very similar with 55% and 53% of the respondents, respectively, not being influenced at all in this way. Only 11 (7%) of students were strongly influenced by a friend who had done the course, and 10% by those who were attending the same course. 59% of respondents suggested that friends attending the
same school / college had some influence on their decision but, as with the two previous aspects considered, only 8% were strongly influenced by them.

These results are in contrast to those from the interviews as they indicated that, for School 4, it was the educational establishment that made the choice for the student with what appeared to be little actual input from parents, while the influence of friends had a negative influence of the decision.

4.2.2 External influences outside the family, relatives and friends.
The influence of teachers almost matched that by parent(s) and guardians with 69% of the students influenced by teachers to do the course to some degree, with 14% being strongly influenced this way. However, the question did not specify which teachers, either current or at KS4, have had an influence but some indication was made through the additional comments made on the questionnaire, such as “… talking to a BTEC Science tutor”; “The first day I came in Mr X (spoke to me)”; “Result day – when changing my subject I was informed about this course”. Caution has to be taken here as the roles of parents and teachers are completely different. It is to be expected that any advice provided to a student by a teacher would be from a professional perspective, whereas it would usually be assumed that a parent’s influence would not be from this perspective.

Information from the college (or school) influenced the course choice for 80% of the respondents, with 54% being either strongly, or very strongly, influenced by this. The majority of participants (63%) got their information regarding the course from open days / evenings, with 20% from the websites and 11% from leaflets. Taking into account that a small number of respondents indicated two sources of information, at least 9 of the participants do not have appeared to have answered the question. They may not have acquired information about the course from the college or school, or may have just seen the course as a natural progression from what they were already doing. This may be particularly true if students had done BTEC L2 at KS4.

The same was also true regarding university / UCAS information regarding course entry as this had some influence on the decision of 62% of the students, but there are possible issues relating to what that the students want and what is realistic which became apparent through the case studies and is discussed later.
By contrast, concerns are raised relating to the effectiveness of alternative sources of information that are supposed to provide information that should help students in the decision making process. This arises because out of all the respondents, 92% of the students felt that **TV / Radio Adverts** had no influence on their decision. No students felt that adverts had a very strong influence, with only 11 students (8%) indicating that they had any influence at all. The issue with this is that this relies on the student’s perception and may not match the reality of what is happening. Hollis (2011) argues that for advertising to succeed it does so by leaving positive impressions and memories that will influence behaviour at a later date, and that direct argument rarely succeeds. So advertising from colleges, etc., may have had an influence but it may be that the student just doesn’t realise it.

In a similar vein, the influence of **Connexions** or a **careers advisor** also seemed to be limited, but not as much, as only 41% felt that they had any influence, with only 5% indicating that they had a ‘very strong influence’. From a potential cultural perspective, 6% of students of ‘Asian heritage’ suggested that Connexions / career advisors had a ‘very strong influence’; while no ‘white British’ students suggested this.

### 4.2.3 Student trajectories

The overwhelming influence on the students’ choice to do the BTEC was to get a **specific job / career**, at 91%. 65% were either strongly, or very strongly, influenced, with 9% not being influenced in this respect at all. In terms of potential cultural differences, the results were very similar for those of ‘Asian heritage’ and ‘white British’. This should not really be surprising as the BTEC courses are usually seen as being vocational, although not as profession focused as a NVQ or VRQ type qualification. This reflects the 67% of those who indicated that they were using the course to **go onto another course afterwards**, while elsewhere the overwhelming majority (90%) of those who responded indicated that they wanted to **go to university**, with a large number of them (93 ≡ 61%) suggesting that they have a specific a career in mind after they have been to university. Although, as has been discussed earlier, there may be issues relating to the equivalency of qualifications, the BTEC is clearly seen as a route into university, often with a particular career in mind.

The most common of these stated were Pharmacy (7%), nursing (6%), teaching (5%) and forensic [science] (4.5%), which unsurprisingly have a general science focus. Even the range of suggested careers in the responses from School 4, which allows students to do a
mix of BTECs and A levels, indicated quite a strong trend towards science based careers.
A range of other careers are suggested from all establishments but are only referred to once or twice.

Of the 11 who indicated pharmacy as a career, 10 were Asian heritage students with 9 of them at College 2. There also appeared to be female bias (8/11) towards this career. No other careers showed this type of bias, either in terms of ethnicity or gender, possibly due to the small number of respondents who indicated them; except for nursing which had a female bias. A few indicated that they wanted to do other college courses, an apprenticeship or that they were not sure what they wanted to do.

With 90% of the respondents indicating that they were thinking of applying to university, when asked which universities they were thinking of applying for, there appear to be some clear preferences. When considering the results, it has to be taken into account that some of the students may not realise that some cities or towns may have more than one university. The universities indicated the most were Manchester (42%), Leeds (21%), Manchester Metropolitan (18%), Salford (17.5%), Liverpool (17%), Huddersfield (12%), Bradford (10%) and Leeds Beckett (formerly Leeds Metropolitan) (6.5%). Edge Hill, UCLAN and Sheffield were named six times each, with the majority of the other universities being named by the students once. All of these named universities are within what might be considered as easy, or acceptable, commuting distance of the three colleges and one school that participated in the research, either by bus, train or car. What is also interesting is that the universities named include Russell group as well as post-92 universities, possibly indicating that the students think that undertaking the BTEC will give them the full range of available ‘after course’ trajectories.

Although a variety of reasons were given in terms of whom or what has influenced you to apply for University, there were three main influences. These were parents / mother / dad (23%), brothers (23%) and family (16%). Other relatives are named but the next two main influences stated are friends / peers (8%) and me / myself (7%). A range of additional comments are provided, a large proportion of which refer to either the terms ‘job’ or ‘career’ (14%) of participants, again possibly indicating a link between the BTEC course, university and career.

With such a large number of students wanting to go to university (90%), it can be taken that, for many of the students, they may be the first members of their family to attend
university as only 30% of respondents indicated that their immediate family, i.e. parents / fathers / mothers / guardians / stepfathers and mothers, had degrees. This proportion of parents having degrees is also reflected in the range of occupations listed for the students’ immediate family, regardless of relationship to the student. The two that stand out are ‘taxi’ (8%) for Parent / guardian (male) and ‘housewife’ (11%) for Parent / guardian (female). These figures don’t take into account if a student comes from a single-parent family. The range of employment listed reflects a large number of occupations that don’t appear to require a degree. 23 students (15%) didn’t respond to this part of the questionnaire. Despite these figures, the large number of students wishing to progress on to university may reflect the recent trends by successive governments to increase the numbers going to university.

4.2.4 BTEC assessment methods
Although the method of assessment wasn’t referred to as part of the questionnaire, some of the students did comment about the assessment method, often from the perspective of “Prefer coursework based work rather than exam based”. From the interviews it became clear that virtually all the students undertaking the BTEC where doing so as they had not met the requirements to follow other programmes. This would usually be due to failing an exam based assessment at some point, so it is likely that the students equate examinations with failure.

There was one student who recognised a potential downside to the BTEC assessment methods:

“It’s a very good course. However, it will not prepare you for exams for university”

This is a theme that came up repeatedly during the interviews and was explored in some detail. From my own experience this is something that lecturers are aware of and would make students aware that there may be issues with some universities because of this. From the interviews the students realised this quite quickly for themselves once they had started the UCAS application procedure, and is discussed further in the next chapter.

4.3 Longitudinal Case Studies of BTEC L3 Science students
There are nine case studies presented for students at School 4. The information provided in them is derived from the questionnaires, focus groups and semi-structured individual interviews which occurred over a two year period. The first five case studies are for the

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students who were close to the end of their full BTEC course by the time of the second individual interview, with the final four having completed year one of the BTEC course and as a result their final trajectory choices could not be determined. There were six students originally in each of the focus groups but before the initial interviews took place one student had left the course after the first focus group and two had left after the second focus group had occurred. The students’ course tutors acted as gatekeepers and acted as intermediaries to set up the interviews with the student participants. The case studies are not presented in any set order except in terms of the chronological sequence the two groups of students participated.

**4.3.1 Case studies for students completing BTEC L3 Applied Science:**

**4.3.1.1 Rachel**

Rachel described herself as a white British female and came across as a down to earth student and didn’t seem to take things too seriously, illustrated during the interviews by making comments and giggling, or laughing, as a result. She appeared to be relaxed throughout the interviews.

She started in year 12 after completing her studies at the end of KS4 which included a merit in BTEC L2 Science in year 10 and a D in GCSE Applied Additional Science in year 11. Unfortunately, these results meant that she was unable to study A level Biology which she felt would have been of benefit as she “always wanted to be a mid-wife”. As she admitted “I would have got a distinction, I just didn’t do one bit of work”, implying that she hadn’t submitted one part of a unit. She was also interested in general nursing. The result was that she chose to do BTEC L3 Science instead as she thought she would “definitely need a Science of some sort and I was into forensics and subjects like that, so I just went for it, erm, because the teachers here are fab and I just thought that I’ll get on with it especially with BTECs as I’ve always done much better in BTECs than with exams”. She was also studying English Literature (A level) and BTEC L3 IT.

At the time of the initial interview Rachel had clearly been researching potential universities and courses, but wasn’t due to apply until later in the year. As a result of the research, she had realised that there are different requirements for the same type of courses amongst the universities. As she pointed out “the Russell groups want A level Biology … some of them, like vocational Unis like Salford, just wanting points. They don’t care what you’ve done, like you could have done Dance, Drama and Music and you want to be a nurse, they just want the points”. But to add to the confusion … “but what I’ve
found is that sometimes like that Huddersfield, they want Psychology … whereas at Salford (*Psychology is not a requirement*) you are starting from scratch everything which is fab really as you can re-cap over it … it just depends what course really … I was going to go to King’s College in London because they weren’t bothered about the BTEC, but it was my English because they wanted an A and I’m not going to get an A (*giggles*). However, Sheffield Hallam wanted her to do GCSE Biology. Her approach was very realistic as “I’ve been looking at the more practical courses just because it suits me better but there’s less of them”.

As well as doing her research on universities and courses, she was also aware of other issues that affected the NHS generally and certain hospitals in particular as “I’ve had a look at Staffordshire, but obviously everything in the news (*a series of stories in the news creating a lot of bad publicity*) at the moment and it’s a bit difficult because when you’re looking for a job, they going to be looking at where you’ve trained …”.

The initial choice of universities Rachel intended to apply for were Huddersfield, Leeds, Manchester, Chester and Liverpool, but she realised that the Russell group universities wouldn’t accept the BTEC Science. As she says “some of them are saying they won’t accept them like at Leeds university … I think sometimes because they’re Russell group, they’ve got a lot going on and they’re stronger in other bits and they just want the best of the best like the more academics”. However, when interviewed towards the end of year 13, she had applied for paediatric nursing at Sheffield Hallam, Bradford, Bangor, Salford and Edge Hill. She had offers from Bangor and Bradford but rejections from the other three. She was rejected by Salford because she didn’t go to the interview and Edge Hill had given her a written English test, during which she had gone off at a tangent on one of the questions, so none of the rejections were anything to do with the BTEC. Bangor wanted 300 points with distinctions in BTEC Science and BTEC IT, while Bradford just wanted the 300 points.

Her experiences of the different requirements of universities, and attitudes towards the BTEC, had followed Rachel into year 13 and through the UCAS application process. Regarding the BTEC “King’s College wouldn’t (*consider it*) at all”, while “Huddersfield I found really difficult because they wanted six extra units like Biology which would mean me staying and doing more but the 6th form don’t do that … it annoyed me a bit as I really wanted to go to Huddersfield … I just didn’t want to stay another year”, although later she felt the reality was that “I’d have to do another two years to get all these units done”. Her...
reaction was understandable, but also philosophical regarding the BTEC as “but … on UCAS … it says if they’ll consider it or not and most places do but it depends on what else you’ve got alongside it I think”.

In terms of reasons for choosing to do the course (questionnaire) she indicated that it was ‘to get a specific job / career’ and ‘go on to another course afterwards’ were very strong influences, while ‘friends attending the same college’ was a strong influence, but none of these carried on to do BTEC but did “straight A levels” instead. All other factors (who / what), including parents and relatives had ‘no influence at all’. Her mother was the influence behind her decision to apply for university but she didn’t elaborate why this was.

Rachel hated exams and this influenced her decision to do the BTEC Science course. It was during her GCSEs that she realised that she hated exams as she explains “I absolutely hate exams and I panic and I did it at GCSE and I seem to get the best grades from BTECs”. This clashed sharply with her father’s perspective about exams and the BTEC with comments like “you are going to do an exam”, “no, you’re not doing a BTEC”, “so that isn’t a proper A level then”. Her father is Iranian and had a degree and all her uncles are doctors, which implies that her father’s side of the family probably has what might be described as a traditional perspective. This, combined with Rachel’s suggestion that they probably don’t have BTEC qualifications in Iran and so would be unfamiliar to her father, meant that he wasn’t supportive of her doing the BTEC. As she also felt that, not only is she in the shadow of her uncles, but also in that of one of her cousins. As she explains “my cousin … she’s doing veterinary at Nottingham … she wouldn’t have chosen a BTEC as she is very academic and so is her brother … it’s just that (she) set the bar so high I’m just trying to get over that”.

However, as in other cases, once her father realised that she could get a Distinction* his attitude changed. This would have been helped no doubt by her mother’s approach at the start of the course as she “sat down and printed all these different things out and showed him them … he’s just proud that I’m getting Distinction* in both of my BTECs”. And at the end of the course, she felt that her father had moved to being even more supportive “because my Dad’s realised that a Distinction* is equivalent to A* … and my Dad has now realised with coursework I seem to be doing better … whereas I’m predicted a D or a C in English (exam subject)”. She admitted that she felt she had to educate him to get to this point and to counteract the influence the media has on peoples’ perceptions of the BTEC as a qualification.
She summed up her friends’ attitude to the BTEC as “I think that they may possibly look down on it a little bit, but I’m getting a higher mark than them doing it so I’m not as bothered (laughs)”.  

Rachel clearly felt that her expectations regarding the course had altered as she progressed through it, but when she was asked to explain how, the explanation revolved more around how she had started to let her work slide a little. She had done something similar for her BTEC at L2, resulting in her not handing a piece of work in and getting a Merit as a result. As she says “everything seems to be coming at once now, and it’s just a bit stressful whereas if I’d just kept on top of it … it probably would have been a bit easier”, and how much had she let it slide? “A little bit which I need to rein in (laughing)”, but that seems to be nothing compared to the BTEC IT as “but with my IT that could be going on for ever (laughs)” . However, despite the stress she was due to complete the course a few weeks after the final interview.

Rachel summed up her feelings for the BTEC course with “I’m enjoying it, it’s good, I’m going to miss it”.

4.3.1.2 Sajid
Sajid is an Asian heritage male who had progressed into the 6th Form after doing Triple Science in KS4 at the same school. When initially interviewed Sajid had just started his BTEC Science course, after doing an AS in Chemistry and IT. He had hoped to re-take the Chemistry, but instead did AS English Language in his final year (a repeat of year 13). He was also doing an A level in Business which he completed at the end of year 13. On the questionnaire he indicated that his parents / family, teachers and aiming for a specific career influenced his decision to do the BTEC, but this was after he dropped his A level Chemistry after doing the AS. The reason he gave for this was that “I'm not too keen on exams … I did Chemistry at AS last year and I did it as a GCSE but I didn’t revise for it as I should have, I revised for it as I would have a GCSE exam which … I knew as I was going for the exam that I would definitely fail it as I didn’t know half the stuff that was required for me to know it”.

When initially interviewed Sajid was keen to do Dentistry but “… if it’s not Dentistry, then Optometry or Pharmacy, Medicine, something along those lines”. He was particularly keen to study at Sheffield “cos I’ve seen a course in Sheffield University which is dentistry
which actually accepts the subjects that I’m doing … they said that BTEC is acceptable. They need 3 As”.

Sajid had done his research as a review of the entry requirements for the University of Sheffield’s Dentistry course revealed that they were prepared to accept a range of qualifications, including BTECs, as an alternative to A levels (University of Sheffield, 2015).

As well as wanting to do something along the medical lines, Sajid’s other concern was to stay local. As he admitted “I like local universities, I don’t like travelling far … “, but as a result his choices for doing Dentistry were limited and the other universities he was considering applying to all did Pharmacy. Again he had done his research as “yeah, I have. I was looking at their website and the UCAS website … a lot of universities were saying they don’t accept BTEC, but luckily for me, the closest ones to me do”, which matched his desire to stay local.

However, over the period of the course his career goals had changed. Towards the end of his 2nd year of BTEC study, Sajid had applied for, and been offered, a place on Primary Education courses. Again, his desire to stay local showed through in terms of where he had applied to, i.e. Leeds Metropolitan University (LMU), Manchester Metropolitan University (MMU), Leeds Trinity, University of Bradford (partnered with the college) and Huddersfield. All would be easily accessible by the train or public transport. He had accepted LMU, with MMU as his insurance. At first he claimed that “I got all offers”, but later when this was raised again he admitted that he had been rejected by Huddersfield for the reason that “you’ve got a weak personal statement”.

The University of Bradford course, taught in partnership with the local college, was Sajid’s first choice but the influence of others had put him off the course. As he explained “Bradford, the course was a university course on the college campus … that was my first choice but a lot of people said that at the college a lot of people said that the teaching wasn’t up to the standard that you need so that’s why I didn’t really apply to that”. By contrast, it was his own experience of visiting LMU that influenced his decision as “When I went to Leeds, it was the buildings; the staff, they were absolutely amazing, they made you feel that you really want to come there and they treat you like adults, so when I went there I knew that this was going to be my first choice”.

LMU had asked for 300 UCAS points “in your A levels or equivalent”, and regarding the BTEC “they said that it was equivalent to an A level”. His insurance offer was from
Manchester Metropolitan University for 280 points. When interviewed for the final time (during his repeat of year 13), Sajid had “already got 340 UCAS points”, and that “even if I just get a D, but I’m in for a B/C, even if I get a D in English (Language AS) I’ll get 360 / 370 UCAS points”.

This was quite a change in terms of career with a move from Dentistry, or a similar medical orientated career, to Primary Education. When asked in the original interview it became clear where the influence to study Dentistry, or something similar, had come from as “my brother’s doing Pharmacy in Bradford, he’s a graduate and a manager in a pharmacy in Leeds … that’s one thing that influenced me to do medicine or something along them lines”. His parents also had some influence as when asked about if there were expectations in terms of a career he admitted that “it was a free choice … but my parents did say that they wanted me to do something along the doc, you know Asians (laughs), the doctor lines … I would love to be a doctor”.

Sajid had changed his career direction “because … I’ve got my experiences is with kids; I teach in a mosque with two kids, I teach them not only about Islam but also Maths and English. I’ve got a lot of nephews and nieces, I’ve got about 11 nephews and nieces so I always be with them and I know how to control them and they really like me so I can use that experience”, and as he then points out “… what’s the point of going into something I don’t really know about when I can use that experience to do a professional thing”. His parents’ attitude towards his career aspirations had also changed as “influence wise, my Mum, she said ‘teaching’s really a good job … I’m happy with you to become a teacher”.

His Dad went even further as “‘don’t worry if you don’t want to become like a dentist, doctor or anything, if you want to become a primary school teacher, we are happy with that as long as you’re happy with it’”. His brothers and sisters also supported him which he was really happy about. He had the attitude that if any of them had said “no, it’s not a good job, don’t do it” he would be thinking “let’s try something else”. Sajid sums up his feelings regarding family support with “I’m really happy that my parents and my family supported me so that’s why I’m doing primary education”.

As well as his brother having an influence of his initial career choice, Sajid’s parents and family did influence him in other ways. One of the reasons he wanted to stay local was “I don’t like staying away from my parents, I do like staying as much as I can with my parents so I can help them and even if they were an older age I can stay with them and be their extra hand to help them, whereas if I’m away I won’t be able to see and I won’t be
able to help them as much as I could when I’m with them and just being away ... I don’t prefer it”. Even when originally considering Dentistry at Sheffield, when asked if he would ‘live in’ or come home, his immediate response was “I'd be wanting to come home”, but he was hoping to have a car at that stage so “if I finish early during the day I can come straight home”.

When considering whether, or not, to do the BTEC, Sajid had friends who had done it the year before and this had some influence on him. “Last year I had two or three friends who did Forensic Science, BTEC Science and they said it was fairly straightforward and it was really fun and a lot of experiments which I really like – it's mostly with Chemistry which is my favourite subject and they said that if you like it along these lines, it’s fairly straightforward so do it. I can use the A level (AS), so I thought ‘why not, let’s try it’, I’ve tried it and I’ve not regretted it at all”. Some of his friends are doing the course with him and there is an element of competition between them, especially in terms of deadlines as “…the best part is that I’ve always beaten them on deadlines, so if they say anything we I just end up beating them in an argument because I can say ‘well, you didn’t do this, I did this’.”

His brother not only initially influenced his career choice but also the BTEC as “he did Forensic Science … he did Biology, Chemistry, Forensic Science and he did Maths at XXX, he really enjoyed it as well, he said it was one of his favourite subjects … so he told me to do that as well … he graduated in Pharmacy and he got number one, he got … a first … and he said that can help a lot … because the BTEC Science I’m doing involves Biology, Chemistry and Physics which is a good advantage to me as I can do anything which involves those kind of subjects”.

Sajid’s parents were not initially impressed by the fact he was doing a BTEC. “When I told my parents, at first they thought that it’s not even an A level, they were like that …”, and it was only when he explained to them what it was and they had spoken to his teacher that they knew the importance of BTEC. As a result “my parents are more supportive of me rather than they were before”.

When discussing Sajid’s thoughts on the BTEC his views had changed as the course progressed. “At the beginning I thought it’s going to be pretty hard really … they give us the work, they go through it with us, they tell us exactly what we need to know … so, because of our teachers, from start to finish, it’s been straightforward simple for us”, and
that “nothing really changes about except it gets a bit harder if you don’t put your head down …”. When compared to A level he felt that “it would be a disadvantage as A level is harder, deemed as higher than BTEC but having said that for the courses I’m doing they said that it is equivalent to an A level and I didn’t feel any difference. That was perfect for me”. He praised the teachers and their teaching throughout the course and at the end of his 1st year was “really enjoying it”.

When asked if he would recommend it as a course, there was familiar sound to his reply “BTEC obviously if you don’t like exams”, especially as the course he is hoping to study at LMU also has no exams so “it’s basically the same thing as I’m doing at the moment”.

4.3.1.3 Gemma

Gemma is a white British female who comes across as very mature and is a lively, confident student who is keen to talk. Gemma progressed straight from the lower school to the 6th form. As part of her GCSEs she did dual award Science (Core and Additional) gaining two Bs. She is, currently, a year 13 student who is repeating a year for as she explains “I’m in year 13 but I’ve gone back a year, not because I failed anything in my lessons, but because I chose lessons I didn’t like and I decided I wanted to do nursing which meant that, although I did Psychology, the Science would like lift the chances that I’d get into uni a bit more”.

Her career aspiration was to be an adult nurse, possibly working with people who have long term illnesses; this was partially influenced by her mother who has a long term illness.

As well as her other A levels, she “was going to do Biology but it clashed with my other lesson so the BTEC Science was the only thing I could do really … most of the universities specifically ask for a biological science which includes obviously Biology and Psychology or Health & Social Care”.

Gemma started the BTEC Science course as a year 13 student and started attending lessons two weeks after teaching had begun. She hadn’t attended taster or open days regarding the course, but had “talked to other students about it that was obviously they were already on the course”. This, combined with the information regarding her subject choices, suggested that the decision to study the BTEC Science was very last minute.
When interviewed for the final time towards the end of the 2nd year of her BTEC L3 Science course, Gemma already had a C in Psychology A level and an A in Textiles A level. She also had AS levels in Art (D) and Photography (D). She was re-taking her Art to “bump her grade up”. Before she did the BTEC Science, Gemma had got herself into difficulties as she had, in her own words, taken on “loads of really creative coursework that you’ve got to keep on top of”. The result was that she “ended up getting an A in my textiles because I focused very much on that and then my other two creative subjects dropped down to Ds”. She dropped the Photography and picked up the BTEC Science. But, as stated before, she really wanted to do A level Biology but there was a clash. It does raise the question, however, of what sort of advice she had received at the start of her 6th form studies but the answer probably depended on when she decided she wanted to do nursing.

Towards the end of the 1st year of her BTEC course, Gemma had already been researching various universities and course requirements. She was finding that some courses were “a little bit harder to get into just with the BTEC”. As she goes on to explain “I’ve talked to a lot of the unis about it, cos I’ve got Psychology, they’ll take me with the Psychology but a lot of the unis have said well the BTEC Science as I’m predicted a Distinction* looks really good as well, but I think if I didn’t have that Psychology grade it might have made it still more difficult for me to get in with just the BTEC”.

Her initial thoughts on which universities to apply for were quite varied but influenced by the fact that as she says “I want to stay local”. She had already looked at both Leeds University and Manchester University, acknowledging that are Russell Group universities. She had also looked at Huddersfield and Bradford, initially from the perspective that “I didn’t think I’d like them as much because they’re not really, erm Leeds and Manchester are Russell group unis …”, but after the visits her attitude changed to “I really liked both Huddersfield and Bradford”. And specifically regarding Bradford she continued “I was really impressed by it, I didn’t know what I was going to expect and I thought it might be a bit rough because Bradford’s a bit rough isn’t it? But no, I really liked it, the health school was really nice and its right next to the main bit, the health school, so …yeah, I liked it”. When initially interviewed she had still to visit the “metropolitan universities” later in the year as she had missed their open days.

There were several reasons why Gemma wanted to “stay local”. Cost was one factor as “it’s cheaper to stay at home”. Another is that she describes herself as “a family person
so I don’t want to leave my family”, possibly influenced by the fact that, as mentioned previously, her mother has a long term illness. If she had gone to Leeds or Manchester she would “probably have accommodation when there but then I’d still have the option to come home at the weekend”. Gemma would have had to make a decision at this point as, when she had spoken to the universities about where to live and travelling, the advice she received was that “it’s OK for when you want to be at the uni but because I’m doing nursing with placements at hospitals and they could be anywhere so it’s a lot easier to live in the city and travel around. So it’s something I’ve got to think about …”.

When interviewed for the final time, Gemma had applied to do adult nursing at Huddersfield, Chester, Manchester Met, Leeds Met and Bradford. She had offers from Chester and Huddersfield, but had been rejected by the others.

Her final choice of universities that she applied for were really influenced by their closeness to her home, apart from Chester. As she goes on to explain “Chester, I applied there because, even though it’s further away it’s really nice town or city and the uni is really nice”. Gemma’s attitude towards Bradford changed from one of really liking it to one of hating it. “I had an interview and when I went to the interview I hated it, like they put me in a group with more mature students who were so much older than me and I think that I immediately became intimidated …”. By contrast, her thoughts on Huddersfield hadn’t changed as “I applied there because I had my heart set on Huddersfield from the beginning just from looking around and talking to the tutors and the staff were really nice and I just loved the university …”. Gemma’s experience at Bradford came as a surprise, as when she is with her peers she comes across as very mature and confident. Apart from the interview experience at Bradford, Gemma hadn’t really been given a reason for being rejected by the other two universities.

The offers from Chester and Huddersfield were dependant on Gemma gaining a Distinction in BTEC Science (she was on target to gain a Distinction*) as she already had an A and a C grade at A level.

Her parents and family’s influence seemed to move from either not understanding, or having a fixed view, to one of being supportive. When Gemma started the BTEC she summed up her parents attitude to the course as “I don’t think that they really know what it is anyway”, and also that “I don’t think that my Mum and Dad really understand what goes on in 6th form anyway”. But their attitude changed as “they were quite pleased that I was
taking on … cos science is more academic”, and later in the course “they know that I’m on target for a distinction* and they’re quite proud of me for getting that target”. It appeared that their attitude changed as they saw their daughter being successful in the subject.

Similarly, this showed through in terms of her choice of university. Her father originally wanted Gemma to go to Manchester or Leeds (Russell group) but she liked the idea of Bradford and Huddersfield. Her father has a degree, either in Art or English (she wasn’t sure) and this may have influenced his initial thoughts. However, when both had visited Bradford and Huddersfield “he said that he really liked them and they’re up on my list, high up on my list”, clearly showing that parental approval had an influence. Her mother and sister are both hairdressers, but she was adamant that she didn’t want to follow in their footsteps based on her observations regarding the business. “My experience from my Mum and my sisters’ business, like especially in these times it doesn’t really do very well, I’d kind of thought I don’t want to do that at all, so I’ve definitely wanted to go to uni, definitely carry on education as long as I can and get as many qualifications and try to get a good job hopefully”.

Gemma’s thoughts about the course during the 1st year were that “it seems like it’s a good course to me cos I’m doing well in it, and I get all my work done and I find it quite easy to do. I think that’s the reason that I chose to do it”. At the end of the 2nd year she couldn’t remember what her initial thoughts were at the start of the course, but she had to organise her thoughts to be able to decide what she thought about course at this stage. “I kinda think that I enjoy it because I kind of like doing independent work, so … I obviously like doing the experiments in class as well but I like researching … so yeah I like the course”. Her enjoyment of the course varied with the units being studied. She clearly liked the Biology aspects (linked to the wish to a nurse?), but others she found “long and tedious”.

In terms of the assessment methods Gemma was used to doing both coursework and exams due to the subjects she had studied in the 6th form, i.e. Textiles and Psychology. Unusually for a BTEC student she admits to like doing Psychology exams, and considers herself equally good at both methods of assessment. And regarding the work itself “I think that it has got more difficult this year than it was last year … I think it’s a bit harder but I get through it”.

When it comes to comparing A levels with the BTEC, Gemma had a balanced approach to it as “I think like people say that BTECs are easy … they that it’s an easy way out of doing
other A levels, but I mean I’ve done A levels as well like my psychology and my textiles and that … it’s not easier, it’s just a different way of doing it”. She sums the BTEC up realistically as “I don’t think that it is the easy way out as you have to put in the effort to get all your units done. If you don’t do the work, you’re not going to get the grades … I think that people have the wrong kind of perception of it”.

When asked if she would recommend the BTEC Science course, after considering the issues that some of her friends have had relating to university application, etc., her response was lukewarm as “yeah I think I’d recommend it, it is a good to do, I enjoyed doing it … so yeah, I think I would recommend it”.

4.3.1.4 Usman
Usman is an Asian heritage male comes across as quite shy and took a while to ‘open up’, but did introduce a little humour at times. The initial interview was about the length of the majority of interviews, but the second one was curtailed due to time constraints (last in his group to be interviewed). Usman joined the school’s 6th Form having come from another school that didn’t have one. He did Foundation BTEC Science in year 11, which he enjoyed, gaining two Cs. He also did BTEC IT and BTEC Construction, while not referring to any GCSEs he might have done. I didn’t pursue this aspect as it might have been a sensitive topic. He was, at the time, doing Level 3 BTECs in Science, ICT and Business, and had also re-sat his GCSE English Language.

He had attended one taster day specifically to enquire about the course, but he also chose the BTEC L3 Science because he knew what work would be involved in the course and, as he says, “I just felt comfortable like picking it and just carrying on with it”. This logical approach would also explain why on the questionnaire he indicated that parents, other relatives and friends had no real influence on his decision to study the BTEC L3. This was also supported during the interviews as “they (his parents) didn’t really say anything about it; I don’t really talk to them about it and I’m just doing what I feel is comfortable”, and then again later “I don’t really talk to them, I don’t really talk to them much about this because … I don’t know, I just like doing my own work and I don’t like to get anyone involved”. As for the influence of his friends, he knew several people who had come from his previous school but he “didn’t do it (the course) because other people are doing it”.

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Another reason for doing the BTEC courses was because he would rather do coursework than exams as “70% exam and 30% coursework and for me it doesn’t really work that way as I know myself I’ll get a low grade”.

Usman’s aim throughout the course was to apply for Law courses at university. At the time of the initial interview, he had already been researching relevant courses at universities, having already phoned Huddersfield, with the help of Miss J, and knew that they would require at least 300 points with his BTECs. At the end of year 11, his target universities were definitely Bradford, Huddersfield and Leeds Metropolitan, particularly as “I want to stay local”, with the expectation that he would be living at home, as well as offering the relevant courses. This theme also continued in year 13 as, after he’d accepted his offer for Bradford, one “reason why I chose this is because it’s close as well and local, so your local train and stops”.

He applied to Bradford, Huddersfield, Manchester Metropolitan and Leeds Metropolitan, receiving offers from all of them. The offers were for 300 UCAS points from any of his BTEC subjects and he had accepted the offer from Bradford. However, Usman was in line to get 360 points, based on predicted grades of 280 points with Distinction*s in Science and Business and 80 points with a Merit in ICT.

His like of doing coursework also played some part in where he applied to as one “reason is that 57% of the courses is coursework and I like doing coursework”, which I interpreted at the time to mean that they were coursework only courses.

He had a very practical and honest approach to the assessments in the BTEC: “I don’t mess about with my teachers, I don’t be rude to them, just listen to them, ask them for help when I need it, do the work … get it done before the deadline”, and also “coming early before school and going home late after school, I’m just doing the work, not messing about, just do it”. As a result he had finished all his coursework for the Science and the Business BTECs two months early. Usman had started the course with a very positive approach to it that continued throughout the two years, no doubt helped by the early completion of the work.

4.3.1.5 David
David is a white British male who has done a mix of A levels (exams) and the BTEC L3 Science course (coursework). David came across as very confident and that he clearly
knew what he wanted to do and where. Initial impressions, however, would give a contradictory view as his questionnaire was incomplete and answers to questions such as ‘which university he wanted to apply to’ were completed in a manner that would possibly suggest that he either didn’t want to answer the questionnaire or didn’t understand what was being asked. The former suggestion could be reflected by the non-completion of the questions relating to family, etc., the reasons for which were not pursued during the interviews.

There was also some confusion with David’s responses to questions at times, but this wasn’t picked up until the interview was analysed some time later – he would occasionally ‘drip-feed’ relevant information that could be explored or clarified at points in the interview when it was too late, or would appear to answer questions without giving any details. In the initial interview he states that “yeah, I’ve already finished three A levels … I finished Geology and Sociology …” From this he gave the impression that he had fully completed those subjects in terms of final exams, etc., but then in the final interview nearly a year later “I need to get a B in Geology this year, a distinction in BTEC Science this year and I need to get an E in Biology, that’s what I’m doing this year and I need to get a D in History … in AS but if I get a distinction* in BTEC I think that would be better. Yeah, and then I’ve got my insurance which is Derby – they want a C in Geology and then BTEC which would give me 240 points”. He wouldn’t have known his grades at the time of the initial interview, but the implication could be that he needed to re-sit his exams to get a better grade. I’m now not sure whether, or not, he had to repeat the whole of the second year of that subject. It would have been useful to have had the opportunity to clarify some points later.

This is further illustrated when David refers to the points needed as “distinction* … for 140 yeah, and then I’ve already got … I think 70 for the first year ……….. 240 plus Biology … I’ve already got more than 340 anyway … I reckon with this year I’ve got 400”. In a way he had told me a lot without actually telling me anything. It must also be remembered that the students can do the BTEC course over one year (Certificate) or two years (Subsidiary Diploma), both of which carry UCAS points. Most students would probably have stated the subject and grade and then suggest what it is worth in UCAS points and we could both tot it up. In this case I have to trust that David can add up.

David’s ambition throughout had been to do Geology or a related subject. For the questionnaire, when asked “If going to apply to university, which ones do you think you

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will to apply to?”, the answer was “BBB Aberdeen University, petrology degree” and the only “very strong influence” box ticked as influencing choice of course was to “to get a specific job / career”. Parents and relatives had no influence at all. This was continued within the interviews. “I’m the 2nd year of 6th Form now and I’m probably going to stay for a Geology degree … at Aberdeen hopefully” (focus group). Then, when asked during the initial interview where he hoped to apply to, he replied “… Bangor - Masters in Geological Oceanography … Keele … just a regular three year Geology degree, Aberdeen – Petroleum and Geology – a four year one in Scotland … Derby – Environmental Hazards & Geology … and then Plymouth – just Geology”, and confirming later in the interview that “it’s the only subject [Geology] I’m interested in actually.” His reply wasn’t quite as straightforward / easy to follow in the final interview but it appears that his “preferred choice is Bangor”.

David had already completed some 6th form study as he had finished Geology and Sociology A level. He had started A level Chemistry but only completed one year of the course, because as he admits “…. I had to leave the Chemistry and then I did the BTEC after realising that Chemistry wasn’t really my subject…”. He also felt that doing dual award science at GCSE “still didn’t prepare me for Chemistry”.

He had started his BTEC Science and A level Biology at the start of the year in which the initial interview occurred. It seems he was also doing AS History in his final year. Unlike some of his peers, David isn’t averse to doing exams and in terms of the BTEC describes his thoughts as “I wouldn’t say it’s easier, I’d say it’s different …”

4.3.1.6 Comment
All of the students, apart from one, started the course due to being unsuccessful at certain points in their education. The exception was Gemma who is doing the course because of a timetable clash. All of them wanted to go to university and had ideas about where they wanted to go and also the subject areas they wanted to study. Four out of the five were initially influenced about where they wanted to study by their families as they wanted to remain close to home and, for some, the subjects chosen were also influenced by their parents. David, however, was more focussed and came across as very independent and it was the subject that was more important and he didn’t deviate from his chosen end of course trajectory throughout the BTEC course. By the end of the course, two of the others had also become more independent in their choices, having changed their minds either about the subject areas they wished to study, or where in the country they wanted
to study, breaking away from the influence of their home environment to some degree. Several of the students had considered applying to Russell Group universities but, in the end, those that did made more realistic application choices and applied to universities that would accept the BTEC as a qualification when it came to applying through UCAS.

4.3.2 Case studies for students completing year 1 of their BTEC:

4.3.2.1 Nayma

Nayma was a year 13 student who is an Asian heritage female who had completed one year of 6th form study. During year 12 she had studied two A levels and BTEC L3 Business. At the end of year 12 she dropped one subject after doing the AS “because of my results”, and replaced it with the BTEC L3 Applied Science course. She was nearing the end of the 1st year of this course which would give her a BTEC L3 Certificate in Science. As well as the BTEC Science, Nayma was also studying A level Sociology and the BTEC L3 Business during year 13.

During KS4 Nayma did triple Science and got a B and two Cs. “Science was the only one I was really good at in year 11 and year 10 and I took triple Science then and I got really good grades for them”. These results would have been enough for her to do at least one Science subject at A level and she did consider studying a Science at the start of year 12. However, after her initial enthusiasm about her grades, she didn't want to do a science subject at A level as “…it was too difficult, I didn't want to do it at A level as I just about got the grades at GCSE and I wasn’t really that interested in that anyway and …”. She would, however, have been interested in something like A level Applied Science if it had been an option.

There appeared to be, however, some regret at not taking a Science option earlier as “if I’d took that at the start of this 6th form I think I’d have got a better qualification rather than just an AS, or half a BTEC or whatever it is …”.

Nayma, although not the only one, appears to have done a mix of subjects and qualifications. When choosing her options “there were three lists and then there was a variety of BTECs, a variety of A levels …”. When asked if anyone had advised her “…yeah, the careers lady, she obviously helped me and some of my teachers as well … they helped me to choose” and further on she explains her thought process when “in year 12 I was making my options after year 11 … obviously I look at the options, there were
three lists and then there was a variety of BTECs, a variety of A levels and my mind then was just that I don’t want to do BTECs because … I’ve always been working at a really high level in A level and stuff that’s been really like hard and stuff … and level 3, we’ve done all that in high school so I was thinking that there’s no point in us doing that again after A level it’s just a BTEC, so my mind then was that I don’t want to do any BTEC …”. However, when she dropped one of her A levels after doing the AS in that subject, she needed another subject for year 13 to study. “I didn’t want to choose BTEC because I think that even though they say it’s like an A level it’s not …”. In the end the BTEC L3 Science was the only option available that she was interested in.

Regarding a potential career, Nayma had no plans to go to university as “…I just want to work like, I just want a nice job … like in business … could be like in a company, an insurance company … just like admin or reception … something related to business”. When asked if she had an interest in going to university an emphatic “no” was the response, which went against the general trend, but she did appreciate that “I can still go to uni in the future”.

The impression that Nayma gave was that her family didn’t appear to ‘communicate’ much about what was occurring with them educationally. In terms of her parents’ thoughts on doing the BTEC she revealed that “well, it’s kinda the same in our family like, we don’t really talk about what we want to do, it’s just our choice to do whatever …like my Mum, she doesn’t really … she does care but … she’s not too fussy what I choose but she does want me to stay in education … she asked me about my marks at the end of year 11 and she asked me what I want to do …”. In a way this apparent lack of communication was reflected when asked what her sister, who is at the same school, will do in the 6th form as she is near the end of KS4. “I don’t really ask her” was the reply. She didn’t refer to any other relatives at any point.

Nayma’s attitude towards exams was one of “…I don’t really like exams because I don’t think that it’s fair to judge one’s indication and everything on one exam … so BTEC has an advantage that way because it’s coursework and you can just, sort of, do it as you are going along rather that at the end of the year after so much work and just remembering everything … I mean personally I don’t like exams cos I’m doing Sociology I know what it’s like … so the only thing BTEC does is have no exams”.

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This approach continued in terms of the assessment process as “I think because we’re doing three units and we’ve got two different teachers, it’s like we’ll start something but before we will finish it we like have two lessons to do it and then we’ll move onto a different assignment so I think that’s why a lot of people sort of like fall back on work I think because they just leave the work incomplete and then have to move onto another assignment, so there’s a lot of assignments to do … but I wouldn’t say they are so hard to do, I’d say they are sort of OK, it’s just like meeting the deadlines of them which is sometimes quite tricky …”.

Regarding the value of BTEC, Nayma’s view was “I don’t think it’s seen to be that important when you go to some universities because some universities … they just want people to get straight A levels, they don’t really look at the level 3 or the BTEC qualification …”. Although not intending to go to university, Nayma’s thoughts on why students choose the BTECs were pretty unambiguous as “most people choose it because they have to obviously meet the UCAS points for that university …”.

Nayma’s thoughts for anyone wanting to do the BTEC were that “I would say that if you really don’t like exams then obviously do the BTECs but if you think you want a better chance to go to uni then do you’re A levels”, which is a general feeling that came across in the focus group. But Nayma’s view towards her studies overall was one of “all I want is the grades and then get a job”.

4.3.2.2 Lucy
Lucy is a white British female who, although she participated in the research activities, had a curtailed 1:1 interview due to the end of session bell, but the interview did continue for a few minutes afterwards. She did triple Science and got Cs for the three subjects. She was also aware that she had done better in some aspects of the subjects than others and knowing that she couldn’t choose which sections she could attempt in an exam had put her off doing an A level in Science. She also knew that she would have needed a B to study an A level science subject. She was advised after her GCSE results, by Miss J, that there was an alternative to A levels if she wanted to continue with science. When asked if the school pushed A levels Lucy suggested that “I suppose in some ways they do but if you’re clever enough to do Biology or Chemistry, Physics … then you’ll be pushed to do that”. Interestingly, Lucy didn’t know what Miss J’s role was but she knew that “she’s not a careers person, I’m not really sure what she does …”.

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She was not keen on exams as “… I'm not very good at doing the exams … they kind of scare me a little bit so I always seem to mess them up … so it (BTEC) seemed to allow me to carry on with doing Science without, like, the stress of exams …”.

When asked about her family’s reaction to her doing BTECs, she admitted “… well, I think that they’re all aware that it’s not, like, that respected as a course at uni but because I’m doing three other A levels it’s just, like, allowing me to boost up my points really, so I don’t know really, I’ve not asked them”. In terms of peer influence on studying the BTEC, there was no peer influence before she started the course.

Asked for her thoughts on doing coursework instead of exams, Lucy felt that “it does take quite a lot of stress away. You know that you’ve got time to think it through, when in exams you’ve got a minute, two minutes to know the answer … yeah. I like that aspect of it … at the same time it’s not as good as A level is it?” The conversation continues:

**interviewer**: it’s a different approach
**Lucy**: yeah
**interviewer**: are you really saying that not everybody appreciates it …?
**Lucy**: yeah
**RH**: so do you think that will influence where you apply to?
**Lucy**: yeah, definitely

Regarding thinking about going to university, she had “kind of, I think I’d like to go but I’ve just not sure what to do”, but she had “not a clue” as to where she will apply to. This is also reflected on her questionnaire responses. She does recognise, however, that doing the BTEC is “allowing me to boost up my points really”.

**4.3.2.3 Nosheen**
Nosheen was an Asian heritage female in year 12, who came across as relaxed and had a ‘light-hearted’ approach throughout and this showed through when we had a general chat after the individual interview had technically finished. She did KS4 at the same school and for her science subjects at GCSE she did Additional Science, obtaining two Cs. Nosheen originally wanted to do A level Biology and would have gone on to do Biomed (Science). This interest in doing A level Biology was influenced by her family as “I think the only reason I’d have done Biology if I did get a B was because my brother’s done it, my uncle’s done it … so I want to like keep on going”, but then dropped in that “I wasn’t
really interested in it”. This would have required a B at GCSE, but due to her results she was recommended to do BTEC Science by her Science teacher who told her that “I think you’d be good at BTEC Science”.

Based on her results, Nosheen originally wanted to take Sociology, Psychology, English Language and BTEC L3 IT during year 12, but she “couldn’t do Sociology and Psychology because my courses are clashing”. Due to this she was doing Psychology and English Language at A level as well as BTEC level 3 in both Science and IT. She had the option of dropping subjects at the end of year 12 and her thoughts were that she was “dropping IT”. This would have given her a BTEC L3 Certificate in IT that carried UCAS points.

In terms of progression using the BTEC, Nosheen initially chose BTEC Science “cos I thought it might take me somewhere, maybe I could do a foundation course (Biomed Science) and then I could do like a higher course at university”, but she admitted that “I don’t really see myself going anywhere with it”.

Nosheen’s career aspiration at the time was to go to university to do a Psychology degree as she admitted that “I do find Psychology interesting”, and that “the only reason I’ve kept Science is I want to do really well in Psychology and I want to do Criminology at university … so I want a bit of Science to be there”. She was, however, unaware that Psychology could be studied either as a BSc or a BA, but after some discussion concluded that “I wouldn’t do the science based one”.

Despite the fact that her uncle also had a degree in Biomed (Science) and that her brother had done A level Biology she hadn’t “really been pushed into … I haven’t been forced into what subjects I should do” by her family and relatives. “They all said ‘do something you’re happy with’”. But then in contrast “then again, I don’t feel that they’re happy that I’m doing a BTEC … cos my Dad was going ‘you’re only doing two A levels’”. She also revealed later that he had suggested “why don’t you become a forensic scientist … like fingerprints and all that … and work for the police”, but she would “prefer talking to people and about their life”.

It also became evident further into the interview that there had been no peer influence for her to study the BTEC.

Nosheen seemed uncertain as to equivalency between BTECs and A levels and after some discussion offered “merit is B, C is pass, distinction is A … and then distinction* is
A**. What she wasn’t aware of was that a Pass at BTEC, if she does the subsidiary diploma, is equivalent to an E at A level.

Despite the equivalencies stated Nosheen thinks “but it’s just that BTEC compared to A level is so much easier … cos I don’t have to revise for it …”. This is reflected in her attitude to BTEC assignments as “how do I find them? … really easy”, and a little later “if I do pass / merit on one piece of work and distinction and I hand it in and my distinction is not good enough, he will give it back to me and he will say to me “look, you need to improve on this, do this”, and I will go back and improve it and give it back to him the following week … I mean some people don’t hand it in, like, for ages”. When asked if there were penalties for late submission she giggled with “they do like keep pestering you, like ‘where’s your work, where’s your work?’” while giggling a lot at this. It became apparent that they had a set format to follow for writing up work and even at this stage in the course “if I was given an experiment to do myself, I would do it and then write the report up without asking for help or anything”. She admitted that she had been trained to do it that way.

This theme continued after the interview had ‘finished’ as there was some general chat about university courses when Nosheen unexpectedly continued the previous theme with “I’m not boasting, or anything, but I think that it will be really easy for me to get Distinction* in Applied Science … you just have to get distinction in two units … so I find BTEC Science has an advantage in one way as I’m getting more UCAS points for the course I want to go into … but if I were doing an A level I would have to work maybe 20 times harder, revising all the time for it and this one I don’t have to revise, I just do the work and get my UCAS points at the end (giggles). Like I can guarantee that I’m going to get this much UCAS points, whereas A level is not like … it’s not expected which scares me a little bit (giggles)”. 

Parental influence was apparent when discussing attending university and where she might apply to. One option was “Huddersfield, somewhere close to home … my parents want me go somewhere like that … they don’t want me to live away from home basically”. Another option was Leeds and “if my brother goes to Manchester University and if he gets a flat there, then they’d be alright as I would have my brother around me …” These universities are easy to get to using train or bus. Continuing this line of thought, Nosheen had considered going to Greenwich University as she had cousins living in London and tentatively asked her Mum about it, but was put off by the grades that would be required.
Nosheen’s friends were doing A levels instead and had no influence on her decision to do the BTEC.

4.3.2.4 Lewis
Lewis is a white British male who showed uncertainty throughout the interview and it was hard to get him to ‘open up’ which is reflected in the length of the interview. I was also acutely aware of the limited time that I had been allowed with the result that I felt that it would be more fruitful to move onto interviewing more willing participants.

Lewis did Applied Science at GCSE and got a D, which went against the entry requirements for the school 6th form, especially for A levels, but there is doubt as “er, I think it was a D … I didn’t do very well at GCSE …”. This might reflect the fact that he was doing three level 3 BTECs – Applied Science, Sport and Business, which he was advised to do by the careers people as “they told me what I could do after”. This type of advice would continue through the 6th Form in tutorial sessions with his form tutor. He admitted that he found the BTEC courses suited him better as “I’m not that great in exams.”

In terms of university / after 6th form, Lewis hadn’t really thought about it at that stage. He might apply to university to do Business, but as he admitted “I’m not 100% on anything”. He thought that he will probably remain local as “I don’t really know to be honest … stay close to friends, maybe family, I’m not really sure”.

There was no family or peer pressure. Regarding family pressure “they were fine with whatever I was going to do …”, and in terms of friends …

Interviewer: have any of you friends, or any of your peers, are they doing the course with you; you know that you did your GCSEs with?
Lewis: the Science course?
Interviewer: yeah
Lewis: not really, no
Interviewer: so it was off your own bat, no influence from outside really … from what you’re saying it’s unlikely that you’ll follow Science after you’ve finished?
Lewis: yeah, probably not, it’s unlikely, yeah.
With doing the three BTECs, Lewis was aware of the realities of applying to university and UCAS points. As he said “if I can get like distinctions then its better from the UCAS point, it’s just that some unis don’t take BTECs” but, although not citing points for grades, he also knows their value as “I’ve looked at the UCAS points and it’s if I get three distinctions, then I do get quite a bit of UCAS points”.

4.3.2.5 Comment
In some ways this second group of students was very different to the original group. Everyone within this group had started the course due to being unsuccessful at one point in their education. In complete contrast to the first group, only one student definitely wanted to go to university, another was adamant that she wanted a job, while the other two (Lewis and Lucy) didn’t have any clear progression route planned and seemed uncertain about their future generally.

4.4 Overall: Nearly all of the students interviewed would rather do coursework than exams although the majority of them were also doing A levels. They all recognised the value of the BTEC in terms of UCAS points at an early stage of the course and as the course progressed began to plan strategies to make the course work for them. Some of the parents were not keen on the students studying the BTEC but in these cases the students actively persuaded their parents, by a variety of means, to accept the course. These points are discussed in more detail in the next chapter. A table summarising some of the differences and similarities of student information from interviews is given in Appendix 7.
5. Factors influencing student choice

5.1 Introduction

In this chapter the findings will be discussed using Hemsley-Brown and Foskett’s 2001 Integrated Model of Educational Choice. A reminder of the model is provided below:

The model will be used at two points of reference which allows the research questions to be addressed. The first point would allow consideration of what influenced students to study the BTEC course. The second point would explore the students’ trajectories throughout the BTEC course. The main source of information would be the longitudinal cases studies of the students at School 4, supported by information gained from the questionnaires. It should be remembered that the situation for school 4 is atypical when compared to the other three educational establishments used in the research. At Colleges 1, 2 and 3, the BTEC Science at L3 would be full-time, probably being the only programme studied, whereas at School 4 the BTEC is studies alongside other programmes.

These ‘points’ will be discussed in terms of different contexts and choice influencers within the Integrated Model. A reductionist approach will initially be taken which will then be brought together to give a holistic overview. The Integrated Model of Educational Choice can be understood in terms of Bourdieu’s ideas relating to the concept of habitus, while not utilising them explicitly, to explain the interplay between structure and agency and
their influence on student choice. This approach allowed the complex nature of the case studies to be highlighted as there was no ‘one glove fits all’ and each case had its own unique character. As a result, there were similarities between cases but they couldn’t be applied to all; in reality the only similarity that all the cases had was that the students were all attending the same school at the same time. This made it very difficult to draw out and express what the similarities are and although a reductionist approach was taken, it was always in the knowledge that other factors were having an impact at the same time.

5.2 Point 1 - entry onto the BTEC Science course

From the questionnaires the overwhelming influence on the students’ choice to do the BTEC was ‘to get a specific job / career’ at 91%, of which 65% were either strongly, or very strongly, influenced. This should not really be surprising as the BTEC courses are usually seen as being vocational, although not as focused as a NVQ or VRQ type qualification. However, care needs to be taken when interpreting these responses, especially as they were not reflected through the interviews. The next section of the questionnaire asked the students what they wanted to do after completing the BTEC course with 90% of the respondents indicating an intention to go to university which they then linked to a specific career. When students were interviewed, this progression route of university and then career showed through very strongly and it is more likely that the respondents to the questionnaire reflected this trend of progression route which is discussed in detail in point 2 (proposed student trajectories during the BTEC Science course) below.

Students entered onto the BTEC L3 Science course at School 4 with a range of qualifications and for a variety of reasons. The qualifications used to gain entry on to the BTEC Science course were Triple Science, Dual Award or BTEC L2 Science. It has to be remembered, however, that these students were doing their particular course alongside other qualifications, and so the situation relating to these students would probably not reflect those in colleges 1, 2 and 3. The initial picture was that students at School 4 fell into one of two categories.

5.2.1 Category 1

These students started the BTEC Science course from the onset of their 6th form studies. The students’ entry qualifications on to the course covered the full range of those available at KS4.
At KS4, Usman had done BTEC Science at level 2, achieving two Cs. He also studied BTEC Construction and BTEC ICT. It seemed, therefore, a natural progression for him to choose to do BTEC Science at L3 as "I had some knowledge of what work would be in the course and I just felt comfortable like picking it and just carrying on with it" (1st interview). He was also studying BTEC L3 IT and BTEC L3 Business. He was also allowed to re-take his GCSE English as it wouldn’t affect his timetable.

Another student, Lewis, who did Applied Science at GCSE, had a straightforward and honest reason for choosing the course, which wasn’t helped by the grade he got … "I didn’t do very well in my GCSEs, so I kinda had to take this cos I had no other subject to do", and then later "er, I think it was a D … I didn’t do very well at GCSE …“ (1st interview). This student is also studying BTEC level 3 Sport and BTEC level 3 Business.

Rachel had done a mix of GCSE and BTEC. She had done BTEC in year 10, gaining a Merit, and then GCSE Applied Additional Science in year 11 in which she got a D. These grades would not have been enough to allow her to study a science subject at A level. Besides the BTEC Science at level 3, she was also doing A level English Literature and BTEC level 3 IT.

To complete the range of entry qualifications, Lucy had done Triple Science having “got all Cs”, and knowing she required a B to study science at A level, she continued “they just said, like, there’s another alternative which was BTEC” (1st interview). At that point she didn’t know what a BTEC was. As well as doing the BTEC Science, she was also doing A level English Literature, English Language and Geography.

Some students seemed uncertain exactly which level 2 science qualification that they had actually taken. Nosheen was a case in point as “Additional … I don’t know, I’m not sure“ (1st interview).

The scenarios above were also reflected by some of the comments on the questionnaires when the respondents were invited to provide additional comments on their choice to study the BTEC Science:

R. Hutchinson – June 2016
“As I failed English I had to do this course as it was the one to do with science”
“I did BTEC Science at school as well”
“Wanted to do full A levels at first”

Does this illustrate the range of qualifications available to students at KS4 and the confusion that can arise from this? As discussed within the findings, there are at least three different types of qualifications that a student can use to gain access onto the BTEC Science course, not to mention that the BTEC L2 has four different sub-qualifications with different GCSE equivalencies and that there are two different levels (higher and foundation) at GCSE, both of which would allow students to access the BTEC L3. The findings appear to support those of Foskett and Helmsley-Brown (2001) who suggest that by the end of compulsory education (year 11), the majority of young people (they suggest 95%) have made a decision about what they will do next with most decisions being provisional depending on the results of their GCSEs or other L2 programmes.

However, it has to be noted that the students who started on this route did not meet the requirements to study a science at A level which required at least one B grade in a science at GCSE. The range of qualifications actually achieved was appropriate for entry onto the BTEC Science course, except for Lewis who did not meet the specified entry requirements for the course. There was no explanation as to why he was allowed to study the BTEC but from my own experience, if students obtained a D grade at GCSE they have often been allowed to study the BTEC at L3. This could be due to the fact that if a student isn’t offered a suitable course they will go elsewhere (and so funding will be lost) or, due to the assessment method being mainly coursework, the student is offered the course with a reasonable expectation of success which would be unlikely with A levels. This was certainly my experience when I taught post-16 students in an FE college. This would also reflect Helmsley-Brown and Foskett’s (2001) view that “at all stages, non-academic pathways are seen as the option of those not able or willing to access academic routes” (p5). The perception of parents would generally be that A levels are the only true academic qualifications and that BTEC is viewed as a ‘lesser’ qualification, which is something that did arise during the student interviews.

Due to the grades achieved at L2, these students had a restricted choice regarding what they could study at L3 if they wanted to do a science, with an A level science subject not being an option. As Helmsley-Brown and Foskett (2001, p6) suggest “for many young people, the reality of their eventual choice is one that emanates from a failure to achieve
their original personal goals. Their choices are second (or lower) choices and they must go through the process of defaulting to lower ambitions in pathway and career choice arenas”.

All the students, apart from one, had progressed from School 4’s year 11 to the 6th Form and year 12. The fact that the school offers the BTEC as an alternative to some A levels, allows the students to be offered a range of alternative routes at the end of KS4 if they decide to stay on at the school. If they didn't, it might mean that the school would lose those students to alternative educational institutions and so lose funding.

5.2.2 Category 2

These are the students who were in Year 13 and had picked up the BTEC Science after ‘dropping’ other subjects for a variety of different reasons. This showed through on the occasional comment on the questionnaire responses …“I’m re-sitting the year and wasn’t able to do AS Chem so I did BTEC”. This was reinforced in the interviews.

David, during one of the focus groups, admitted that he had failed an AS and had picked up the BTEC Science to compensate …

“I did Chemistry 1st year at AS and I think I got like a U in it ...” (1st focus group),

and then, during his first individual interview “I didn’t actually do the BTEC until the 2nd year and I had to leave the Chemistry and then I did the BTEC after realising that Chemistry wasn’t really my subject, well I chucked it in my 2nd year …” (David, 1st interview). David wasn't the only respondent who seemed to have forgotten poor grades – this was usually during the first interview with the students and maybe reflected their uncertainty about me as the interviewer as I was unknown to them and they didn't want to admit to not doing as well as they had hoped? Maybe they were protecting their self-image.

Gemma decided to do BTEC for several reasons, although she hadn't failed anything. Firstly, to increase her career chances as … “I decided I wanted to do nursing which meant that, although I did Psychology, the Science would like lift the chances that I’d get into uni a bit more” (1st interview). Secondly, she originally wanted to do A level Biology but there was a timetable clash “so the BTEC Science was the only thing I could do really ...” (1st interview), but this may have been a blessing in disguise as she had
“heard that the biology course is really hard and that the exams are horrible apparently” (1st interview). This knowledge and the timetable clash, combined with knowing what the method of assessment would be and her experience of coursework for her other A level subjects, had influenced her decision to study the BTEC.

Nayma did two A levels and a BTEC in Business in year 12. She dropped one A level after doing the AS and needed to pick another subject, as she explained … “… it was just at the beginning of year 13, it was because of my results, obviously I had to drop one A level and then I was left with BTECs and then I had to just choose Science” (1st interview).

These three students were typical of students in this position, either using the BTEC to compensate for a subject that they may not have performed in as well as they may have hoped, or as a stepping stone to achieve a particular goal. Gemma had clearly thought past the end of the course and what career path she wanted to follow, and having two Bs in Science at GCSE and so would have easily met the entry requirements for A level Biology. But again the choice the students made to do BTEC Science was a restricted choice, even if due to a timetable clash. Structural factors as described by Blenkinsop et al (2006) steered the students down this particular route.

One student’s comment on the questionnaire maybe summed up the realistic ‘choice’ some students had at the end of Year 11 … “Didn’t choose it”. While it could be argued that such one off comments can highlight the limitations of a quantitative approach, it is very revealing about the non-choice that students have, but not all of them will recognise, or accept, that this is the true situation they find themselves in. This does come through in the interviews, but it would have been useful to explore this aspect further with this particular respondent.

Taken in isolation, the examples above represent ‘institutional’ aspects of the Integrated Model both in terms of the passive context and active influencers. The passive context shows itself through an implicit expectation that the students will continue through from KS4 to the 6th Form in School 4. There is also an implicit expectation that students will do A levels in the 6th Form but alternative courses have been provided, such as BTEC L3 ICT and BTEC L3 Business, which will encourage students to remain at the school if certain A levels are not an option for individual students. This aspect wasn’t really discussed by the
students and some, such as Lucy, were initially unaware of BTECs as an alternative at the start of their 6th Form studies. She was the only one who referred to it when asked directly … “but if you’re clever enough to do Biology or Chemistry, Physics (A levels) … then you’ll be pushed to do that” (1st interview).

5.2.3 Who did they go to for advice?
It is when a student’s expected progression is disrupted and alternative routes need to be considered that the active choice influencers, such as the influence of teachers, etc., become obvious in terms of the choice to study the BTEC L3 Science. As can be seen from the discussion above, the disruption to a student’s progression occurred either at the end of KS4 or at the end of Year 12. This was usually due to not achieving their expected grades or, as in the case of Gemma, a timetable clash.

It would be at this point that the students came under the active influence of the institution. From the questionnaires 14% of respondents felt that they were strongly influenced by teachers to do the BTEC Science course, while overall 69% of the students were influenced to some degree in this way. Sources of advice for those interviewed within the school, however, appeared to be confused. Some students mentioned careers advisors, others had clearly spoken to teachers while some were unsure what the role was of the person giving the advice was within the school.

Miss J, the only person who was named as giving advice, seemed to fit into the “unsure what the role was of the person giving the advice was” category. When Lucy was asked if it was careers who advised you to do the course, she replied … “Miss J, but she’s not a careers person, I’m not really sure what she does … but she said “do it”, so …” (1st interview). She is not a listed careers advisor. Another student, Usman, mentioned Miss J but, again, didn’t suggest what her role was … “…I rang there, Miss J helped me ring the Huddersfield University people, specifically like the people who do Law …” (1st interview).

Careers advice within the school is formally provided by a contracted outside agency. They provide two regular staff, each for two days a week, covering four days of the school week, as they “provide an invaluable service supporting students with their decisions regarding future progression”. Furthermore, according to the school’s website “all Year 11 students will automatically receive an interview” and there are lunchtime drop-in sessions
for all 13-19 year olds. There was a feeling from some students, who provided information informally, that the careers people were more focussed on those who didn’t know what they wanted to do at the end of year 11. IAG [information and guidance] is also provided by teachers during relevant curriculum sessions.

This perception by the students would suggest that there was an expected progression route for the students within the school and that the careers advice provided was there for those who may not follow the expected routes. As the school has a 6th form and students equate to funding, there would be truth in Helmsley-Brown and Fosketts’ (2001) conclusion that there is “institutional pressure for teachers to push young people towards decisions that are primarily in the school or college's interest because of its own competitive needs” (p3). Indeed, the students indicated that advice came from both careers and teachers. Nayma, a year 13 student, had dropped an A level at the end of year 12, and needed another subject … “Yeah, the careers lady, she obviously helped me and some of my teachers as well … they helped me to choose …” (1st interview). Nosheen “got recommended the subject from my Science teacher” (1st interview). And for some there seemed to be an expectation in terms of progression routes in year 11… “I think they knew like … I think that some teachers could tell in year 11 that you were going to stay on with that subject …” (1st focus group). It seems to be that these students no longer have a free choice if they wish to do a science subject and they are being directed down a particular route. It may be that both the staff and the careers had a given script that both follow to keep students at the school.

While the students didn’t criticise those who gave them advice, and were on the whole positive about the advice given, a mixed picture emerged of who was giving the advice. This may raise concerns regarding the effectiveness of those whose role is to give ‘career’ advice. As the DfES (2007b, p8) suggests “many careers lessons and libraries are ineffective. The role of careers co-ordinator is often not a priority for the post holder, and they often lack expertise. Libraries vary in quality and consist of a lot of print material that young people either cannot find their way around, or do not want to read. Pupils do not rate careers lessons and prefer CEG [careers, education and guidance] which is less didactic and more experiential (e.g. college visits, enterprise education days, company/site visits)”. This may be reflected by the questionnaire results linked to how the students obtain information. It also has to be remembered that three of the four colleges participating in completing the questionnaires provide education at 16+ and the students...
will enter those colleges from ‘feeder’ schools. As none of the students from these colleges were able to be interviewed, no comment can be made as to the quality of the CEG / IAG that they received.

As an active influence, the role and effectiveness of Connexions and careers advisors is called into question in relation to the questionnaire findings, reflecting the conclusions of the DfES (2007b). Only 5% of respondents indicated that they had a ‘very strong influence’, and less than half suggested that they had any influence at all in helping students decide whether, or not, to do the BTEC course. No one, during the interviews, referred to the Connexions service possibly implying that these students didn’t include them in the decision making process. This contradicts Helmsley-Brown and Fosketts’ (2001) conclusion that “The role of careers guidance is important as a counter to existing attitudes, knowledge and perception, and is a critical factor where young people from social backgrounds with no family traditions of FE or HE make a choice to pursue such a pathway” (p3). However, the feedback from the students would suggest that the passive influence of the institution and the expectation of continued progression within School 4 make the role of organisations such as Connexions seem irrelevant to these students.

**5.2.4 The influence of the home environment**

In terms of the home environment and course choice, 75% of the students who responded to the questionnaire indicated that parent(s) / guardian had some influence on their decision, with 16% being influenced very strongly. This would be expected up to a point as the majority of students are in the 16 – 18 age groups and probably living at home, but what cannot be determined from the questionnaire is whether, or not, the influence is implicit or explicit. Again this is a weakness of the quantitative approach.

During the interviews it became apparent that for some students family background clearly had an influence, even if they did not think of it in that way.

Rachel’s family, on her father’s side, are Iranian with her uncles being doctors and her cousin training to be a vet at a UK university. The assumption is that they would have a ‘traditional’ approach regarding qualifications and that her cousin “set the bar so high I'm just trying to get over that” (1st interview). She suggested that they would be very aware of A levels but had no knowledge of BTECs and regarded them as “not being proper A levels”. By contrast Rachel “hates exams” and had already had experience of a BTEC in KS4. As a result the BTEC met her needs but the qualification did not meet the
expectations of her father. She decided to study the BTEC even though she was aware of her father's views on the qualification. Her mother, however, was more supportive and both undertook a process of changing his point of view regarding the BTEC after she had started the course. This process was achieved due to Rachel's assessment results throughout the course. Rachel had clearly gone against the implicit influences at home.

This view that BTECs are not proper A levels was also an influence for Sajid, who like Rachel, changed his parents' views over a period of time after starting the course. Again though, his family seemed to have a traditional perspective towards education and careers as his parents said that they wanted him “to do something along the doc, you know Asians (laughs), the doctor lines …” (1st interview).

By contrast, Gemma's home influences were along the lines that her parents did not really understand what occurred within the 6th Form at School 4. However, when she started to get Distinctions for her coursework, the home environment became more supportive. But the home environment became a choice influencer, not due to a positive approach within it but, by what Gemma regarded as a negative aspect of the home environment. Both her mother and sister are hairdressers and, due to observing what happened to the business, especially when it wasn't performing well, Gemma decided that she wanted to “definitely carry on education as long as I can and get as many qualifications and try to get a good job hopefully” (1st interview).

Usman, however, felt that his parents and relatives had no influence on his decision to study the BTEC. He came to this conclusion because "I don’t really talk to them about it and I’m just doing what I feel is comfortable … I just like doing my own work and I don’t like to get anyone involved” (1st interview). However, what was not revealed was the influence the home environment had on his decision. Usman had already sown the seeds for his decision to do the course as he had already studied three L2 BTECs during KS4 at another school, which may have resulted in his parents already accepting that he would study BTECs instead of A levels, even if it possibly went against accepted culture within the home environment. The same applies to Nayma and Lucy, neither of whose parents communicated with them about their education and that it was their choice about what they did. Nayma did reveal that her mother wanted her to stay in education and Lucy, although her parents didn’t feel that BTEC courses were respected by universities, felt that because she was doing other A levels, they were fine with her doing the course.
What is not known about the parents of these students is their social background and knowledge of education, but Helmsley-Brown and Foskett (2001) suggest that “middle class aspirations relate strongly to notions of economic advancement and social status, while working class choice is focused more strongly on the young person’s own preferences and the desire to preserve social acceptability” (p4). To definitely state which social grouping these students belong to would be purely an educated guess that could not be made without more knowledge of the home background.

Although there was influence from other relatives, it is not as strong as that for the immediate family with 51% overall stating that they had no influence on their decision, with only 5% being strongly influenced by them. In terms of the groupings, 53% of ‘Asian heritage’ students suggested that other relatives had some influence in their decision compared to 44% for ‘white British’ students. Other relatives may not only include an extended family but also brothers and sisters. Again, could this difference be due to ethnic or cultural differences and the relationship that the students have with their other relatives? The interviews supported the findings of the questionnaire in that there was some influence from close relatives which could be both positive (Sajid’s brother had done the Science BTEC) and negative (Rachel’s cousin setting the bar high). Relatives were not referred to by interviewees as frequently as parents/guardians and not all participants referred to other relatives, which may well indicate where the main influence within a family, or home environment, came from.

5.2.5 Social context

Foskett, Lumby and Maringe (2003) suggest that social context has several meanings. The first one links the term with family, social class and cultural heritage but I feel that this overlaps too strongly with the passive home environment of the Integrated Model and that it then becomes difficult to differentiate between the home and social environments. The second meaning refers to an individual’s social and leisure aspects of their life. As students get older, the pressures move from the social context of the parents as they will make choices for the students initially, to the students themselves. As a result there are pressures, and influences, that relate to an individual’s group identity and self-esteem leading to an individual’s establishment of their social status and ultimately lifestyle. Foskett, Dyke and Maringe argue that for students choosing “institutions and programmes which attract ‘people like me’ or ‘people like I aspire to be’ is a key element in the choice process”, and that matching choices “to the choices of friends and peers protects group
identity and bolsters self-esteem" (p6). It is this second interpretation that will be used when discussing a student’s social environment.

From the questionnaires overall, there was a fairly even split in terms of whether, or not, friends had an influence on the respondents’ decision to do the BTEC course, with 7 - 10% being strongly influenced depending on the nature of the question asked. However, if School 4 was considered in isolation there are a group where no-one is strongly influenced to study the BTEC by their peers or friends. These differences may well reflect the nature of the institutions within the sample. Students going to Colleges 1, 2 and 3 will probably only be studying the BTEC Science L3 and as all the students will have moved from feeder schools, there may be a high possibility that some of their peers and friends may have moved with onto the same course after KS4, so maintaining group identity, etc. At School 4 however, as already discussed, the institutional context ensures that students will have generally progressed into the 6th Form, usually expecting only to study A levels. This would imply that they will maintain their group identity, etc. It could be argued, therefore, that in the majority of situations where students have started to study the BTEC L3 Science at School 4, whether due to poor qualification results or a clash of timetables, this will not ‘fit’ their group identity and social status in terms of the ‘value’ of qualifications. As a result this could be quite a departure for these students in a social context. When interviewed, Usman and Lucy were typical of the interviewees in that their friends, and peers, had no influence on choosing the BTEC course, but many of the interviewees referred to their friends only in terms of studying A levels. Although the questionnaires didn’t allow this to be explored, it is possible that there are two distinct groupings within the participants, not only regarding what students do at the end of KS4 in terms of leaving school and going to a new educational establishment or progressing within their current one into the 6th Form, but also in terms of maintaining the group identity, or possibly not in the case of School 4.

5.2.6 The influence of the lived environment
These differences certainly show through when the context of the lived environment (geographical locations) is considered. All students attending Colleges 1, 2 and 3 will have moved from schools that probably offer 11 – 16 provision, which may not be in close proximity to the colleges. This, in itself, could be an upheaval for these students which could have a marked effect on the other environments in their lives, i.e. home, social and institutional contexts. For School 4, however, the institution itself and the majority of students expect progression from Year 11 to Year 12 in the school’s 6th Form, which
would be part of a somewhat passive process. For the transition from Year 11 to 6th Form / college study, especially for those who change institutions at the end of KS4, active influences would be expected to assist the student in their choice.

Within the Integrated Model, these active influencers include media and other methods of relaying information to the students. Overall, 80% of the respondents were influenced to choose the BTEC course by information from the college or school, with 54% being either strongly, or very strongly, influenced by this. 63% of the respondents got their information regarding the course from open days / evenings, with 20% from the websites and 11% from leaflets. One student mentioned the college prospectus as a source of information, but it would be expected that this would be accessible through the college websites, and may have been viewed early on in the decision making process, even if just to see what was available.

The popularity of the open days / evenings was evident from the focus groups and interviews as … “they have an open evening in the 6th form block for the year 11s and all the subjects have different things like catering, cooked food …” (1st focus group), and “… you get like different subjects in different corners. You can choose certain subjects …” (1st focus group)

Foskett and Helmsley-Brown (2001) pick up on the fact that the promotion of courses by post-16 providers occurs almost exclusively during year 11, by which time at least 50% of the students are well into the decision making process, possibly having already made their decision. This, in itself, has implications for the post-16 providers in terms of when best to supply information for potential applicants. The situation may well be different for schools that have a 6th form (such as school 4) as they would probably expect the majority of their students to progress into their 6th form. This is what Foskett, Dyke and Maringe (2004b, p54) concluded as “The provision of a sixth form within a school is an important influence on the decision of young people to stay on and participate in post 16 education and training”. They suggest that this influence occurs through careers education and guidance, the importance of academic pathways and university as a progression route being highlighted. Although the value of CEG has been discussed previously, it may be that course and institutional information that students receive, especially if it is well into the decision making process, may be used to allow the student to justify their choice already made rather than causing any fundamental changes to be made (Helmsley-Brown and Foskett 2001).
By contrast, 92% of respondents said that they were not influenced at all by TV / radio adverts, but it has to be borne in mind how advertising works (Hollins, 2011). What was explored in the questionnaires was what might be considered to be more traditional approaches to distributing information to prospective students. Helmsley-Brown and Foskett (2001, p6) highlight the “significance of the media in the lives of all sectors of the community”, and how important it is in moulding the perceptions of young people. While the media of the time may be relevant in 2001, what has not been taken into consideration in this research is the recent effect of constantly evolving modern technology, the use of apps, blogs, Facebook, twitter and other social media which has just started to be used more frequently by organisations to appeal to younger course entrants. Could targeted marketing / advertising on sites such as YouTube, Twitter, etc., be more effective at targeting a specific audience? Many of these new innovations give prospective students the ability to be able to give instant feedback on experiences, whether positive or negative, and these could potentially have an influence on a student’s decision to study a particular course.

As Helmsley-Brown and Foskett (2001) suggest, choice is “a momentary external expression of the balance between a wide range of internal and external social, cultural and economic perceptions” (p3) and it could be that today’s choice may not be identical to that made tomorrow.

For the students making the choice to study the BTEC L3 Science, the four contexts and choice influencers in Helmsley-Brown and Fosketts’ model play a part in the decision making process to varying degrees. While the contexts have been dealt with in a reductionist approach, it is often difficult to keep them separate. Although only School 4 has been dealt with in depth, it is clear that the model applies to the students in differing ways. In terms of the ‘choosers influencers’ within the model, it appears that the institution will be the dominant partner involved in this process.

5.6.7 Summarising decision point 1
From the interviews, there appears to be a variety of reasons why the students choose to do the BTEC course, although it could be argued that this is usually a default position due to not achieving particular grades in subjects at some point in their education whether it is during KS4, the end of KS4, at the end of Year 12 or, in the case of at least one student, a timetable clash. A variety of home and institutional influences had some effect on the
students’ choice but for the interviewees the social environment, as represented by their friends, tended to have no influence on their decision to do the BTEC course. However, there was a difference in terms of students ‘lived’ and institutional contexts linked to where they studied the BTEC. Generally the students at School 4 remained at the same educational establishment, whereas those at Colleges 1, 2 and 3 had arrived from other establishments at the end of KS4.

For School 4, the use of the framework, provided by Hemsley-Brown and Foskett’s 2001 Integrated Model of Educational Choice, to explain the factors that influence the students’ choice at Point 1 would be expected to have been straightforward. In terms of the model, the expectation would be that, before students make their choice, all the influential factors would be up front (whether consciously or sub-consciously) with the justification being made before the choice announcement. The model is used, figuratively speaking, to provide hooks on which to hang the factors used for discussion. During the interviews, it became clear that the students had the decision made for them by the systems and structures (passive context of the institutional environment) that operate within School 4. The students’ initial pathway perception of the BTEC was not always positive due to the processes involved in their choice of course and reaction from their family and friends. It was also apparent that the other three passive environments (within the Context) were operating in the background to varying degrees. However, for Point 1, the model had to be applied back to front due to the students effectively having a ‘non-choice’. The choice announcement occurred before the justification could be made by the students. Due to the ‘non-choice’ and premature course announcement, the students seemed to unconsciously start to manipulate the situation to suit them. The students’ justification for doing the course occurred while they were studying the BTEC and tended to be related to UCAS points, and this was then used to convince their parents as to the value of the course. The active choice influencers were also ‘turned on their head’; the students may view their lifestyle ambitioning as a move backwards due to some loss of group identity and there was a need to protect their self-image as they had gone against the group norm. The estimation of net personal gain would not initially be a consideration unless the student already has a career goal in mind or the student was in Year 13 at the start the BTEC of course and had already started the process of UCAS application.
5.3 Point 2 – proposed student trajectories during the BTEC Science course

5.3.1 “We want to go to uni”

The suggested trajectories of the students both from the questionnaires and the interviews was very much that of going to university. 90% of the respondents to the questionnaires indicated this, with 7% ‘get a job’ and 3% ‘other’. Some of those not intending to go to university made reference to “To get a full-time job and earn money”, “To get an apprenticeship in pharmacy and work my way up”, “I plan on hopefully getting a job at my local library because I did some work experience there once”, “Go to do another course at college to get more qualifications”, “Looking for an apprenticeship for construction work” (questionnaire additional comments). The aim of going to university is consistent with the conclusions of Foskett and Helmsley-Brown (2001). They identified two groups of factors that influenced a student’s choice of post-16 pathway – general factors and specific factors. The three main general factors were a desire to continue with their studies, an improved chance of university entrance and the career prospects linked to their choice, while linked to this is one of the specific factors, i.e. that of university entrance. This was further explored in the interviews.

Overall, students answering the questionnaire generally saw the link between university and their future afterwards. When asked about what influences had encouraged them to apply for university, many commented about it leading on to a career. Comments such as “Complete my degree and get a good job”, “Getting a good career / job” and variations of this were common in the additional comments section and seem to support their conclusion.

5.3.2 Home environment

From the questionnaire, according to the respondents, the main influence to apply for university were from the students’ immediate family, indicated by the students’ use of the terms parents / mother / dad (23%), brothers (23%) and family (16%). This would strongly indicate that the students’ home environment had a bearing on their decision to apply. However, despite such a high percentage wanting to go to university, a maximum of 30% of the respondents indicated that their immediate family (excluding siblings) had a degree, with sisters (17%) and brothers (14%) also having a degree. The figure cited for parents may be slightly lower as in some cases both parents may have a degree. This would mean that for some, they will be part of the first generation of their family to go to
university. As Helmsley-Brown and Foskett (2001) concluded “University entrance seems to represent the kite mark of economic and social success in the wider community” (p5) and it may be that parents see this as a form of increasing their social standing, as well as wanting the best for their children.

Some students, even if they think that they were not influenced by parents, may have been influenced in ways that they don't realise. Gemma, who wants to be a nurse, illustrates this well. Her mother and sister are both hairdressers, but Gemma made the decision that she did not want to be one … “to be honest, my experience from my Mum and my sisters' business, like especially in these times it doesn't really do very well, I'd kind of thought I don't want to do that at all, so I've definitely wanted to go to uni, definitely carry on education as long as I can and get as many qualifications and try to get a good job hopefully (laughs)” (1st interview).

5.3.3 Social context
The social context of a student’s decision to apply to university was that of peers / friends and seen as a more limited influence (8% of questionnaire respondents), but this was not expanded upon within the additional comments section and neither did the students put this forward as a reason within the interviews. Is it likely that there is unconscious peer pressure on the student and also a need to maintain their group identity or they will be seen to be ‘the odd one out’ if they aren’t seen to apply? This may be linked to what also appeared as an unexpected influence, i.e. what could be termed as the student’s self-motivation. This was interpreted in two ways. Firstly by the listing of ‘me’ or ‘myself’ (7%) as an influence, and also by reference to ‘job’ or ‘career’ (14%) in the relevant additional comments section of the questionnaire. This reference to the terms ‘job’ or ‘career’ is again possibly indicating a link between the BTEC course, university and career. As Helmsley-Brown and Foskett (2001) suggest, university entrance “is perceived as the gateway to economic enhancement, social status and lifestyle benefits by most young people” (p5). Within the Integrated Choice Model it would be reasonable to assume that the student is at the stage where they expect to make decisions for themselves and are past the point when parents make decisions for them, e.g. the choice of secondary school, and are therefore the main ‘chooser’ in the decision-making process. As a result, from the student’s perspective issues such as protecting self-image, justification selection, lifestyle ambition and estimation of net personal gain may all play a part in the decision to apply to university.
5.3.4 Institutional influence

Another influence on the students’ decision to apply to university was the institutional influence (6%) of the teachers and the educational establishments that the students are attending. Like the social context it only showed through in the questionnaires and was not discussed in the interviews. The students will have sessions relating to future careers, etc., and there is probably an expectation that an institution’s students will follow particular trajectories with university entrance being one of them. From experience, colleges and schools are expected to keep destination data on the students who have left. As a result, organisations can use this information to build a positive reputation by claiming that x% of students gained employment within y months of completing a certain course, or in the case of those with A level provision z% went to university, or even better b% went to Oxbridge. Many institutions will use this information to entice future students through their doors. As a result, both the social and institutional aspects of the decision-making process may have an unconscious influence on the student’s choice of trajectory.

5.3.5 The influence of the Media

But what influence does the ‘lived’ aspect as an active choice influencer? As in the choice to study the BTEC, if this is taken to refer to media communication, then it appears to have very little, or no influence at this point. That doesn’t mean that it never was an influence, but it may be that it is just not at the point when students are making early decisions about university entrance. Or, they just didn’t recognise it as an influence. From the questionnaires, comments such as "because they have the exact course I want to do" suggested that this particular student had probably been on a relevant website or had read the relevant prospectus. It was not referred to directly in the questionnaire responses or the early interviews. Even during the second round of individual interviews there was no mention of publicity material, etc., influencing their choice either to go to university or which one to apply to. However, there were open day visits, etc. that the students had attended and these were discussed by the students. Usually this was in terms of their open day experiences, some of which were positive (e.g. Sajid’s at Leeds Metropolitan, now Beckett, University) and others negative (e.g. Gemma’s at Bradford University). Many of the points raised previously relating to the use of social media, etc., will also apply in this situation.
5.3.6 “I want to stay local”

So, if the main trajectory after completing the BTEC L3 Science was university entrance, what was influencing where they wanted to study? A wide range of universities were indicated as being considered by the students when they came to apply through UCAS, but there were some that were clearly more popular. These were Manchester (42%), Leeds (21%), Manchester Metropolitan (18%), Salford (17.5%), Liverpool (17%), Huddersfield (12%), Bradford (10%) and Leeds Beckett [formerly Leeds Metropolitan] (6.5%). Edge Hill, UCLAN and Sheffield were named six times each, with the majority of the other universities being named by the students once. Of the universities named, 11 are Russell group universities including one mention each for Oxford and Cambridge. The top two listed, i.e. Manchester and Leeds also belong to this group of universities.

However, not all year 12 students (1st year of the BTEC) were clear about where they intended to apply to. On the questionnaires, some students indicated courses or careers rather than actual universities, e.g. Pharmacy, Chemistry, ‘ones that do journalism’. This applied to 11% of the respondents, with 4% not indicating anything at all. It should be noted that the questionnaires were distributed quite early in the students’ 1st year of their BTEC Science courses; possibly before the students had chance to fully explore what the realities of applying for particular universities and courses were.

Although the questionnaire didn’t ask for reasons for their choices, again a possible weakness of the quantitative approach, there may be several reasons for the students’ choices, some which were indicated through the interviews. One possible reason for the universities listed above being the top 10 choices could be their accessibility and location to where the students live and where they are studying; the passive lived environment of the Integrated Choice model. All the universities listed above would not only offer courses that the students would want to do, but are also well served by public transport, including trains if they are a further distance from the student, and all are well served by the motorway network.

The majority of students interviewed wanted to remain near home and this was illustrated through some of the interviews …

“… I want to stay local, yeah … I mean Huddersfield, I didn’t choose it because it was local, I chose it obviously because it had that course that I wanted … and for it to be
local was another bonus as I don’t have to move away or anything ...” (Usman, 1st interview), after which he said that he wanted to live at home.

“I like local universities, I don’t like travelling far ... so I am looking at trying Bradford or Huddersfield or Leeds or Manchester ...” (Sajid, 1st interview)

“Huddersfield, somewhere close to home” (Nosheen, 1st interview)

“I want to stay local, so I’ve looked at Manchester and Leeds and I’m going to look at the metropolitan unis ... then I’ve looked at Huddersfield and Bradford ... I think it’s just more like it’s cheaper to stay at home, I think ... I’m a family person so I don’t want to leave my family” (Gemma, 1st interview). Although she didn’t indicate it as a reason at this point, Gemma had previously mentioned the fact that her mother had a long term illness and it might be reasonable to assume that this was also another reason for wanting to stay local. She also indicated that if she went to Leeds, or Manchester, and had accommodation, she would still go home at the weekend.

None of the students mentioned increased tuition fees, student loans or other financial considerations as reasons for wanting to stay local. This was in a way unexpected as one of the arguments against increasing the tuition fees after the coalition came to power in May 2010 was that an increase in fees may put students off applying to university. It may be that this wasn’t referred to as students see it as an advantage to go to university, despite possibly incurring debt, as it is seen as a way to increase their net personal gain.

What this demonstrates is that the passive context of two different environments, in this case ‘home’ and ‘lived’ can have an influence at the same time without the student necessarily recognising it in those terms.

The interviews revealed a difference between the two groups of students at School 4 regarding whether or not they wanted to go to university. All of the first group interviewed wanted to go to university and had ideas about where they wanted to go, even if they changed their minds later. The second group, however, were more uncertain about what they wanted to do after completing the BTEC course. Nayma wanted to work after the course while Lewis and Lucy thought they might want to go university but hadn’t, at that
point, considered what subject area they might study. Only Nosheen had considered what she might want to study at university and that was in the field of Psychology. Both groups of students were interviewed roughly at the same point to consecutive academic years. It may be that these students hadn’t really considered university entrance at that point as the questionnaires and interviews occurred well before they would have started the process of applying to university.

However, the desire to remain local didn’t appear to be a consideration for David who had his career goals mapped out, and it was clear that it was the course and subject that was the only real consideration. The courses he was considering at the start of the BTEC were Geology related at Bangor, Keele, Aberdeen, Derby and Plymouth. At the end of the course David had accepted Bangor (Geological Oceanography) with Derby (Geology and Environmental Hazards) as his insurance.

5.3.7 Choice and the Russell Group

The desire to stay close to home will limit the choices of university that a student can apply to, especially when courses have to be taken into consideration. This may be further reduced by the criteria set by the Russell group of universities when they consider applications for their courses. In their guide for applicants, they have the following advice for those applying with BTECs:

“Some universities consider these vocational qualifications in certain circumstances but the circumstances do vary. It is therefore particularly important to check requirements with individual universities”, and “BTEC Diploma: Some universities will accept this on its own, or combined with other qualifications. However, you are likely to be required to achieve high grades, for example, three Distinctions, or two Distinctions and one Merit” (Russell group, 2013/14 p17). However, when the ‘subjects required for different degree courses’ are listed (p33 – 45) only A levels are referred to, with CACHE being the exception for nursing and teacher training. Although Manchester was the top choice of university to apply to for the respondents of the questionnaire, one respondent expressed their view regarding Manchester University, and possibly all Russell group universities, and BTECs in the additional comment section with “Manchester don’t let BTEC in”.

The effects that ‘institutional’ choice influencers could have on a students’ choice became clear during the interviews. Several of the students, who were interviewed in year 12, spoke about their intention to apply for Russell group universities, particularly Manchester,
Leeds and Sheffield. For some students at School 4 however, doing the BTEC Science seemed to cause issues, even if the student was also studying other A levels.

When interviewed in year 12, Rachel talked about becoming a nurse, most likely a paediatric nurse. She originally wanted to be a mid-wife but as she had done a BTEC L2 Science she wasn’t able to do A level Biology. As a result she knew she couldn’t apply to some universities as “the Russell groups want A level Biology” (1st interview). When interviewed a year later, Rachel had applied to Sheffield Hallam, Bradford, Bangor, Salford and Edge Hill, receiving offers from Bangor (300 points and Distinctions in Science and IT) and Bradford (300 points).

Gemma also wanted to be a nurse and had considered Leeds and Manchester at the start of the BTEC course (unable to do A level Biology due to a timetable clash), which her father seemed keen on her to do with the comment “oh, yes I want you to go there”. She didn’t think that she would like the other universities she was interested in “because they’re not really, erm Leeds and Manchester are Russell group unis” (1st interview). When interviewed a year later she had applied to five non-Russell Group universities, receiving and accepting offers from Chester and Huddersfield provided she gained a Distinction in her BTEC Science. Originally Gemma wanted to remain at home but a visit to Chester changed her mind as she thought both the town and the university were really nice.

Another student, Sajid, who was doing two A levels as well as the BTEC Science, during the initial interviews talked about wanting to do Dentistry. He had done some research regarding the BTECs and the entry requirements for dentistry courses. Several universities including Leeds, Manchester and Huddersfield had been considered. None of them would accept BTECs but he had realised that Sheffield did. He was also aware that Sheffield’s usual entry requirements were 3 As, but had been told that BTEC was acceptable. He had also considered Medicine and Pharmacy, for which he had the encouragement of his family ... “but my parents did say that they wanted me to do something along the doc, you know Asians (laughs), the doctor lines ...”. However, a year later, when asked about his applications to university, his proposed career trajectory had changed quite markedly. He now wanted to do primary education with none of his choices being Russell Group universities. His firm choice was Leeds Metropolitan and his insurance was Manchester Metropolitan. Leeds Met had made him an offer of 300 points.
at A level or equivalent and he already knew he had 340 UCAS points. The reasons for Sajid’s change of career plans were not explained by why he decided not to apply for Dentistry, but more by the reasons why he chose to do Primary education which mainly related to previous teaching experience. During the second interview it would have been interesting to ask Sajid why he didn’t apply for dentistry, but I didn’t pursue this as I felt that it might be something that he may not wish to discuss if it was possibly an embarrassing or awkward topic for him.

Both Gemma and Sajid seem to have demonstrated how, as students mature, they are making decisions that suit them as individuals, and not necessarily to please their parents or family.

The fact that students, even in year 11 and at the start of year 12, had decided on a definite career path surprised me, as did that fact that the majority seemed to want to apply to particular universities early in the BTEC course. In a way this should have been expected from previous research (Foskett and Helmsley-Brown, 2001).

5.3.8 Career aspirations

When suggesting potential careers, the majority of respondents to the questionnaires appeared to be realistic about where studying BTECs might lead to. The most common potential careers, unsurprisingly, had a general science focus, including Health related areas such as Nursing (76% of those who identified a specific career), probably due to most of the respondents only studying a BTEC Science course at colleges 1, 2 and 3. The most common suggested careers were Pharmacy (7%), nursing (6%) and forensic [science] (4.5%). Teaching (5%) was also stated but it wasn’t clear if the respondents wanted to teach Science or other subjects, but as the majority were doing BTEC Science as their only programme, this might be a reasonable assumption. As mentioned in the Findings, only Pharmacy seemed to have a cultural / ethnic and a gender bias, with nursing having a gender bias. The majority of other careers mentioned were only referred to once or twice with no trends being possible to be determined. Only the odd student suggested a career that might prove unrealistic due to the entry requirements for the relevant university courses, e.g. vet, oncologist (consultant?). Only 11% of respondents indicated a non-science or non- teaching career.

For those who were interviewed at school 4, the trend towards ‘science’ based careers wasn’t as obvious. While nursing, geology and psychology were stated as future careers,
so was law, primary teaching and getting a business related job. However, this would probably be explained by the fact that these students were studying the BTEC, either Subsidiary Diploma or Certificate, alongside other subjects and qualifications which would allow them a wider choice of potential career path at the end of year 13 or completion of their L3 programmes.

In the questionnaire the students were asked to indicate what type of current employment their immediate family was engaged in to try and determine if there is a link between their suggested career and the employment of their parents. No descriptors were offered to the respondents. There were 52 different occupations stated for male parents / guardians and 42 for female parents / guardians. Of these, the occupations stated that could be classed as science based were doctor (1), NHS / nurse (7), electronics (1) and computer scientist (1). Teacher (6) was also stated but this could have been in non-science subjects. With such a high bias towards a potential Science / teaching career amongst the respondents, there was no indication that the students were influenced by the occupations of their parents, mainly due to the lack of science based employment stated. These findings mirrored those of Hemsley-Brown and Foskett (1999) who, while exploring post-16 choice but not specifically related to a subject and also based on questionnaire responses, tried to match the occupational choices of young people to the occupations of their parents using subject headings, for example, engineering, teaching. They concluded that young people were not choosing career areas that their parents were involved in. A comparison of parental economic / social class to student choice was explored using the Standard Occupational Classification (SOC) by the Office for National Statistics (ONS, 2010). This involves the use of the ONS Occupation Coding Tool (calculator) which is located at:

However, as no descriptors were offered to the respondents, some of the parental occupations listed were too vague for the ONS Occupation Coding Tool to provide a code and as a result it was not possible to determine if there was a link between respondent career choice and parental economic / social class.

5.3.9 BTEC assessment and UCAS points

One consequence of doing the BTEC course that the students hadn’t really considered before commencing the course, but which could impact on their trajectories, were the assessment methods used within the course coupled with the number of UCAS points it
could generate for them. This linked in with one of Foskett and Helmsley-Browns’ (2001) suggested general factors, i.e. that of improving their chances of university entrance. The equivalent UCAS points for A levels and the different level 3 BTEC Science qualifications are provided in Appendix 6.

Although this aspect was occasionally commented upon in the questionnaires, it often arose in the interviews. At the time of the research, the method of assessment for the BTEC L3 Science was in the form of assignments throughout the year with no exams being used at any point, unlike A level. The approach to the BTEC, in terms of UCAS points, seemed to be different depending on whether the students started the course in year 12 or 13. It became apparent that the students, who were in year 12, were aware very early in their BTEC course, of the value of the BTEC in terms of UCAS points.

Lewis was typical of this, even though he hadn’t yet considered going to university: “yeah … if I can get like distinctions then it’s better from the UCAS points”, and then further on he adds “… I’ve looked at the UCAS points and it’s if I get three distinctions, then I do get quite a bit of UCAS points” (Lewis, 1st interview). So although he might not have been aware of the value numerically, Lewis knew they would have value later. Other year 12 students also recognised the potential, for example as Lucy points out “UCAS points as well isn’t it” (Lucy, 1st interview). Although one respondent to the questionnaire didn’t refer to UCAS points directly, maybe their comment summed up the approach … “It was just so I could get into university”.

Even if the students weren’t aware of the value of the BTEC as UCAS points at the start of the course, they soon were when they were starting to consider applying to university. Usman, who was studying three BTECs at L3, had spoken to one university towards the end of year 12. When asked what his predicted grades were, he had told them that they were a Distinction* in Business, Distinction* in Science and a Merit in IT, equating to 360 UCAS points. He was fairly confident about getting them as “… I know I’ll get all my BTECs and in August I think I’ll get my C in (GCSE) English so that’s pretty much sorted” (1st interview). In year 13, he had been offered a university place based on 300 points.

Students, who were already in year 13, but doing the 1st year of the BTEC, seemed to have a more calculated approach, probably because they had started to consider the
UCAS application process at the end of year 12 and had also done AS level exams or coursework for other programmes.

David, who had a specific career goal, was honest about his reasons for doing the course, especially as he had to drop his A level Chemistry at the end of year 12 … “I'm doing it for UCAS because if I get a Distinction* I get 140 UCAS points which is really good … which is the equivalent to an A**” (1st interview). This awareness of the number of points needed was even more developed by the time of the second interview which occurred during the 2nd year of their BTEC course. With the BTEC being continuous assessment, David knew exactly how he was progressing and was totting up his points tally as he went along … “I need to get a B in Geology this year, a Distinction in BTEC Science this year and I need to get an E in Biology, that’s what I'm doing this year and I need to get a D in History … in AS but if I get a Distinction* in BTEC I think that would be better. Yeah, and then I've got my insurance which is Derby - they want a C in Geology and then BTEC which would give me 240 points”, and then later … "Distinction* … for 140 yeah, and then I've already got … I think 70 for the first year ……… 240 plus Biology … I've already got more than 340 anyway … I reckon with this year I've got 400” (David, 2nd interview).

Nosheen, also in year 13, but in the 1st year of the BTEC course, thought that she would be able to get the UCAS points without the effort required for A level … “I'm not boasting, or anything, but I think that it will be really easy for me to get Distinction* in Applied Science … you just have to get Distinction in two units … so I find BTEC Science has an advantage in one way as I'm getting more UCAS points for the course I want to go into … but if I were doing an A level I would have to work maybe 20 times harder, revising all the time for it and this one I don't have to revise, I just do the work and get my UCAS points at the end (giggles). Like I can guarantee that I'm going to get this much UCAS points, whereas A level is not like …” (Nosheen, 1st interview).
Usman, who had done three BTECs at level 2, had already been made offers by his five choices and had accepted them. He was already well aware of what he was due to get even though the A level results for other students would not be known until mid-August … "(offered) 300 UCAS points from any of my subjects - I'm getting 360. In Business and Science I'm getting Distinction*s which is 280 and in ICT I'm getting a Merit, which is about 80 points so it adds up to about 360" (Usman, 2nd interview).

This situation of already knowing your results as you went along, is a less stressful situation for the student and was commented upon by several of them. As Rachel put it …

"but I'm not having to revise for any exams … some of my friends are having to revise for eight exams because their subjects have multiple exams … so that stress isn't there … my only exam is English and that is on the 6th June and I'm for everything to be done by then and then I can have a bit of a longer summer (laughs)" (Rachel, 2nd interview).

This highlights a theme that came through in the interviews: a comparison between A level and the BTEC. It appears that there is a contradiction, or conflict, for the students in terms of BTEC Science, A levels and the UCAS points associated with them. Certainly some of the students felt that BTECs were ‘easier’ than A levels and yet they could collect a large number of UCAS points by doing the BTEC Science. For some, it may be seen as a ‘safety net’. Others thought that some universities would have a negative attitude to the BTEC when applying for courses. However, it was often hard to separate the issues out from each other. Sometimes it would be implied rather than being raised, or discussed, specifically. Lucy, during her 1st interview, was discussing the benefits of BTEC coursework and how it “took a lot of the stress away”, but then dropped in “at the same time it’s not as good as A level is it?”, implying that she thought that this would influence where she would apply to in her 2nd year of BTEC study.

Nayma had clearly seen the BTEC as a second choice … “I didn’t want to choose BTEC because I think that even though they say it’s like an A level it’s not…” and then commented how she thought that universities would rather have straight A levels. However, she then took the same position as many of her peers in that … “I mean I don’t really like exams because I don’t think that it’s fair to judge one’s indication and
everything on one exam” and implied that the only advantage BTEC has is “no exams”. She then summed up how she saw the difference with … “I would say that if you really don’t like exams then obviously do the BTECs but if you think you want a better chance to go to uni then do your A levels” (Nayma, 1st interview).

For David, the student who was very career focused, the BTEC assessment method was almost viewed as being along the lines of ‘a break is as good as a rest’ … “I like BTEC Science because it’s kind of a break from the exams”. And when asked what his thoughts were in the two different methods of assessment in relation to BTECs his thoughts were “I wouldn’t say it’s easier, I’d say it’s different”. He did later express the view that if he had only done BTECs that for certain university courses “you’d be at a disadvantage” (David, 1st interview).

One questionnaire response possibly summed up the position some students might find themselves in when applying to university … “It’s a very good course; however, it will not prepare you for exams for university (questionnaire comment). And this possibly highlights a decision that students need to make when they initially start the BTEC course. This may be that the student adopts a strategy that may be used when applying to university; that of tactical applications, i.e. that of applying to universities and courses where coursework is the usual method of assessment. Research has shown that there is an increasing trend for universities and courses, except those that are research intensive, to use coursework as the main method of assessment within courses (Henry, 2012), which would make it possible for students to avoid exam based courses completely. The course chosen by a student will probably influence the career path chosen by that student and as Hemsley-Brown and Foskett (1999) suggest “the capacity and willingness to make economically rational, informed choices about careers is context related, and cannot be separated from the social and cultural background, and the life experiences of young people” (p423).

5.4 Summarising decision point 2
Unlike Point 1, the use of the Integrated Model as the framework was straightforward in that the influencing factors were considered, and the choices justified, before the choice announcement was made. During the interviews the students discussed what their trajectories were and could justify the choices made.
From the questionnaires and the interviews the most desired trajectory for the students was that of university entrance, usually linked with a specific career. During the first year of the BTEC course, the students indicated that they would consider applying to a range of universities, including those from the Russell Group. However, from the interviews in the second year of the course, all the students had applied for, and received offers from non-Russell Group universities. Where the students had considered applying to appeared to follow a common theme. This was the desire to study locally or at universities with easy access for everyday commuting, yet reasons for this that might have been expected for this choice, such as cost of going to university, were never cited or discussed during the interviews.

From the interviews, the initial thoughts on where to study, including Russell Group universities, seemed to be clearly in the context of the ‘lived’ environment of the students, influenced to some degree by their home environment even if they didn’t recognise this initially. Although, from the questionnaires, the respondents clearly felt that there was influence from their social and institutional environments, this was not reflected in the interviews and the active on-going nature of these influences either did not appear to be recognised or considered important by the students when interviewed. While the desire to study locally was still there in the second year of the course, students were prepared to change their minds to meet their own needs, not those of others, for example Sajid’s decision to study Primary Education and Gemma’s decision to accept Chester's offer. They all developed an independence regarding making their own decisions and moderated their ambitions in light of their personal circumstances, as demonstrated by their end of course trajectories.

As a result, it demonstrates Helmsley-Brown and Fosketts’ (2001) ideas that choice for a child is an unequal partnership that alters as the child gets older. At a young age, the child is very much a silent partner, but as they get older the balance alters until it is weighted more to the child as chooser and this is the position that the majority of students will find themselves in at the end of the BTEC course. This means that the student is now the main chooser when they make a choice regarding institution, pathway, programme and career but not necessarily in that order.

It has to be recognised that many of the choices made by the students may not be their first choice but are, in reality, choices made due to proposed avenues not being available.
to the student, for example the non-acceptance of the BTEC as an entry qualification by
some universities. The process that led up to certain routes, or options, not being
available to the students may have started for some of them in KS4 or possibly earlier, but
this is a continually changing process and for some students, due to circumstances, this
process was occurring even in Year 13. As Hemsley-Brown and Foskett (2001) suggest
“decisions at each point can shape, and may ultimately strongly determine,
the opportunities that fall into the individual's choice environment in the future” (p2).

5.5 Overall

Habitus can be thought of as being the unconscious norms and tendencies that guide our
thinking and behaviour that develops over time, is created by past events and is the
interplay between agency and structure with context and environment being influences on
it (Powercube, 2012). Many researchers, when looking at choice, tend to view it either
from the perspective of agency or structure, but not usually both (Özbilgin et al, (2005).

highlights the difficulty of attempting to concentrate on student choice either from the
perspective of agency or structure. The students are at a stage in their development
where the emphasis on who is the chooser is altering rapidly in favour of the student. As
they struggle to take control of their own destiny, the choosers and choice influencers that
determined the students’ choice while they were younger, usually as a result of their prior
educational outcomes, still have an influence even if the student doesn’t view in this way.
This position also reflects the problem of trying to deal with points 1 and 2 above in terms
of a reductionist approach as, although an aspect is considered in isolation, there is
always an awareness that other factors are impacting at the same time. While the
students felt that they were probably operating relatively freely in terms of the decision
making process, it was clear the structural factors such as institutional interests were
operating in the background with the effect that they constrained the students and
moderated their thinking. Organisations such as schools and colleges have their own
competitive position to consider, either in terms maintaining or improving it. As a result,
they will want to maintain their student numbers, and therefore funding, as well as being
able to boast about their students’ success. As well as exam or assessment results,
success is also often measured in terms of progression routes and university entrance,
especially to Russell Group universities. This may result in subtle pressure and influence
being applied to students to help the interests of the organisation and may be why many
of the BTEC students initially considered Russell Group universities. However, as the
students progressed through the course, the unseen influences on them diminished as they develop their own strategies to make more informed choices.

The model itself can be understood in terms of the ideas of Bourdieu and utilises the interplay between structure and agency. Habitus isn’t fixed and will alter depending on the circumstances and could be seen in how the students adapted to their changing situation as their course progressed. They continually reformed and re-shaped their ideas in light of the prevailing circumstances. This could be clearly seen at Point 1 as the students adapted to fact that it was a ‘non-decision’ to study the BTEC L3 course. The decision for them to undertake the course was made by the school, with the unspoken support of their parents / guardians. At this point the Integrated Model seemed to work back to front as the justification for the course choice, in the form of potential UCAS points, etc., came after the decision was made for them. However, at Point 2, while the model worked in the expected sequence, the students were constantly adapting to circumstances as they unfolded; illustrated by the desire of some to apply to Russell Group universities but in the end they all applied to non-Russell Group universities.

The most striking observation from the cases was the change in emphasis of who was the main chooser in the decision making process. At point 1, for many of the students, when choosing to undertake the L3 BTEC Science at School 4, it seemed as if it was a ‘no choice’ situation and that the institution, due to the structures operating within it, effectively made the choice for them. What Hodkinson and Sparkes (1997) describe as a ‘non-decision’ when the possibility of a choice is removed. By point 2, although the students in some respects were limited in the choices available, for example due to some universities not accepting BTECs, the students had started to take control of the decision making process, making the ‘system’ work for them. An example of this was when one student completely changed his career trajectory between the first and second interviews. Another was the student who accepted a place at a university that wasn’t local to her home, despite being adamant in the first interview that she wanted to stay local. Also, those who applied to university had applied to the ones who would definitely consider the BTEC Science as a relevant qualification, and so had started to make choices to make the best of their situation.

For point 1 the choice seemed to be related to the categories of institution, pathway and programme, with career not really an influence unless the student had a clear goal in mind at that point. Whereas, at point 2, all four aspects had an influence as the trajectory
chosen would lead onto a career. The same applied to the choosers. The estimation of net personal gain would not have been a consideration for many at point 1, whereas at point 2, especially when considering career choice, this could have been a major influence even if the student didn’t admit to it.

The passive and active aspects of the social context proved difficult to pin down. Social was interpreted as referring to friends / peers and the maintenance of group identity, status, etc. At point 1, the decision to do the BTEC course would have gone against what would been expected for the majority of students, i.e. to study only A levels as that was the expected route through the school. To study the L3 BTEC would have made most of the students break ranks with their friends who may have viewed it as a ‘backward’ step; the unfashionable and unacceptable choice as Foskett, Lumby and Maringe (2003) might have described it. It may have gone against the generally accepted wisdom provided by the grapevine. In Chapter 2 it was asked ‘If the role of friends, or the grapevine, is removed by those who ‘know better’, could it be that students’ ability to make decisions is restricted’? From the experience of the students at point 1 I would have to say that this seems to be the case. The institutional influences were more powerful than those of their friends, and although not discussed in those terms, the school probably had the tacit support of the parents when making this decision for the students. At point 2 however, although institutional and parental influence had a part to play in the students’ choice of trajectory, i.e. going to university, the effect was greatly diminished. The social influences would have still been there and it could be argued that by going to university the students re-established or maintained their status and group identity by making the fashionable and acceptable choice (Foskett, Lumby and Maringe, 2003), so protecting self-image.

It could also be argued that this change in emphasis in terms of who is the ‘chooser’ also illustrates a move by the student from, what Ball, Reay and David (2002) describe as being, a contingent to an embedded chooser. At the end of KS4 (point 1), the parents, with the help of data, etc., provided by the institution, will probably have heavily influenced the student’s choices made at that point (contingent), whereas at point 2, the choice by the student has become long-term and aspirational with a wide range of variables being considered (embedded). The justification for the student’s choice can be made at the time the choice is made, whereas at point 1 the justification usually came well after the choice was made, e.g. the number of UCAS points to be gained and university entrance
By the end of the BTEC course, the students had progressed from being in a position where they had major decisions regarding their education made for them to confident students who knew where they wanted to go and made the system work for them as best they could.
6. Conclusion

The purpose of the research was to gain an understanding of what factors influence a student's initial and developing choices on a course, using BTEC Level 3 Science as a vehicle. The usual expected trajectory for the students in School 4, who continue their education after the end of KS4, is A level. The BTEC Science, although it has some features of an academic course, would not normally be considered as a progression route unless there are reasons for the students to choose to study it, which is something that interested me when I used to teach the course. It is for these reasons it was chosen as a vehicle for the research.

What was striking from the case studies was the contradiction that became apparent when examining the reasons why the students at School 4 studied the BTEC L3 Science. Despite the introduction of the QCF and NQF, as well as the UCAS points tables suggesting that there is supposed equivalency between BTECs and A levels, and that equivalent courses are supposed to provide equivalent opportunities, the entry requirements for School 4’s A level programmes and BTEC programmes had subtle differences between them. The entry requirements for the A level programme for Science requires a B grade at GCSE in a science subject, while the BTEC programme requires a C grade in a science subject, implying that A levels are more highly regarded than the BTEC. All the students, apart from one, were on the BTEC Science course either due to failing to meet the entry requirements for A level Science subjects at the end of KS4 or failing a relevant subject in Year 12. Again, this implies that the BTEC is the fall back option for students who are seen as failing in some respect reinforcing Newman’s (1986) view that “it would seem that pupils’ degree of choice varies according to ability” (p146).

As a result, in reality, it is School 4 itself that is the central influence on the students to study the BTEC course, probably due to the need of the school to maintain its student numbers as students equate to funding for the school.

The research has told a story, however, using longitudinal case studies, about how the nature of student decision making can develop during the course of a BTEC L3 Science programme but it has to remembered that the exact details and findings of this process only applies to the students in the study, although some very tentative generalisations may be able to claimed, but it is not my intention to pursue this in any depth. Generalisations also need to be treated with extreme caution as it has to be remembered that the situation in School 4 is not the same as that in other three post-16 educational establishments that took part in the study. The BTEC Science can be offered in a variety
of formats, resulting in students being able to obtain a wide range of UCAS points (Appendix 6) depending on the number of guided learning hours (GLH) offered. The school offers the BTEC Science (with less GLH and therefore UCAS points) as a progression route alongside other courses such as A levels, whereas the BTEC L3 course offered to students in post-16 colleges will probably be the only programme that they study due to the high number of GLH (and therefore more UCAS points) for the course. As a result, the findings are unique to the individuals studying the BTEC L3 Science at School 4 at the time of the research.

To be able to produce the longitudinal case studies, three main methods were used. After piloting, questionnaires were initially used which provided information of a more general nature, addressing some of the research questions. They also identified areas of interest that could be explored more fully through the use of focus groups and individual interviews, which also allowed the remaining research questions to be addressed.

The use of questionnaires highlights some general trends as well as some areas that may need consideration by organisations. The majority of students surveyed see the BTEC L3 course as a route into university (usually local) and then into a specific career, usually in a science related area. From the findings of the questionnaire, it was not possible to determine whether, or not, there was a link between the students’ chosen career path and the current employment of their parents or guardians. In many cases the participants will be amongst the first generation of their family to go to university.

They also raised questions regarding the effectiveness of the marketing strategies by some organisations for post-16 courses and also the role of connexions and careers advice in helping students make their decisions. Open days and evenings appeared to have a significant influence but the students appeared to pay no real attention to radio and TV adverts, while very few claimed to have been influenced by websites and leaflets. This does raise a more serious issue regarding the marketing of courses, but it has to be remembered that advertising works in subtle ways. In School 4, students were usually offered the course after they had problems with results and they needed an alternative course. At least one student admitted that they hadn’t heard of the course until they were offered it as an alternative. There can be little surprise, therefore, that both students and parents were not keen on it as a course when they first started and so the approach taken to making students aware of the alternatives may need more thought. This is also compounded by the attitude of some universities to applications made by students.
studying BTECs. Despite this, the students were all very positive about the course with the majority recommending it, were realistic about what was possible and had made the course work for them in a positive way. Could it be that the use of social media could be the way forward? Could the use of Facebook, etc., be used to raise awareness of the course and promote it in a positive light? It must be remembered however, that social media can be a two-edged sword.

Some aspects of the questionnaire findings were not always borne out by the interviews, possibly because three of the establishments used were post-16 colleges and the students had moved from schools to study there, possibly giving them a different perspective, whereas the students at School 4 had, in the majority of cases, progressed from the lower school straight into the school’s 6th form.

The qualitative findings revealed a variety of information, some of which might be expected and possibly considered to be obvious, while some of it was quite surprising and unanticipated. One aspect that wasn’t anticipated was how open some of the students were about their lives. This may have been unintentional on their part but provided, at times, quite an intimate look into their lives, often through small comments they made. This was brought about, I feel, by my approach to the students which helped them feel relaxed and at ease, largely helped by setting the scene at the start of the interviews. It was also helped by listening and being genuinely interested in what they had to say while trying not to be deliberately intrusive.

There is no fixed point at which the students started the decision making process that led to their choice to study the BTEC L3 Science course or the trajectories planned for after completion of the course. For some, the seeds that led to their choice to study the BTEC L3 Science course were sown early in KS4, or possibly earlier, probably linked to their academic performance during KS3. For others it was as late as the start of Year 13 after a review of their academic performance at the end of Year 12. Occasionally, the decision was made due to a timetable clash. The earlier that the decision making process started, the more students appeared to accept the choice to study the course. It could be argued however, that these students, in reality, had been steered on to the course due to the institutional mechanisms that exist and that the choice had been made for them. This is possibly what occurred for the majority of these students at School 4, i.e. the possibility of a choice is removed and it became a ‘non-decision’ (Hodkinson and Sparkes, 1997).
Likewise, for their chosen trajectories after the course, the students’ decision making process had no fixed start point. Some started the course with no clear idea of what they wanted to do at the end of it, while others had very fixed ideas, even if, for some, those ideas had changed by the end of the course. As in the questionnaires, the initial trajectories of those interviewed were overwhelmingly indicating that students wanted to go to university, although the odd one did state that they would rather go straight into employment.

Analysis of the interviews, while using the Integrated Model of Educational Choice as a framework, started using a reductionist approach, but it became obvious that while contexts, etc., could be explored individually, other factors were clearly having an impact at the same time and were difficult to separate out, suggesting that a holist approach is probably more appropriate. For example, while the students were clearly being guided onto the BTEC course, the students’ home environment was also having an influence at the same time which could be either positive or negative, occasionally influenced in ways not recognised by the student. Also, the students’ decision, or (non-)choice, to study the BTEC course went against the socially accepted and fashionable routes of their friends through education, with possibly a perceived loss of status and self-image.

The students, while maybe having a non-choice, soon started to use the situation to their advantage by making the system work for them. This was illustrated in several ways including using strategies to bring parents who disapproved of the BTEC round to seeing the benefits of it as a course, using the large number of UCAS points available for Distinction* to access university courses (and impressing parents) and by applying for non-exam based university courses as they had a dislike of exams.

When interviewed at the start of course, the students appeared to show many of the characteristics of contingent choosers but, by the end of the course, they were demonstrating many of the traits of embedded choosers (Ball, Reay and David, 2002). The influence that family had on some students could be observed being reduced as the student progressed through the course, either in terms of where they wanted to study (non-local) or changes in career choice.

The use of Helmsley-Brown and Fosketts’ (2001) Integrated Model of Educational Choice provided a useful framework. The four contexts and choice influencers had a role in the choices made by the students but the emphasis and importance of each altered as the
student progressed through the course. At point 1, it was the institution that played a
major role both terms of context and choice influencer for the student to initially undertake
the course, while the home and social influences were there but in a more negative way.
However, these became more positive, or should it be less negative, as the student
moved through the course. The categories for the choosers really depends on who is the
dominant partner in the decision making process and therefore makes the choice. It is
also dependant on where in the process of decision making the student is. For those who
have been on a trajectory to undertake the course from an early stage, e.g. KS3, pathway
perception and net personal gain may be significant and positive, with justification of
selection occurring well before the start of the course. For those who undertook the
course with very little advance notice, many of the chooser categories only became
significant after the event and so that part of the model was redundant when the choice is
made. For these particular students, the Integrated Model operated back to front
regarding the active aspects of the decision making process, due to the institution making
the decision. After the students started the course, they adapted to make the best of the
situation. The course justification occurred after the choice was made, with the number of
UCAS points that could be gained being used to influence parental attitudes towards the
course.

By contrast, at Point 2, the Integrated Model operated in the expected manner with the
relevant aspects being considered before the choice announcement is made, with the
students having more responsibility for their own futures. The contexts are still there but
the institutional and home environments are more in the background and have less of an
active role in choices towards the end of the course. The social aspects have a more
positive bearing as it was easier for the students to maintain their status, self-image and
group identity. All the elements that identify the chooser are now firmly in the control of
the student and as a result the choices for the student relating to institution, pathway,
programme and then career are under the control of the student to a greater extent. But,
as has been observed, there are still restrictions on the available choice but the student
has become better adapted at making the system work for them.

It is these students’ ability to adapt within the educational system that highlights how
habitus plays a significant role within the decision making process and the interplay
between structure and agency. Initially they were swept along by the dominant powers
within the educational system and in reality had a non-choice when it came to studying the
BTEC course. It is as a result of their past experiences that has shaped their current practices.

Despite being piloted, with alterations made to the questionnaire, there were limitations with the method that showed through. There ultimately had to be a balance between obtaining information while at the same time not making completion of the questionnaire too onerous for the respondent.

Gaining access to participants, at times, proved problematic. Colleges 1, 2 and 3 would only distribute the questionnaires and this was done through gatekeepers. In some respects, this was easier for me but then I was totally reliant on the distributor. College 1 just simply would not allow interviews, while College 2 actively discouraged me from interviewing the students and in some respects it would have been easier if they had just said "no". College 3, although they had allowed the piloting questionnaire and distribution of the final version, did not respond to any requests to interview students. It may have been due to using personal contacts to allow the pilot and questionnaire distribution, but then there was a change in staff shortly afterwards. School 4 allowed the distribution of the questionnaires and the interviewing of the students, but again that was probably because I used personal circumstances and contacts to gain access. This highlights a serious problem that can face researchers and it may be that a lack of access to participants may end the research before it has begun. From experience I feel that the situation is getting worse, especially in light of potential safeguarding issues and limited time for course input.

It is important that the researcher fits in with participants and organisations if they are prepared to take part. As a part-time researcher, there are potential issues regarding time, especially in terms of organising when aspects of the research are to take place. The researcher can only work within the boundaries imposed by the individuals allowing access to the participants. The role of gatekeepers is important and their co-operation, or lack of it, can be the difference in terms of success. For the institutions that agreed to participate they gave easy access to students for the distribution of the questionnaires.

There were several points raised in the introduction that the current research reinforces. Both the introduction and chapter 2 discussed a range of short-lived qualifications, often designed to replace BTECs or offer a supposedly genuine alternative to A levels. These qualifications never had the support of universities and crucially parents. Although not all
universities appear to view the BTEC favourably, the majority appear to do so, and parents, even if they don’t seem to support the student doing BTEC initially, appear to accept it as a good qualification as the course progresses. I also commented on the fact that when I taught BTEC Science, I felt that some students were over ambitious in their goals. To some extent this is still true as illustrated by the initial ideas of which universities some students wanted to apply to, but these universities were not in their five choices when they actually applied. Other universities still have high regard for the BTEC reflecting Wolf’s (2011) comments and the offers made to the students.

It has to be remembered that the students had started the BTEC L3 Science course and made their choices before the policy on when students can leave education changed. Since September 2013, the choices that school pupils can make when considering what to do, or where to go, after Key Stage 4 changed to a certain extent with what the Government refer to as ‘Raising the Participation Age (RPA)’ and the compulsory education leaving age being increased to 17 in September 2013, rising to 18 in 2015. This change means that the option of just leaving school and not continuing with any form of education is now not an official option.

As the Department for Education (DfE, 2014) website explains “This does not necessarily mean staying in school; young people have a choice about how they continue in education or training post-16, which could be through:

- full-time study in a school, college or with a training provider
- full-time work or volunteering combined with part-time education or training
- an apprenticeship”.

There will be an element of ‘coercion’ to ensure that those who ‘drop out’ will be followed up as “From summer 2013 all learning providers, including academies, will be required to inform their local authority if a young person has dropped out of learning. This is to ensure that the young person can be contacted swiftly and offered support to help them re-engage in education or training” (DfE, 2012). Due to these changes, it could be argued that BTEC courses would be in more demand due to the larger number of ‘failing’ students who will remain in the education system in one form or another. This, in turn, puts increased pressure on providers of 16+ education programmes, especially if there are issues with funding.
In summary, research questions 1 and 2 relate to the influences on the students’ decision to study the BTEC L3 Science. The only real influence on the students’ decision was their perceived failure in their previous academic performance relating to science which resulted in, what was in reality, a non-choice. As a result of this, the students were guided down a particular progression route by the school and the systems that exist within it. They might be described as silent partners in the decision making process at this point in terms of the BTEC.

Research questions 3 and 4 relate to student trajectories during and after the course but the answers are not straightforward. Each student was at a different starting point when they entered onto the course and the trajectories they followed reflected their own development. The majority of students knew that they wanted to go to university, with some of them considering applying to Russell Group universities. However, all of the students who were followed throughout the course had decided only to apply to non-Russell Group universities for a variety of reasons, with several of them altering their career focus as the course progressed. The trajectories of the students demonstrated how the decision making process and each students’ position in the process changed as the BTEC course progressed, as well developing strategies to gain the best out of the course so that they could achieve their optimum trajectory. The course had facilitated the development, growth and attitude of each student in a unique way.

Whatever one may say about BTECs at L3, it seems that they are here to stay. It offers many students an alternative but it needs to be marketed by schools and colleges in such a way that it isn’t viewed as a course that is only for ‘failing’ students by parents, employers, some universities and the students themselves, but this is not helped when the reasons why students studied the BTEC L3 Science at School 4 are considered. The factors that influence students’ choices regarding the BTEC L3 Science will reflect not only their personal circumstances, but also the political and educational circumstances at the time that they had to make their choices. However, once on the course, students soon adapted to make it work for them and it seems they gain a lot more than just a qualification.
7. Overall

7.1 Introduction

Although each educational establishment has its own unique individual systems and structures, and its students will have their own unique characteristics, the findings from this study may provide ‘naturalistic generalisations‘ that may be applicable to them in individual ways. This section summarises the overall findings while briefly discussing what the research contributes to knowledge, both professional and academic.

7.2 Main findings:

1. The starting point of the decision making process varies for each individual.

   The point at which the decision making process started was different for each individual. For a few it was as early as the end of KS2 or during KS3, although for the majority it was when the KS4 / GCSE results were released in August. For some who met the criteria to study science subjects at AS, the starting point may have occurred during Year 12 of their studies, but if not it would certainly have started on results day. As a result, for some students the length of time between the decision making process starting point and their choice could be several years, although the institution would know at the point of ‘failure’ that, if the students wanted to study Science at post-16, they would be offered the BTEC Science course, reinforced by the fact that these students would also be studying BTEC Science at L2 during KS4. For those who undertook Science at GSCE or AS, the point of failure would have been results day and the length of the process for the choice to be made would depend on the communication between the school and the students. The result of this means that the passive influence of the context within the Integrated Model varied in terms of time. For those who started the decision making process as early as KS2 or 3, the choice at the end would not have come as a surprise to them as this is what they would have been conditioned to expect. Both they, and their family, are more likely to have accepted the choice to be made. This would allow some of the elements that make up the choosers component of the Integrated Model to be active in a positive way at the point of choice such as choice announcement, justification, and pathway perception and the students would have started to protect their self-image and moderate their lifestyle ambitions accordingly. Alternatively, for those whose choice was made at the end of KS4 or Year 12 (AS), the choice to undertake the BTEC L3 Science course would have been a surprise with the institution being the main influential
element of both the passive and active components, while the choosers component would have little or no influence. A student’s prior attainment has become the major influence on decisions made at this point.

2. **A student's choice is constrained by their prior attainment.** All the students were studying the BTEC L3 Science course as a fall back option. At some point in their education, most of the students had either not met the criteria that would allow them to study science subjects at A level, or had failed relevant subjects at AS level. The students’ original goals may have been influenced by all the elements within the passive context of the Integrated Model, but their perceived ‘failure’ results in the BTEC Science being actively offered to the student by the institution which has become the main choice influencer in this scenario, which leads to the next point.

3. **Student failure strongly contributes to the influence of institutional structures and systems.** Institutional mechanisms were the dominant force in the decision for students to study the BTEC level 3 Science, which came to the fore due to the students’ perceived failure. Institutions need to maintain or increase aspects such as levels of funding, student numbers and success rates if they want to survive. The school would not want to lose students for this reason and was able to offer students an alternative. If the students wanted to continue at the school they had to accept what was offered. Therefore, the students’ choice to study the course was a ‘non-choice’, as in reality the decision was made by the school, with tacit support by the students’ parents. In this situation, the influence of the elements within the passive context of the Integrated Model shifts from one of possibly more, or less, equal influence to one where there is a dominant element (the institutional environment) and a possible minor element (the home environment), with the other two elements having no significant influence.

4. **The limitations of studying the BTEC L3 Science course were not initially recognised, resulting in students demonstrating the ability to adapt.** These limitations became apparent to the students when they started to consider applying to university, particularly those belonging to the Russell Group. It showed through either in terms of being rejected outright or with some universities asking for additional qualifications, or units that were impossible to achieve within the two year time frame that the students were working to. However, students responded
to this actively, by adapting to their changing circumstances as their course progressed, demonstrating the dynamic nature of habitus and individual agency’s ability to adapt. The students moved from a situation where they started with a ‘non-choice’ to study the BTEC course to one where they were responsible for controlling their own destinies.

5. **Students’ perceptions of the course changed as the course progressed.** Once on the course, the students’ attitude towards it changed. This mainly applied to those who had done GCSE or AS Science as those who had done BTEC L2 Science already had a more positive view of the course at L3. This turn around was mainly due to high number of UCAS points associated with Distinction* results and it then became viewed as a good route into university and then a career, provided they chose which universities to apply to carefully. This was also helped by parental attitudes towards the course becoming more positive. The change in perception towards the course allowed the choosers component of the Integrated Model to become active as the students were able to retrospectively justify the choice to study of course and were able to undertake damage limitation in terms of protecting their self-image and lifestyle ambitioning. As the course progressed and the students became more mature, the model functions more along the line proposed by Hemsley-Brown and Foskett (2001).

6. **The influence of passive and active aspects of the Integrated Model of Educational Choice alters as students progressed through the course.** The speed of this change varies for each student and reflects their developing maturity. The students, and their families, whose starting point of the decision making process began as early as KS2 or KS3, already knew that they would probably follow the BTEC L3 route. While the student had a passive ‘non-choice’ regarding the course, by the time they started the course the active elements and components of the Integrated Model were already having an influence on their decision making processes regarding the course. For those who started the course with little notice, the speed of change of influence between the passive and active aspects was considerably more rapid as the students had to adapt very quickly to their rapidly changing circumstances in order to gain their full potential from the course. Some of the students, especially those who had done AS seemed to take being on the course in their stride and adapted very quickly, while those who had done GSCE Science subjects it appeared to take longer to adapt.
By the end of the first year of the course, virtually all of the students were actively influencing their own decision making.

7. **The students moved from being contingent to embedded users.** Ball and Vincent (1998) and Ball, Reay and David (2002) suggested that there are two types of educational choosers, i.e. ‘contingent’ and ‘embedded’. Contingent choosers rely more on official information to make their choice, while embedded choosers use both official and grapevine based knowledge. Contingent choosers are more likely to accept official information as the truth and both students and their families will not question the non-choice that the students had regarding the BTEC L3 course. As the course progressed, the students became the dominant partner in the decision making process and drew on a variety of sources, both official and unofficial to inform their choices. The unofficial included family and friends and the grapevines that operate within the home and social environments. Students’ own experiences, such as attending university open days, will also feed into the choices made.

8. **The status, or standing, that students have is different in terms of the qualifications studied in post-16 education.** Points 1-7 notwithstanding, there is still a degree of difference associated with the status of different post-16 qualifications, usually based on university entrance and this translates into the status students have within the post-16 education system. A level, particularly those that allow access to the top universities, are often referred to as the Gold standard and the students who study them have the highest status. There is a divide between these academic qualifications and those that are more vocationally orientated. Many of these courses do not provide UCAS points and do not allow access to university through the traditional routes and therefore the students who follow these courses are regarded as having a lower status within the system. There have been attempts to bridge the gulf between the qualifications, usually through the introduction of new qualifications such as GNVQs, AVCEs and Diplomas. Some of these qualifications have been short-lived and there have been issues that have weakened their appeal and therefore kept their status low. This is usually in terms of the method of assessment, for example coursework instead of exams (Ecclestone, 2000), poor course design (Ofsted, 2005) or the type of students who study the courses, i.e. those not capable of doing academic A level. This status divide is currently reinforced when the background of those who hold high political office are considered (usually high status education), as
well as the current policy of introducing terminal exams and the removal of the modular structure of some courses. Many of the students involved in the research were in a position of having two levels of status as they studied two types of programme, i.e. A level and BTEC. These students had a dual identity. They had high status for the A level but a lower status when linked to the BTEC, reflecting the trajectories they could pursue at the end of the course, often with the BTEC being the limiting factor. This limiting factor would be seen more acutely when with their peers doing A level who would be perceived as having no such restrictions. Students who just study either full-time A level or full-time BTEC would not be in this position; although students on a full-time BTEC would have lower status, the difference in status with those doing A level would not be obvious as they would be part of a peer group with its own identity and there would be no confusion in terms of IAG either at the start of, and throughout, the course.

7.3 Contribution to knowledge:

This intensive study of participants on a particular course has wider implications which I will now elaborate.

7.3.1 Professional knowledge

This is viewed from the perspective of educational establishments and the teaching profession. 11 to 18 schools that provide a variety of post-16 courses, including A levels, may need to consider how they market, or inform their students of, their L3 BTEC courses. Many of the students on the L3 BTEC Science course, particularly those who studied Science at GCSE or AS, were unaware of its existence until it was suggested to them by the staff as an alternative to A level sciences. This would not be the case for students who were doing the BTEC Science L2 course at KS4, as both they and their parents were aware of the most likely route the student would follow if they wanted study a post-16 Science course. The lack of information available to GSCE and AS Science students prior to commencing the BTEC course is one of the reasons why some of the students’ parents were unhappy with their children being on the course. At this point, the influence of the institution is dominant, the decision making process is quite short and elements of both the passive and active components of the Integrated Model have no influence on the choice made. The ‘non-choice’ that the students have results in them being detached from the decision making process.
This detachment from the decision making process can be avoided to some degree if the students can be made aware of the course during tutorial sessions in years 10 and 11. Any Information and Guidance (IAG) provided must be accurate and meet student needs. The information can be targeted at individual students if the tutorial staff is familiar both with the courses available and the individual students. As in finding 4, many of the students only realised, what might be described as, the limitations associated with undertaking the course after they had commenced their studies, which may in turn be an indication of gaps in any IAG that the students received both at the start of, and throughout the course. Some students’ situations are made more complicated by the fact that they were doing the BTEC L3 Science course in combination with other A levels. It is also important that the students doing such courses are not made to feel that they have failed even though, in most cases, they gained at least a C grade in a science subject at GCSE. This highlights the importance of IAG being holistic in its approach to individual students, and making the students aware of the alternatives available to them depending on circumstances as they unfold.

With the introduction of various Government initiatives and policies, particularly the Ofsted inspection regime, there has been a blurring of the boundaries between 11 - 16 school and 16 – 18 education with many schools and colleges now appearing to be a straight continuation of 11 – 16 education, with all the ‘school’ orientated rules and policies, to conform to Ofsted expectations. As a result, care needs to be taken not to make year 12 and 13 students feel alienated within the system. As in finding 6, the students moved from being passive and junior partners in the decision making process to becoming the active and dominant partners in the process while adapting to rapidly changing circumstances as the course progressed. A feeling of alienation could have the opposite effect, with students dropping out of the system. While students constantly mature and develop throughout their school years, they need to reach a point at the end of year 13 where they have the maturity and skills to be able to deal with either university or the world of work. The students who were on the BTEC L3 Science course had already started the course at a point where they had been classed as having failed in some respect, and were ‘guided’ on to the course although they had may have gained a C in science at GCSE. As a result, it could be argued that such students would possibly be starting from a low level in terms of confidence and that they needed to have their confidence restored to an appropriate level over the period of the course. This highlights the dangers of schools, etc., being too prescriptive in their approach to student choice. From findings 2 and 3, the ‘non-choice’ that the students had was determined by their prior attainment which then triggered institutional systems to determine their choice.

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While the student may have accepted this ‘non-choice’ to some degree, this in itself will create a situation where findings 4 and 5 apply as there then is a period where the student may be disillusioned with the choice as they realise the limitations of the course and therefore have a poor initial perception of it.

By the end of the course the students had clearly matured in terms of confidence and independence and had become the dominant partner in the decision making process. They had moved from a position where structural factors (finding 3) dominated the decision making process to one where individual agency (findings 6 and 7) had become dominant in the process. It may have been expected that this shift in dominance would occur due to interventions by the educational establishment but the information provided by the students suggested that this change occurred due to their own experiences, resilience and adaptability. Educational establishments need to ensure that there are mechanisms in place to ensure that students, who find themselves in a similar position to those on the BTEC L3 course, are able to mature enough in terms of confidence and independence. There needs to be recognition of the changes in student development as 16 – 18 courses progress.

There are also implications, or should that be reminders, for those who determine policy or seek to introduce new courses. The attitudes of some parents and universities towards the BTEC L3 Science course are reminiscent of those that led to the withdrawal of the GNVQ as a qualification. This situation is not helped by the Government and others who are seen as in ‘authority’ and who appear to hold the view that only A levels are seen as the gold standard. For any qualification to be viewed as having value, it must have the support not only of universities and employers but also of pupils and their parents (Gaskell et al, cited in Donnelly, 2009) and be seen to be valued by those in authority. If some universities are clearly not viewing some qualifications in a favourable light this is soon picked up on by students, parents and employers, and reinforces the perception created through institutions not making students aware of courses during appropriate IAG sessions and them having a ‘non-choice’. This is the situation experienced by students on the BTEC L3 course (findings 3, 4 and 5). As Hemsley-Brown and Foskett (2001) suggest, “any desire at a policy level to alter the macro scale patterns of choice preferences requires actions that will change perceptions and understandings both amongst all the influencing factors in choice (young people, parents, teachers and the media, for example) and across the whole time span of choice” (p3).

Institutions can clearly influence the perceptions of students regarding the courses that they offer. It is, therefore, important that they provide full and relevant information,
including realistic progression routes, to students either through IAG sessions, tutorials or information evenings.

7.3.2 Academic knowledge: revising the Integrated Model

Hemsley-Brown and Foskett’s 2001 ‘Integrated Model of Educational Choice’ is still applicable, is very useful and can be widely applied, but that the variation in application is surprising and needs to be better understood. It can be updated, and adapted, to take account of advances in technology, for example the use of social media such as Facebook, Twitter, etc. The Model can be used to give a snap shot of decision making at one point of time or can be utilised at different points along a time line to examine the decision making process over a period of time as was the case in this research.

The assumption is that all the elements that make up a component will interact with each other to varying degrees. This is true for the second point at which the Integrated Model is applied within the research, with all the elements having an influence on the choices made. It seems, however, that that the decision making process, in terms of the Integrated Model operates in different ways for students at the end of KS4. Students who follow the straight A level route will fit into the model as presented by Hemsley-Brown and Foskett (2001). The majority of students undertaking the BTEC L3 Science course study A levels alongside it and the model operates in two different ways at the point when they make their choice. Their choice to study A level(s) will more, or less, fit with the Integrated Model. However, the decision making process resulting in the choice to study the BTEC L3 Science course has become a ‘non-decision’ for these students. The interaction between the elements within the components of the Integrated Model have become skewed, mainly due to, what appeared to be, the unchallenged influence of the institution within the decision making process regarding this particular course. In terms of the passive context, both the home and social environments will cease to have an influence, while the lived environment will have some influence as the students are generally already studying there or make the decision to move to School 4 after KS4. Regarding the active influencers, the influence of both the home and media environments are greatly diminished, while the removal of the grapevine, due to the institution’s unchallenged influence, will not allow the social context to operate. This does prevent the negative attitudes of friends and peers towards the course from having an influence on the decision. As a result the ‘choosers’ component of the model fails to operate in the expected way with the announcement and justification of the choice occurring after the decision has been made, and the other elements having no influence in the decision at
that point. The effect of the skewed influences of the different interacting elements is suggested in Figure 4.

**Figure 2** – revised Integrated Model of Educational Choice taking into account the ‘non-choice’ regarding studying the BTEC L3 Science course for those who study Science at GSCE and AS level.
However, the Integrated Model operates in a different way for those who have studied BTEC L2 Science due to them not meeting particular criteria either at KS2 or KS3. Although these students also have a ‘non-choice’ regarding the L3 course if they wish to study science subjects post-16, the length of time for the decision making process has been protracted when compared to the other BTEC L3 Science students. This has allowed both the students, and their families, to adjust and accept the route that these students will have to take if they want to study science subjects at post-16. This also allows the home and social elements of the passive Context component to have more of an influence. While family and friends may be ‘disappointed’ at the prospect of the student having to study the BTEC, they will be more understanding and supportive when the decision becomes reality. This support and acceptance will also feed through into the active Choice Influencers when considering the Integrated Model. As a result of the protracted decision making process, elements of the Choosers component will also impact on the student’s choice and the influences on the Integrated Models for the student’s choice in these circumstances are illustrated in Figure 5.
Figure 3 – revised Integrated Model of Educational Choice taking into account the ‘non-choice’ regarding studying the BTEC L3 Science course for those who studied Science at BTEC L2.

Institutional Environment (KS2 / KS3 results)

Context (passive)

Choice Influencers (active)

Choosers

Institution

Home – parents accept situation

Social

Parents accept

Social – no real influence

Live

Parents accept

Choice announcement

Lifestyle ambitioning

Justification selection

Protecting self-image

Pathway perception

Pathway

Institution

Career

Programme

Already there – “captive audience”

Makes the decision / student has “non-choice”

Friends aware

Home – parents accept situation

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Ball and Vincent (1998) initially suggested that educational choice was based on official (cold) and grapevine (hot) knowledge and then over time this idea gave rise to the idea of ‘contingent’ and ‘embedded’ choosers, with contingent choosers utilising ‘cold’ knowledge, while an embedded chooser utilises both ‘cold’ and ‘hot’ knowledge (Ball, Reay and David, 2002). These ideas were utilised during the research and while the literatures suggested that the boundaries between the different types of choosers were blurred. The findings suggest that as a student progresses through a BTEC Science course they move from being very ‘contingent’ chooser to being ‘embedded’ chooser due to their experiences, etc. Account has to be taken of the ‘non-choice’ that the students may have and the influence of institutions on this, which in turn has changed the characteristics of the two types of chooser. These changes are illustrated in Table 2. The students initially had a ‘non-choice’ that was determined by structural factors and institutional systems, while their individual agency is constrained under these circumstances. At this point they are a contingent chooser relying solely on the official information provided by institutions. As the BTEC course progresses, the students’ experiences equip them to make their own informed decisions and rely less on structural factors for guidance. They began to consider alternatives to problems that arose due to the attitudes of others towards the BTEC course, as well as developing a wider perspective regarding opportunities that are open to them, demonstrating that individual agency is constantly changing. They start to consider their own needs and ambitions as being important, rather than those of others who feel they may know what’s best for the student. As a result, the students take on the characteristics of an embedded chooser, but the pace of this change will vary with each individual. The ideas of Ball and Vincent (1998) and Ball, Reay and David (2002) imply that if an individual is a contingent chooser they will be incapable of being an embedded chooser due to their passive context and lack of knowledge of how the educational system works. Finding 7 from the research suggests, however, that if a student is allowed to adapt and develop their individual agency through appropriate experience, they will develop the characteristics of an embedded chooser and therefore be able to make their own informed choices utilising a variety of different sources, i.e. ‘hot’ and ‘cold’ knowledge.
<table>
<thead>
<tr>
<th>At start of L3 BTEC Science course (Contingent choosers)</th>
<th>Towards end of BTEC L3 Science course (Embedded choosers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student had minimal / no information</td>
<td>Choice is based on extensive and diverse sources of information</td>
</tr>
<tr>
<td>Choice is distant or ‘unreal’</td>
<td>Choice is part of a cultural script, a ‘normal biography’</td>
</tr>
<tr>
<td>Few variables utilised</td>
<td>A diverse array of variables are deployed</td>
</tr>
<tr>
<td>Choice is dictated</td>
<td>Choice is specialist/detailed</td>
</tr>
<tr>
<td>Choice is proffered</td>
<td>Choice is experiential</td>
</tr>
<tr>
<td>Information is abstract</td>
<td>Choice based on direct knowledge</td>
</tr>
<tr>
<td>Choice is logical if student wants to study Science based on evidence / results</td>
<td>Feelings / emotions / anecdotal evidence / impressions influence choice</td>
</tr>
<tr>
<td>Minimal support (social capital) used due to no family involvement</td>
<td>Extensive support (social capital) is mobilised</td>
</tr>
<tr>
<td>‘Culture’ relevant only in terms of school</td>
<td>‘Culture’ is marginal or irrelevant to choice</td>
</tr>
<tr>
<td>Choosing is short term part of an incomplete or incoherent narrative – an expedient solution?</td>
<td>Choosing is long-term and often relates to vivid and extensive ‘imagined futures’ — part of a coherent and planned narrative</td>
</tr>
<tr>
<td>First-time choosers with no family tradition of education</td>
<td>‘Followers’ embedded in a ‘deep grammar of ‘aspiration’ which makes education normal and necessary</td>
</tr>
<tr>
<td>Narrowly defined socioscapes and spatial horizons — choices are ‘local’ / distance is a friction</td>
<td>Broad socioscapes and social horizons — choices are ‘national’ / distance is not an issue</td>
</tr>
<tr>
<td>Parents are ‘onlookers’</td>
<td>Parents may have some input</td>
</tr>
</tbody>
</table>
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Appendices
Appendix 1 – school / college request letter

Lower Badger Cottage,  
Blackshaw Head,  
Hebden Bridge,  
West Yorkshire,  
HX7 7JP

Dear

I currently work at the University of Bolton in the Education section and am also studying for an Ed.D at the University of Manchester.

It is as a University of Manchester Ed.D student that I am writing to you.

The focus for my research is to “understand what factors influence a student’s initial and developing choices on a course combining academic and vocational features: the case of BTEC Level 3 Science”, and there are four research questions:

1. How do students’ perspectives on their previous schooling and prior attainment influence their decision to study BTEC Level 3 Science?
2. What other factors, personal or otherwise, influence this decision?
3. At the start of the course what are the students’ anticipated trajectories after completion of the course?
4. Do these anticipated trajectories alter as the students progress through the course and, if so, why?

As the school / college would be acting as a ‘Gatekeeper’, I would like permission to distribute, to the 1st year BTEC Level 3 Science students, a three page questionnaire (please find a copy attached) through their teachers. Please note that the students cannot be identified from the questionnaire and as I would not be coming into contact with the students, parental consent would not be necessary.

I am also seeking permission to interview some of the students as part of a focus group, followed by 1:1 narrative and semi-structured interviews. The potential students for this part of the research would be identified by giving their consent at the end of the questionnaire. The research would be carried out over the next 18 months, ending at the end of the academic year 2012 / 13, at mutually agreed times with the school / college and the students.

It may also be that I need to occasionally seek clarification from the BTEC students’ tutor regarding information that arises through the interviews. This could be by telephone, e-mail or in person depending on their wishes.

If you are able to give me permission for the above, or need to discuss my request further, please do not hesitate to contact me. I have supplied e-mail and phone details at the end of this letter of this e-mail.

Hoping that you will be able to oblige

Yours Sincerely

R. Hutchinson – June 2016
Rowley A. W. Hutchinson
(rowleyhutchinson@yahoo.co.uk / 01422 844468)
(rah1@bolton.ac.uk / 01204 903210)
Appendix 2 – questionnaire used for the pilot

Questionnaire for BTEC Level 3 students on their choice of course

Dear Student

I am a student at the University of Manchester and am doing research regarding the factors that influence Science students to study BTEC Level 3 Science.

Part of the research consists of a questionnaire and I am asking if you would be prepared to complete this short questionnaire. By completing the questionnaire you agree to participate in this part of the research.

Taking part in the research is purely voluntary and you can withdraw from the process at any point. No names are being asked for and you will not be able to be identified on an individual basis and any information provided is confidential. None of your answers will be divulged to other people but will be used to produce my report.

I am trying to learn more about the factors which influence young people to choose the course(s) / subjects that they are studying and would be grateful if you would answer the questions below.

Please ✔ (tick) the appropriate answer

What age are you?  □ 16  □ 17  □ 18

Are you  □ male  □ female

Which BTEC Level 3 Diploma course are you studying:

Forensic Science  □  Medical Science  □  Applied Science  □

Please read the list below and for each one (who / what) ✔ (tick) to what extent it has influenced you to choose your course:

<table>
<thead>
<tr>
<th>Who / what</th>
<th>Very strong influence</th>
<th>Strong influence</th>
<th>Some influence</th>
<th>No influence at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent(s) / guardian</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other relatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know someone who has done course</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV / Radio Adverts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information from the college</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends attending the same course</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connexions / Careers advisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any other influences not given in the table
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Please read the list below and for each one (why) ✓ (tick) show how far it is a reason for you doing this course:

<table>
<thead>
<tr>
<th>Why</th>
<th>Very strong reason</th>
<th>Strong reason</th>
<th>Some reason</th>
<th>Not a reason at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>To get a specific job / career</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Go on to another course afterwards</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add further reasons in the boxes below:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any other reasons not given in the table
________________________________________________________________________
________________________________________________________________________

What do you want to do after completing this course

Go to university ☐ get a job ☐ other ☐

If going to apply to university, which ones do you think you will to apply to?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Who or what has influenced you to apply for University?

What ideas (if any) about careers do you have for after your degree?

Which people in your immediate family (parents / guardians, brothers or sisters) have a degree?

If you are not planning to apply to university, what are your current plans after the end of the course? Please give some details.

Could you please indicate what type of current employment your immediate family (parents / guardians, brothers or sisters) are in.

Parent / guardian 1
Parent / guardian 2
Brother 1
Brother 2
Sister 1
Sister 2

Is there anything else you would like to add about your choice to study BTEC Science?

Thank you for completing this questionnaire.
Appendix 3 – questionnaire used for the study

Questionnaire for BTEC Level 3 students on their choice of course

Dear Student

I am a student at the University of Manchester and am doing research regarding the factors that influence Science students to study BTEC Level 3 Science.

Part of the research consists of a questionnaire and I am asking if you would be prepared to complete this short questionnaire. By completing the questionnaire you agree to participate in this part of the research.

Taking part in the research is purely voluntary and you can withdraw from the process at any point. No names are being asked for and you will not be able to be identified on an individual basis and any information provided is confidential. None of your answers will be divulged to other people but will be used to produce my report.

I am trying to learn more about the factors which influence young people to choose the course(s) / subjects that they are studying and would be grateful if you would answer the questions below.

Please ✓ (tick) the appropriate answer

What age are you?  16 □  17 □  18 □  19 □  Other (please state) …………. 

Are you  male □  female □ 

How would you describe your ethnicity?  …………………………………………………

Which BTEC Level 3 Diploma course are you studying?

Forensic Science □  Medical Science □  Applied Science □ 

Please read the list below and for each one (who / what) ✓ (tick) to what extent it has influenced you to choose your course:

<table>
<thead>
<tr>
<th>Who / what</th>
<th>Very strong</th>
<th>Strong</th>
<th>Some</th>
<th>No</th>
</tr>
</thead>
</table>

R. Hutchinson – June 2016
<table>
<thead>
<tr>
<th>Influence</th>
<th>Influence</th>
<th>Influence</th>
<th>Influence at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent(s) / guardian</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other relatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know someone who has done course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends attending the same course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends attending the same school / college</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To get a specific job / career</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Go on to another course afterwards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connexions / Careers advisor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV / Radio Adverts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University / UCAS information regarding course entry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information from the college</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you got information from the school / college was it from (please tick):

- Open days/evenings [ ]
- Website [ ]
- Leaflets [ ]

Any other influences not given in the table above:

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

What do you want to do after completing this course?

- Go to university [ ]
- Get a job [ ]
- Other [ ]

If you are not planning to apply to university, what are your current plans after the end of the course? Please give some details.

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
If going to apply to university, which ones do you think you will to apply to?

Who or what has influenced you to apply for University?

What ideas (if any) about careers do you have for after your degree?

Which people in your family (parents / guardians, brothers or sisters, grandparents, uncles, aunts, cousins) have a degree?

Could you please indicate what type of current employment your immediate family (parents / guardians, brothers or sisters) are in:

Parent / guardian 1 (male)

Parent / guardian 2 (female)

Brother 1

Brother 2

Brother 3

Sister 1

Sister 2

Sister 3

Is there anything else you would like to add about your choice to study BTEC Science?

Thank you for completing this questionnaire
Appendix 4 - Questionnaire – ALL totals

Organisations:

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>College 1 - 1&lt;sup&gt;st&lt;/sup&gt; group (2013)</td>
<td>37</td>
</tr>
<tr>
<td>College 1 - 1&lt;sup&gt;st&lt;/sup&gt; group (2014)</td>
<td>35</td>
</tr>
<tr>
<td>College 2 (2014)</td>
<td>50</td>
</tr>
<tr>
<td>College 3</td>
<td>11</td>
</tr>
<tr>
<td>School 4 - 1&lt;sup&gt;st&lt;/sup&gt; group (2013)</td>
<td>9</td>
</tr>
<tr>
<td>School 4 - 2&lt;sup&gt;nd&lt;/sup&gt; group (2014)</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>152</strong></td>
</tr>
</tbody>
</table>

What age are you?

<table>
<thead>
<tr>
<th>Age</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>29</td>
</tr>
<tr>
<td>17</td>
<td>68</td>
</tr>
<tr>
<td>18</td>
<td>38</td>
</tr>
<tr>
<td>19</td>
<td>16</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Other (please state)</td>
<td></td>
</tr>
</tbody>
</table>

Are you male 85 female 67

How would you describe your ethnicity?

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>(English / white) British</td>
<td>50</td>
</tr>
<tr>
<td>Asian</td>
<td>7</td>
</tr>
<tr>
<td>Black (African)</td>
<td>3</td>
</tr>
<tr>
<td>Pakistani</td>
<td>7</td>
</tr>
<tr>
<td>Chinese</td>
<td>2</td>
</tr>
<tr>
<td>Sikh (Indian?)</td>
<td>1</td>
</tr>
<tr>
<td>British Pakistani</td>
<td>44</td>
</tr>
<tr>
<td>Arab</td>
<td>1</td>
</tr>
<tr>
<td>Muslim</td>
<td>2</td>
</tr>
<tr>
<td>British Asian</td>
<td>1</td>
</tr>
<tr>
<td>Afro-Caribbean English</td>
<td>1</td>
</tr>
<tr>
<td>British Indian</td>
<td>3</td>
</tr>
<tr>
<td>(British) Bangladeshi</td>
<td>6</td>
</tr>
<tr>
<td>Mixed Asian/white</td>
<td>1</td>
</tr>
<tr>
<td>Not stated</td>
<td>4</td>
</tr>
</tbody>
</table>

Which BTEC Level 3 Diploma course are you studying?

<table>
<thead>
<tr>
<th>Course</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forensic Science</td>
<td>12</td>
</tr>
<tr>
<td>Medical Science</td>
<td>39</td>
</tr>
<tr>
<td>Applied Science</td>
<td>91</td>
</tr>
<tr>
<td>Both Med Sci and App Sci</td>
<td>3</td>
</tr>
<tr>
<td>none indicated</td>
<td>1</td>
</tr>
</tbody>
</table>

R. Hutchinson – June 2016
Please read the list below and for each one (who / what) ✓ (tick) to what extent it has influenced you to choose your course:

<table>
<thead>
<tr>
<th>Who / what</th>
<th>Very strong influence</th>
<th>Strong influence</th>
<th>Some influence</th>
<th>No influence at all</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent(s) / guardian</td>
<td>25</td>
<td>17</td>
<td>36</td>
<td>24</td>
<td>150</td>
</tr>
<tr>
<td>Other relatives</td>
<td>7</td>
<td>5</td>
<td>17</td>
<td>11</td>
<td>147</td>
</tr>
<tr>
<td>Know someone who has done course</td>
<td>11</td>
<td>7</td>
<td>27</td>
<td>19</td>
<td>145</td>
</tr>
<tr>
<td>Friends attending the same course</td>
<td>15</td>
<td>10</td>
<td>24</td>
<td>17</td>
<td>144</td>
</tr>
<tr>
<td>Friends attending the same school / college</td>
<td>10</td>
<td>8</td>
<td>27</td>
<td>21</td>
<td>130</td>
</tr>
<tr>
<td>Teachers</td>
<td>20</td>
<td>14</td>
<td>37</td>
<td>26</td>
<td>142</td>
</tr>
<tr>
<td>To get a specific job / career</td>
<td>50</td>
<td>34</td>
<td>45</td>
<td>31</td>
<td>146</td>
</tr>
<tr>
<td>Go on to another course afterwards</td>
<td>20</td>
<td>14</td>
<td>34</td>
<td>25</td>
<td>138</td>
</tr>
<tr>
<td>Connexions / Careers advisor</td>
<td>7</td>
<td>5</td>
<td>22</td>
<td>15</td>
<td>145</td>
</tr>
<tr>
<td>TV / Radio Adverts</td>
<td>1</td>
<td>1</td>
<td>10</td>
<td>8</td>
<td>132</td>
</tr>
<tr>
<td>university / UCAS information regarding course entry</td>
<td>16</td>
<td>12</td>
<td>32</td>
<td>24</td>
<td>134</td>
</tr>
<tr>
<td>Information from the college</td>
<td>21</td>
<td>15</td>
<td>35</td>
<td>26</td>
<td>137</td>
</tr>
</tbody>
</table>

If you got information from the school / college was it from (please tick):

- Open days/evenings: 95
- Website: 31
- Leaflets: 17

Any other influences not given in the table above

- College prospectus
- Is something I want to do
- Enrolment, talking to a BTEC Science tutor
- Enrolment day
Result day - when changing my subject I was informed about this course
Had to choose different subjects which make me able to do the university course that I wanted
The first day I came Mr X

What do you want to do after completing this course
Go to university 137 get a job 11 other 3

If you are not planning to apply to university, what are your current plans after the end of the course? Please give some details.

Start doing another course
To get a full-time job and earn money
To get an apprenticeship in pharmacy and work my way up
I plan on hopefully getting a job at my local library because I did some work experience there once
I want to go to uni but I'm not sure, that's why I ticked other
Go to do another course at college to get more qualifications
Looking for an apprenticeship for construction work
May do a foundation degree in medical science / may do a full-course study doing psychology
To work at a chemists

If going to apply to university, which ones do you think you will to apply to?

<table>
<thead>
<tr>
<th>University</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manchester</td>
<td>64</td>
</tr>
<tr>
<td>Leeds</td>
<td>32</td>
</tr>
<tr>
<td>Man Met Uni</td>
<td>28</td>
</tr>
<tr>
<td>UCLAN</td>
<td>6</td>
</tr>
<tr>
<td>Edge Hill</td>
<td>6</td>
</tr>
<tr>
<td>Salford</td>
<td>27</td>
</tr>
<tr>
<td>Liverpool</td>
<td>26</td>
</tr>
<tr>
<td>Glasgow</td>
<td>3</td>
</tr>
<tr>
<td>Bradford</td>
<td>15</td>
</tr>
<tr>
<td>Surrey</td>
<td>1</td>
</tr>
<tr>
<td>Hertfordshire</td>
<td>2</td>
</tr>
<tr>
<td>Sheffield</td>
<td>6</td>
</tr>
<tr>
<td>Brighton</td>
<td>1</td>
</tr>
<tr>
<td>Nottingham</td>
<td>2</td>
</tr>
<tr>
<td>St John's (York?)</td>
<td>1</td>
</tr>
<tr>
<td>Huddersfield</td>
<td>18</td>
</tr>
</tbody>
</table>

R. Hutchinson – June 2016
<table>
<thead>
<tr>
<th>University</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lancaster</td>
<td>3</td>
</tr>
<tr>
<td>Leeds Beckett</td>
<td>10</td>
</tr>
<tr>
<td>Bangor</td>
<td>3</td>
</tr>
<tr>
<td>Newcastle</td>
<td>3</td>
</tr>
<tr>
<td>Uni of Cumbria</td>
<td>1</td>
</tr>
<tr>
<td>Cardiff</td>
<td>2</td>
</tr>
<tr>
<td>Liverpool John Moores</td>
<td>3</td>
</tr>
<tr>
<td>Birmingham</td>
<td>2</td>
</tr>
<tr>
<td>Queen's (Belfast)</td>
<td>1</td>
</tr>
<tr>
<td>Ulster</td>
<td>1</td>
</tr>
<tr>
<td>Uni of West of England</td>
<td>1</td>
</tr>
<tr>
<td>Bolton</td>
<td>3</td>
</tr>
<tr>
<td>Derby</td>
<td>1</td>
</tr>
<tr>
<td>Halifax?</td>
<td>1</td>
</tr>
<tr>
<td>Oxford</td>
<td>1</td>
</tr>
<tr>
<td>Cambridge</td>
<td>1</td>
</tr>
<tr>
<td>Nottingham Trent</td>
<td>1</td>
</tr>
<tr>
<td>Aberystwyth</td>
<td>1</td>
</tr>
<tr>
<td>Durham</td>
<td>1</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>1</td>
</tr>
<tr>
<td>Chester</td>
<td>1</td>
</tr>
<tr>
<td>London City</td>
<td>1</td>
</tr>
<tr>
<td>York</td>
<td>1</td>
</tr>
<tr>
<td>Coventry</td>
<td>1</td>
</tr>
<tr>
<td>East Anglia</td>
<td>1</td>
</tr>
<tr>
<td>Kent</td>
<td>1</td>
</tr>
<tr>
<td>Leicester</td>
<td>1</td>
</tr>
<tr>
<td>Bradford College</td>
<td>1</td>
</tr>
</tbody>
</table>

No idea / not sure / none stated                  | 6      |

<table>
<thead>
<tr>
<th>Subject</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forensic Science</td>
<td>1</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>1</td>
</tr>
<tr>
<td>Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>Ones that do Journalism</td>
<td>1</td>
</tr>
<tr>
<td>The one that will take me in</td>
<td>1</td>
</tr>
</tbody>
</table>

(+ one comment that Manchester “don’t let BTEC in”)

Who or what has influenced you to apply for University?

| Family   | 25 | Parents | 28 | Relations | 7 |

R. Hutchinson – June 2016
<table>
<thead>
<tr>
<th>Mother</th>
<th>5</th>
<th>Dad</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sisters</td>
<td>4</td>
<td>Brother</td>
<td>35</td>
</tr>
<tr>
<td>Teachers</td>
<td>6</td>
<td>Jobs</td>
<td>3</td>
</tr>
<tr>
<td>Courses</td>
<td>2</td>
<td>Work colleagues</td>
<td>1</td>
</tr>
<tr>
<td>Life prospects</td>
<td>2</td>
<td>School / college</td>
<td>3</td>
</tr>
<tr>
<td>Grandmother</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Complete my degree and get a good job (2)
It will help me further myself in the best way to build my career
I want a career in science and that is what has influenced
The fact that I will hopefully get a much better job if I go and have a much better quality of life
Because I need to become an astrophysicist
Parents have to educate us like themselves
Because they have the exact course which I want to do
To have a successful career
I've always wanted to go to University after college
My desire to have a successful career
To get the degrees I need to get the job I want (2)
The career path I want to take and myself to get a good job
In order to get a good job
I wanted to go myself to get a good job and the qualifications I need to do this
Personal interest
Hobbies
To go into a specific career
The fact that I am heavily involved in and around sport has influenced me
To get a better job
Want a degree (2)
Just want to go to uni
Getting a good career / job (8)
Everyone I know who has been
My ability in the different subjects and enjoyment
Past relatives have attended there
The courses that they run
My life position
Culture

What ideas (if any) about careers do you have for after your degree?
Other comments:
Study religion and history combined
Open business with brother
Get a job in the field studied in
Working at an animal conservation / zoo
To work in an environment where I help people live a better life, e.g. nurse
Start another course at University
Career with high wages

Which people in your family (parents / guardians, brothers or sisters, grandparents, uncles, aunts, cousins) have a degree?

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mum</td>
<td>15</td>
<td>Dad</td>
<td>18</td>
<td>Guardians</td>
</tr>
<tr>
<td>Stepdad</td>
<td>2</td>
<td>Stepmother</td>
<td>2</td>
<td>Family</td>
</tr>
<tr>
<td>Brothers</td>
<td>22</td>
<td>Sister</td>
<td>26</td>
<td>Cousin</td>
</tr>
</tbody>
</table>

R. Hutchinson – June 2016
Aunt 27  Uncle 35  Grandparents 2  
Grandmother 3  Grandfather 1  Parents 7  
All(?) 2  Most? 1  Sibling 1  
Don’t know 2  None / indicated 36  

Could you please indicate what type of current employment your immediate family (parents / guardians, brothers or sisters) are in:

<table>
<thead>
<tr>
<th>Parent / guardian (male)</th>
<th>Parent / guardian (female)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Businessman 6</td>
<td>Businesswoman 3</td>
</tr>
<tr>
<td>Taxi 12</td>
<td>Shopkeeper / owner 2</td>
</tr>
<tr>
<td>Management 6</td>
<td>Housewife 16</td>
</tr>
<tr>
<td>Shop owner 3</td>
<td>Catering 1</td>
</tr>
<tr>
<td>Catering 2</td>
<td>Carer 6</td>
</tr>
<tr>
<td>Company director 1</td>
<td>Drug dispenser 1</td>
</tr>
<tr>
<td>Retired 3</td>
<td>Call centre 1</td>
</tr>
<tr>
<td>Factory worker 4</td>
<td>Nurse 6</td>
</tr>
<tr>
<td>Employer 2</td>
<td>Shop assistant 3</td>
</tr>
<tr>
<td>Claims company owner 1</td>
<td>Teaching assistant 3</td>
</tr>
<tr>
<td>VP market research 1</td>
<td>Cook 1</td>
</tr>
<tr>
<td>CCTV manager 1</td>
<td>Buyer (electronics) 1</td>
</tr>
<tr>
<td>Computer scientist 1</td>
<td>G4S 1</td>
</tr>
<tr>
<td>Fabric inspector 1</td>
<td>Sales 1</td>
</tr>
<tr>
<td>Sales 3</td>
<td>Solicitors 1</td>
</tr>
<tr>
<td>Electronics 1</td>
<td>Management 4</td>
</tr>
<tr>
<td>Disabled 2</td>
<td>Disabled 1</td>
</tr>
<tr>
<td>Unemployed 2</td>
<td>Teacher 6</td>
</tr>
<tr>
<td>Solicitor 1</td>
<td>Dinner lady 1</td>
</tr>
<tr>
<td>Self-employed 5</td>
<td>Assistant Head 2</td>
</tr>
<tr>
<td>Lift engineer 1</td>
<td>Bus driver 1</td>
</tr>
<tr>
<td>Engineering 5</td>
<td>Secretary 1</td>
</tr>
<tr>
<td>Truck driver 2</td>
<td>NHS payroll officer 1</td>
</tr>
<tr>
<td>Teacher 1</td>
<td>Receptionist at doctors 1</td>
</tr>
<tr>
<td>Oil processor 1</td>
<td>Speech therapist 1</td>
</tr>
<tr>
<td>Accountant 1</td>
<td>Working 1</td>
</tr>
<tr>
<td>Painter &amp; decorator 1</td>
<td>Driving instructor 1</td>
</tr>
<tr>
<td>Van assistant 1</td>
<td>Student 1</td>
</tr>
<tr>
<td>Draftsman 1</td>
<td>NHS 1</td>
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R. Hutchinson – June 2016
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Pharmacy 2 Pharmacy dispensing assistant
Garage 1 Voluntary work 1
University 1 Biomedical scientist 1
Oil processor 1 Optometrist 1
Speech therapist 1 Teacher 3
Architect 1 Architect 1
Construction 2 Legal Secretary 1
Self-employed 2 Carer 3
Sales assistant 1 Cabin crew 1
Job-line 1 Cake baking 1
Cruise ship 1 School receptionist 1
Retail 1 Self-employed 1
Sales 1 Bank mortgage advisor 1
Biology lab 1 Navy 1
Electrician 1
Doctor 1

Is there anything else you would like to add about your choice to study BTEC Science?

I found BTEC Science more hands on experience which would have made uni more easy and I also find coursework / assignments easy
It was just so I could get into university
I like science
To learn more about the specific field of subject that I would like to study at university in the near future
I’m re-sitting the year and wasn’t able to do AS Chem so I did BTEC
It’s amazing
I enjoy it
I chose science to learn it, then taking the knowledge I held, then jump into history and religion and combining together to understand life
It is easier for me as I’m not fond of exams
I chose BTEC because there are no exams and I am very good at doing practical work
I love the BTEC as is removes a lot of pressure from exams and as long as the students take it seriously it’s a great course
This type of learning suits me best
As I failed English I had to do this course as it was the one to do with science
I found the info on the course interesting & it made me want to do this course
Didn’t choose it
Work better with coursework over exams

R. Hutchinson – June 2016
Prefer coursework based work rather than exam based
I made a good choice
I did BTEC Science at school as well
I enjoy Science and I hate exams, BTEC Science was the best choice to continue my education
Wanted to do full A levels at first
I would definitely recommend it to people who want to enjoy a practical based session with a good foundation of theory lessons
Very good choice
I like the experiment / lab side
Very exciting subject
I love Science and it’s really interesting to study every part of the human body and the anatomy of human body
I enjoy Science, that’s why I picked it
I find science interesting and want to learn it more in greater depth
It’s a very good course; however, it will not prepare you for exams for university
Appendix 5 – samples of transcribed interviews

Sajid first interview 1st year BTEC

(… indicates periods where interviewer / interviewee were organising their thoughts / no meaningful dialogue or exchange)

<table>
<thead>
<tr>
<th>Time / comments</th>
<th>Initial introduction as to purpose of follow up interview and also reminder of right to withdraw, confidentiality, etc. ……</th>
</tr>
</thead>
<tbody>
<tr>
<td>53secs</td>
<td>RH: … where you at CH in the lower school before you did the 6th form?</td>
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<tr>
<td>1min</td>
<td>S: yeah, I was.</td>
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<tr>
<td>1min 30secs</td>
<td>RH: … and do you mind if I ask if you did dual or triple award?</td>
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<tr>
<td></td>
<td>S: triple award</td>
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<td></td>
<td>RH: triple award science – OK … you're doing the BTEC Science, are you doing any other subjects as well?</td>
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<tr>
<td>1min 30secs</td>
<td>S: I doing Business here which is A level, I've just done IT which is A level (AS?) and I'm doing Forensic Science which is BTEC … and hopefully, if all goes well, I'll be doing Chemistry – just an AS for next year … cos I've seen a course in Sheffield University which is dentistry which actually accepts the subjects that I'm doing which is to a high grade … which hopefully I will get, so hopefully I'll be doing Dentistry.</td>
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<td></td>
<td>RH: … so will Dentistry accept the BTEC?</td>
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<tr>
<td>2mins</td>
<td>S: yeah, they said that BTEC is acceptable. They need 3 As.</td>
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<td></td>
<td>RH: … so the equivalent of 3 As and a BTEC that they'll take as UCAS equivalents …….. you're going to have more choice other than, say, Sheffield, so are there any other universities that you are thing of applying to as well.</td>
</tr>
<tr>
<td>2mins 30secs</td>
<td>S: I like local universities, I don't like travelling far … so I looking at trying Bradford or Huddersfield or Leeds or Manchester, but Bradford doesn't do Dentistry, er Huddersfield I think does but it requires no BTECs, same with Manchester, same with Leeds, I don't think Leeds does it as well but I'm not sure. But I think that the only university that actually takes BTECs for Dentistry was Sheffield, which is the closest.</td>
</tr>
<tr>
<td>3mins</td>
<td>RH: …… So how does that put in terms of your career because you're not going to have Sheffield as your one choice …</td>
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<tr>
<td></td>
<td>S: no, I'm going to have more choices</td>
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<td></td>
<td>RH: so if you can't do Dentistry, what do you think you might do?</td>
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</table>
**S:** something along that line, something to do with Chemistry and something to do with Medicine ... so if it’s not Dentistry, then Optometry or Pharmacy, Medicine, something along those lines.

**RH:** so would the local universities provide that?

**S:** yeah, they would. Bradford provides Medicine and Pharmacy ... Bradford is really good in Pharmacy specialising in Pharmacy, same with Leeds and Huddersfield, Manchester, Sheffield ...

**RH:** ... (explain my links to Bradford) ...

**S:** my brother’s doing Pharmacy in Bradford, he’s a graduate and a manager in a pharmacy in Leeds ... that’s one thing that influenced me to do medicine or something along those lines.

**RH:** ........ so the reasons for going for the local universities is purely that you don’t like travelling around (M – yeah) or other influences?

**S:** ... I don’t like staying away from my parents, I do like staying as much as I can with my parents so I can help them and even if they were an older age I can stay with them and be their extra hand to help them, whereas if I’m away I won’t be able to see and I won’t be able to help them as much as I could when I’m with them and just being away ... I don’t prefer it.

**RH:** ... maybe an obvious question this but I’ve got to ask it ... when you’re talking about Bradford and that, they’re all on the train line (M – yeah) and Sheffield for the same reason?

**S:** ... well hopefully I’ll be getting a car ... so wherever I go I’ll probably be driving.

**RH:** and if you did, say, go to Sheffield, would you expect to stay there or would be wanting to come home?

**S:** (immediate response) I’d be wanting to come home ... my sister does live in Manchester, so Sheffield and Manchester are fairly close, so when I finish in Sheffield I can go to Manchester and stay there for a bit or if I finish early during the day I can come straight home.

**RH:** what influenced your decision to do the BTEC at the end of GCSEs?

**S:** Well ... I’m not too keen on exams ... I did Chemistry at AS last year and I did it as a GCSE but I didn’t revise for it as I should have, I revised for it as I would have a GCSE exam which ... I knew as I was going for the exam that I would definitely fail it as I didn’t know half the stuff that was required for me to know it, so the year after that I looked at the science criteria and what subject offers and BTEC science was one and the first ??? I read which was an introduction to the course I really enjoyed it and at the moment I’m at top of the class which is really good ... I’m really enjoying it and due to this I’m doing Chemistry next year to see how I can do it again.
**RH:** in terms of the universities you’re thinking of applying to, although it won’t be dentistry, those courses will accept a BTEC will they?

**S:** yeah, hopefully

**RH:** have you looked at the UCAS …

**S:** yeah, I have. I was looking at their website and the UCAS website … a lot of universities were saying they don’t accept BTEC, but luckily for me, the closest ones to me do. Bradford, Huddersfield, Leeds, Manchester. Manchester is a bit strict with BTECs but Sheffield does because I want to, if not my first choice dentistry, then Bradford University do something there like medicine or optometry, whereas I got Dentistry then Sheffield would be my choice.

**RH:** how did your family or parents feel about you doing the BTEC, as well as the A levels? Were they bothered by that at all?

**S:** when I told my parents, at first they thought that it’s not even an A level, they were like that and then I explained to them and when they came to parents evening my teacher explained to them and they knew the importance of BTEC, then they started to realise what it is … and now my parents are more supportive of me rather than they were before. At first they thought ‘it’s only BTECs’, but now they know what it is …

**RH:** so what about friends and that – did most of your friends stay on and did that influence you as well, or …?

**S:** … last year I had two or three friends who did Forensic Science, BTEC Science and they said it was fairly straightforward and it was really fun and a lot of experiments which I really like – it’s mostly with Chemistry which is my favourite subject and they said that if you like it along these lines, it’s fairly straightforward so do it. I can use the A level, so I thought ‘why not, let’s try it’, I’ve tried it and I’ve not regretted it at all.

**RH:** …… any other things that influenced you to do the BTEC?

**S:** my brother influenced me. Not only for BTEC Science but for the science cos … I told you he’s doing Pharmacy – he did Forensic Science … he did Biology, Chemistry, Forensic Science and he did Maths at CHS, he really enjoyed it as well, he said it was one of his favourite subjects … so he told me to do that as well … he graduated in Pharmacy and he got number one, he got … a first … and he said that can help a lot … because the BTEC Science I’m doing involves Biology, Chemistry and Physics which is a good advantage to me as I can do anything which involves those kind of subjects.

**RH:** in terms of the course and that is there any expectations in terms of career and that for you or were you given a sort of free choice …

**S:** it was a free choice … but my parents did say that they wanted me
to do something along the doc , you know Asians (laughs), the doctor lines … I would love to be a doctor

**RH:** *(RH makes a joke about how he would have liked to have been but is a 'bit past it now')* … so there was a combination of the pair was there – a bit of interest and a bit of family influence in there …

**S:** there was more of an interest

**RH:** thanks participant and winds up the interview

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**RH:** since the last time we spoke, did you actually apply to university?

**S:** yeah, I have

**RH:** and which universities did you apply to?

**S:** I applied to Leeds Metropolitan University

**RH:** just Leeds or any others?

**S:** well I applied to Leeds Metropolitan University, Bradford University, Leeds Trinity, Manchester Met and that's it … and I got the offers … but you only need to do two, one firm choice and one insurance offer, and my firm choice I did Leeds Met and my insurance I did Manchester Met.

**RH:** what did Leeds Met ask from you in terms of offers?

**S:** Leeds Met, it was 300 UCAS points … and you had to do two skills tests, a literacy skills test and a numeracy skills test and you have to pass in both of them. You can only do them three times; if you fail you can’t do those skills tests for two months … er two years, so you can’t be on the course for two years. I've got a skills test booked in June; hopefully I'll get it done by then.

**RH:** 300 points … did they specify anything in particular that you had to do?

**S:** they said 300 in your A levels or equivalent … they said English at GCSE should be a minimum of a C or above – I've got everything. In
A levels it was basically in any subject but they had to be in the National Curriculum …

RH: oh right, and what about the BTEC, was that referred to specifically?

S: they said that it was equivalent to an A level and I’m getting more than 300. At the moment, without doing English Language. I’ve already got 340 UCAS points, so even if I just get a D, but I’m in for a B/C, even if I get a D in English (AS?) I’ll get 360 / 370 UCAS points so I’ve got more than enough.

RH: where was the second offer you went for?

S: I got all offers, Bradford … the insurance offer was Manchester Met.

RH: was that 300 points again?

S: 280 points

RH: and what do you want study when you finish?

S: primary education

RH: I wondered this with what you were saying. Why have you decided to go into primary education?

S: because … I’ve got my experiences is with kids; I teach in a mosque with two kids, I teach them not only about Islam but also Maths and English. I’ve got a lot of nephews and nieces, I’ve got about 11 nephews and nieces so I always be with them and I know how to control them and they really like me so I can use that experience … what’s the point of going into something I don’t really know about when I can use that experience to do a professional thing. So I thought teachings the … I really like teaching, I enjoy it in the mosque and I enjoy it at school, so I thought that from there that I’ll start teaching and hopefully I’ll like it and at the moment I’ve not regretted the choice.

RH: right, and in terms of … was it just the courses you’d applied for or was there anything else that had influenced you to apply to those universities because they are all sort of fairly on the train track …

S: obviously every uni … I got offers from, they invited me for an interview and an open day – Bradford, the course was a university course on the college campus … that was my first choice but a lot of people said that at the college a lot of people said that the teaching wasn’t up to the standard that you need so that’s why I didn’t really apply to that. When I went to Leeds, it was the buildings; the staff, they were absolutely amazing, they made feel that you really want to come there and they treat you like adults, so when I went there I knew that this was going to be my first choice. Then I went to Leeds Trinity and wasn’t bad but nowhere near as good as Leeds. Then I went to
Manchester. Manchester, they are changing the building as the building they had wasn’t really good and they’re changing to a far better building, the staff was really trained(?) and everything but that in Leeds was that bit slightly higher, so that’s why I applied to Leeds and Manchester.

RH: … nowhere rejected you then?

S: Huddersfield

RH: and did they say why?

S: Huddersfield, when I applied they go … ‘you’ve got a weak personal statement’. I asked him what was weak about it but he refused to give me anymore feedback, he said ‘we can’t give you anymore feedback’, whereas the rest … when I got the letters from Leeds Met and Bradford, they go ‘we are pleased to offer you an interview because your personal statement was up to the standards we require’, so I didn’t understand what Huddersfield had in contrast …

RH: OK, and in terms of the BTEC and that, no comments were made about you doing the BTEC?

S: no …

RH: … since you started the BTEC course have your thoughts towards it changed as the course has progressed?

S: at the beginning I thought it’s going to be pretty hard really … the teachers we’ve got are really good, they always help us to do work. They’re not the type that will give us it, ‘they can do it themselves, they’ve got the internet’; no, they give us the work, they go through it with us, they tell us exactly what we need to know … so, because of our teachers, from start to finish, it’s been straightforward simple for us. Experiments, they tell us exactly what to do, they printed out a sheet of paper with the methods, the equipment that we need. It’s all been really good … obviously near the end it gets harder with deadlines getting closer and everything, but … with the teacher we’ve got here it was easy, straightforward for all of us and yeah, so me and the person you’re to interview next, we were the first to finish. Of all the BTECs we were the first to finish. Yeah, mainly due to our teachers … yeah, nothing really changes about except it gets a bit harder if you don’t put your head down …

RH: … you haven’t felt it a disadvantage doing a BTEC instead of A level Science?

S: no, no, no … it would be a disadvantage as A level is harder, deemed as higher than BTEC but having said that for the courses I’m doing they said that it is equivalent to an A level and I didn’t feel any difference. That was perfect for me.

RH: … one of the questions I asked you about when we originally
spoke would have been about your family and friends and their view to BTEC ... any comments about how they still view the BTEC ... is it positive / negative?

S: ... they viewed it as negative because it was only a BTEC but then after I told them what it is they understood, they thought that actually it's not bad, pretty good ... and now I've got my offers from university and now they know that it's positive and I've got a place at university ... well, they never thought it was negative, they always supported me and they've never stopped that which was good for me. Influence wise, my Mum, she said 'teachings really a good job ... I'm happy with you to become a teacher'. My Dad said that same thing, 'don't worry if you don't want to become like a dentist, doctor or anything, if you want to become a primary school teacher, we are happy with that as long as you're happy with it'. Same with my brothers and sisters, they were really happy with my choice. So family could ... if parents or your siblings or one of them said 'no, it's not a good job, don't do it', in my mind you'd be thinking 'let's try something else'. But I'm really happy that my parents and my family supported me so that's why I'm doing primary education.

RH: ... (long pause) ... what about your friends as you've gone through the course, have they ever commented on the fact that you're doing a BTEC as opposed to A levels?

S: nearly all my friends that came to this school, they've all been doing Science, mainly BTEC and the best part is that I've always beaten them in deadlines, so if they say anything we I just end up beating them in an argument because I can say 'well, you didn't do this, I did this'. So ... no friends have said it and I don't think anyone will say it as all my friends are either doing Science or something else.

(student seemed to be irritated at this point – not sure why, so I was keen to move on)

RH: ... would you recommend people to do the BTEC?

S: yeah, definitely. BTEC obviously if you don't like exams. My course, the primary education in Leeds (Met), there's no exams in it, it's all coursework based and practical exams like school teaching, so this good for me, an advantage to me as I know how to do coursework to a standard like distinction*, you know how to do it, so when I go to Leeds I'll know what standard they require. There's no exam there so it's basically the same thing as I'm doing at the moment. That's one positive thing. Second one, like I said, it's very good, if you don't like exams do that ... the teachers are amazing in this course, so ... you know that the teachers in one subject might not be good ... this subject is really good for the teachers. Not only the teachers, the work is really simple ... if you put your head down its really simple, so yeah, I would definitely recommend this.

RH: thanks participant and winds up the interview
**Gemma – initial interview 1st year BTEC**

(... indicates periods where interviewer / interviewee were organising their thoughts / no meaningful dialogue or exchange)

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**RH:** …start in terms of GCSEs. Did you do dual awards or triple award Science?

**G:** dual award, is that right? Is that dual award where you do your core Science and then another isn’t it?

**RH:** you might have …

**G:** yeah, I did core science, then additional science so I got two GCSEs for it

**RH:** OK, and what grades did you get for it if you don’t mind me asking.

**G:** two Bs

**RH:** OK, and what influenced you then to do the BTEC Science?

**G:** well, originally, I’m in year 13 but I’ve gone back a year, not because I failed anything in my lessons, but because I chose lessons I didn’t like and I decided I wanted to do nursing which meant that, although I did Psychology, the Science would like lift the chances that I’d get into uni a bit more. So I was going to do Biology but it clashed with my other lesson so the BTEC Science was the only thing I could do really (giggles, then laughs) …

**RH:** so do you have a particular career aim?

**G:** yeah, I want to go to university to do adult nursing … I don’t really know what field I want to work in yet. Erm, I think I want to work with people with long term illnesses because my Mum’s got Multiple Sclerosis so I kinda want to work in that kind of field because obviously my Mum’s got this and that’s reflected on me to do that.

**RH:** so in terms of universities to apply for … has the BTEC influenced that at all?

**G:** most of the universities specifically ask for a biological science which includes obviously Biology and Psychology or Health & Social Care … I think Rosie’s had a few problems because she doesn’t do Psychology or Biology and the BTEC, they want you to do more units I think, and specific units. I think the BTEC, just for the NHS nursing and midwifery courses, I think are a little bit harder to get into just with
the BTEC. I’ve talked to a lot of the unis about it, cos I’ve got Psychology, they’ll take me with the Psychology but a lot of the unis have said well the BTEC Science as I’m predicted a distinction* looks really good as well, but I think if I didn’t have that Psychology grade it might have made it still more difficult for me to get in with just the BTEC.

RH: so which unis do you think that you will end up applying for?

G: I want to stay local, so I’ve looked at Manchester and Leeds and I’m going to look at the metropolitan unis in October because I missed them and then I’ve looked at Huddersfield and Bradford, and I really liked both Huddersfield and Bradford. I didn’t think I’d like them as much because they’re not really, erm Leeds and Manchester are Russell group unis, so my Dad was like “oh, yes I want you to go there”, but then when we went to Huddersfield and Bradford he said that he really liked them and they’re up on my list, high up on my list …

(RH had been to Bradford and expressed his liking of it)

… I was really impressed by it, I didn’t know what I was going to expect and I thought it might be a bit rough because Bradford’s a bit rough isn’t it? But no, I really liked it, the health school was really nice and it’s right next to the main bit, the health school, so …yeah, I liked it.

RH: so, why do you want to stay local if you don’t mind me asking?

G: I don’t know, I think it’s just more like it’s cheaper to stay at home, I think … I’m a family person so I don’t want to leave my family and I don’t know, I’d rather just travel to Huddersfield, or Bradford, or… I think if I went to Manchester or Leeds I’d probably have accommodation when there but then I’d still have the option to come home at the weekend …

(2-way comments about trains)

… the thing is that I spoke to them about travelling and they said it’s OK for when you want to be at the uni but because I’m doing nursing with placements at hospitals and they could be anywhere so it’s a lot easier to live in the city and travel around. So it’s something I’ve got to think about depending on where I decide to go, definitely.

RH: so, again in terms of the BTEC, how did your parents and other members of your family feel when you said you were going to do BTEC?

G: I think they were fine with it. I don’t think that they really know what it is anyway. I think they were quite pleased that I was taking on … cos science is more academic and previously I was doing more creative subjects like photography and art and I’d end up dropping them cos I didn’t do as well in them as I hoped to do. I think I took too much on at the time because I did textiles as well which I ended up,
yeah textiles, art and photography which is loads of really creative coursework that you’ve got to keep on top of and I ended up getting an A in my textiles because I focused very much on that and then my other two creative subjects dropped down to Ds but this year I’ve actually taken on Art again to see if I can bump that grade up. My teachers is re-entering me for one of my AS works so I’m going to re-do that, erm try and get it to the same level as my textiles was. I’ll end up this year, or next year, I’ll end up with four A levels all together, including this, and then two AS levels, so I’ve got a few qualifications going on (giggles) …

(RH: … just a few … )

… yes, so it’s a bit complicated.

RH: … so when you were thinking of choosing these sort of … I appreciate that you sort of came into the BTEC late … what influenced you to choose the BTEC … had you attended an open day, taster days or …

G: not really, I think I talked to other students about it that was obviously they were already on the course. I think I came in about two weeks late and had to catch up the course work … which wasn’t really a problem. I think the BTEC course for me just … I’m used to doing coursework anyway but this, obviously for me, is a bit easier because I’m so used to doing creative coursework that takes so long to do like making textiles pieces and the evaluating it so this written coursework just seemed like a combination between my creative coursework and my psychology courses because, obviously, psychology courses are a bit biological, a bit scientific and it just … it seems like it’s a good course to me cos I’m doing well in it and I get all my work done and I find it quite easy to do – I think that’s the reason that I chose to do it. I’d heard that the biology course is really hard and that the exams are horrible apparently, so I’m glad I went for this one and I’m doing well in this I might have not been doing so well in biology …

RH: do you tend to like courses that have coursework rather than exams …

G: yeah, I don’t know, I’m used to doing coursework anyway; I did well in two of them, I got two Bs and one of them I got a D in and I re-sat and got a C and I think I was the only person who actually went up a grade, everyone else tends to do worse in their re-sits so I don’t know I think it just depends really … I’m not really one of them people who are only good at one thing … I’m good at exams and I’m good at coursework so I guess that’s alright isn’t it (laughs)

RH: … do you have friends who are on the course now and did that influence you at all?

G: kind of, at the time I wasn’t really friends with them, just knew of them because they’re in the year below me, ern but I spoke to R about the course before I came on it and she kind of told me what it was a bit like and that’s when I decided I’d do it …
R. Hutchinson – June 2016

Gemma – final interview 2nd year BTEC

(… indicates periods where interviewer / interviewee were organising their thoughts / no meaningful dialogue or exchange)

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<td>Initial introduction as to purpose of follow up interview and also reminder of right to withdraw, confidentiality, etc …….</td>
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**RH:** have you applied for university yet

**G:** yeah

**RH:** can you tell me where you actually applied for?

**G:** … all five … Huddersfield, Chester, Manchester Met, Leeds Met and Bradford I ended up applying for.

**RH:** and what sort of courses are they?

**G:** adult nursing

**RH:** adult nursing? Ok, and have you had offers from any of them?
G: I've had two offers off Chester and Huddersfield, the rest I just got rejected from (laughs)

RH: ... what's the offers they've given you?

G: they're conditional offers on condition that I get this science at distinction, but I've already got my two A levels, I got textiles and a psychology A level.

RH: what grades did you get in those if you don't mind me asking?

G: I got an A in textiles and a C in psychology

RH: ... why did you apply for the universities that you did?

G: ... I think because it was closer to home, like I wanted to stay sort of local. Huddersfield, I applied there because I had my heart set on Huddersfield from the beginning just from looking around and talking to the tutors and the staff were really nice and I just loved the university ... everywhere else I applied because Manchester and Leeds are fairly close. Chester, I applied there because, even though it's further away it's really nice town or city and the uni is really nice ...

RH: do you know why the other three might not have invited ... made offers?

G: Bradford, I had an interview and when I went to the interview I hated it, like they put me in a group with more mature students who were so much older than me and I think that I immediately became intimidated and I was probably held back during the interview knowing that I wouldn't get a place there, I hated it so I kind of knew that was going to be a 'no', they rejected me but they said I'm on a waiting list ... so like if places do become available they will contact me but I want to go to Huddersfield because I've obviously got an offer there. Erm, Manchester Met weren't very helpful in telling me why I was rejected, they just said on UCAS they declined my offer ... and then I had to e-mail them to know why and when I did they just literally just sent me like a really general kind of excuse that they obviously send everyone. Erm, Leeds Met said that I didn't have enough experience outside, in like a health environment which is a bit stupid (laughs — finds it amusing as if she can't believe it?)

RH: are you online for a distinction?

G: yeah

RH: ... in your BTEC Science and hopefully you'll be able to take up the offer you've been made ... has your attitude towards the BTEC Science altered significantly since the start of the course?

G: I don't think so ... I can't really remember what I thought at the beginning of the course.

RH: and what do you think of the course now?
**G:** I kind o’ think … I don’t know … I kinda think that I enjoy it because I kind of like doing independent work, so … I obviously like doing the experiments in class as well but I like researching so if Sir says “alright this is something that you’ve got to do” and like we’ve been doing the physiology unit, something like the cardiovascular system, it’ll be like a little research thing and I like looking it up for myself rather than being taught kinda thing, so I like that bit about it … so yeah I like the course.

**RH:** … you must be near the end now with the assignments?

**G:** I think I’ve got one piece of work to hand in …

**RH:** and how do you find the coursework … how have you found it as the course has gone on?

**G:** … erm, I think that it has got more difficult this year than it was last year … probably because the last unit we did was very long and tedious; I don’t think that I enjoyed it as much. I’ve really enjoyed the physiology unit because I like Biology which is better … erm, I think it’s a bit harder but I get through it (giggles, and then bursts into laughter)

**RH:** … have your relatives, family, friends and that made any comment as the course has gone on about the fact you do BTEC Science …

**G:** no, I don’t think that my Mum and Dad really understand what goes on in 6th form anyway but they know that I’m on target for a distinction* and they’re quite proud of me for getting that target, so yeah, I think that they like it.

**RH:** …(quite lengthy pause) … in terms of expectations … at the start of the course you must have had some expectations, have those altered as your course has gone on?

**G:** I think like people say that BTECs are easy … they that it’s an easy way out of doing other A levels, but I mean I’ve done A levels as well like my psychology and my textiles and that … it’s not easier, it’s just a different way of doing it, so it’s like it’s all coursework, there’s no exams – that can suit some people better than others … I feel like I’m a kind of a bit of both, I like exams and I like coursework, so I don’t really mind the BTEC that is all coursework as I’m kind of alright at both, so yeah I don’t think that it is the easy way out as you have to put in the effort to get all your units done. If you don’t do the work, you’re not going to get the grades … I think that people have the wrong kind of perception of it.

**RH:** … (lengthy pause – comment made to relax interviewee which causes her to laugh – relaxed?) … in terms of the offers and that because you wanted to go to Huddersfield … do you have a good positive attitude towards the BTEC? Is it the sort of course you’d recommend to friends maybe?
G: yeah, I think so. I think R has some trouble … with universities that actually accept the BTEC … but that’s because she’s … I did an A level in Psychology so they accept that on top of the BTEC … it depends what kind of course you’re doing. For the nursing courses and midwifery courses I think that they aim for A levels in Biology and Psychology and things but I think it depends what course you’re doing and what uni you go to but, I’ve not had myself trouble with that so … yeah I think I’d recommend it, it is a good to do, I enjoyed doing it … so yeah, I think I would recommend it.

RH: thanks participant and winds up the interview
## Appendix 6 - UCAS Points equivalence for A level and BTEC Level 3 qualifications

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<th>Diploma</th>
<th>90 credit Diploma</th>
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Appendix 7 – table summarising some of the differences and similarities of student information from interviews

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<th>Studying mix of BTEC + A levels</th>
<th>Studying BTECs only</th>
<th>Wants to do a degree</th>
<th>Initially wanted to attend local university</th>
<th>Applied to non-local university</th>
<th>Initially considered Russell group</th>
<th>Did not apply to Russell group</th>
<th>Family / relatives did not support BTEC</th>
<th>No communication with family on this</th>
<th>Family view changed during course</th>
<th>Career goals changed</th>
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