

**Student engagement and value co-
creation: a model of university and
student impacts on the quality of
educational outcomes**

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**Student engagement and value co-
creation: a model of university and
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Abstract

Student engagement is a phrase that is now common in the vocabulary of academics and higher education managers but there is little clarity about what it actually means and how this can be encouraged and harnessed. The theories around student engagement have emerged from the educational discipline and have been quite isolationist. This study integrates these theories with those of value co-creation to give a different and additional perspective that has a valuable contribution to theory and practice.

The study uses the UK Engagement Survey from the Higher Education Academy as a basis for developing a model of student engagement. Undergraduate students at a university were surveyed using the amended UKES instrument and a sample size of 891 was obtained. The survey instrument included qualitative open comments that were analysed alongside the quantitative data. SPSS was used to generate descriptive and comparative statistics and exploratory factor analysis, which was further, developed using AMOS into confirmatory factor analysis to specify a model of student engagement. The additional items used from the value co-creation literature significantly enhanced the final model outcomes.

The study has made important contributions to the areas of method, in its use of the amended survey incorporating qualitative aspects, of theory in the integration of theories from different academic disciplines and of practice, in the development of a useable model that had implications for use in universities.

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1 Chapter One - Introduction

This thesis is concerned with student engagement; the biggest challenge faced by higher education professionals in their interactions with students. This is of contemporary and lasting interest due to the focus of student engagement in the recently introduced Teaching Excellence Framework (TEF). The first criteria of the TEF is ‘teaching quality’, which includes providing effective stimulation and challenge to encourage students to engage. From a position of working in the sector for over 25 years, it was clear that universities are challenged by changes in the structure, finances and market of higher education. Coupled with this, the significant increases in tuition fees and student debt has added to debates around marketisation and whether students are customers. These factors have influenced the way in which students engage in learning and university study, which has meant that academics have had to rethink how they teach and design courses. This is not all negative though; there are significant benefits in students and academics working together. There are also considerable advantages for individual students being engaged fully in their studies and being clear on what they should do to be successful. For academics designing activities that enable engagement, the process of student learning and achievement is also particularly rewarding.

This emphasis developed from original ideas on service quality as the focus, where initially the proposed research was to investigate concepts of quality in higher education according to different stakeholders. However, it became apparent that this would have little contribution to the research area. What quality might mean for students, institutions and academics would have been interesting but if subsequent similarities and differences were of any importance was not so clear. Although a discussion of 'what and whose' quality is interesting it did not really address the 'so what' test that is required for doctoral research. Other considerations when designing the research problem were that a number of organisations are involved in quality and higher education and if the research was to be overtaken by events in the sector and a large organisation such as HEFCE or HESA initiated testing of quality constructs, as in fact they did, then my research would be redundant. The initial stakeholder perspective lent itself to a social constructionist approach but as the research ideas were progressed, it became clear that a more positivist stance was required. Initially I was investigating the issue of quality and higher education through the lens of a marketing background and therefore evaluating extant literature on service quality and total quality management. During this phase of the study, it was realised that this was quite a narrow viewpoint that ignored a vast amount of literature and previous research in the educational quality academic discipline. Educational research held some significant research studies, as did influential sectorial organisations such as the Higher Education Academy (HEA) and HEFCE. It was decided to take a more holistic view of what quality is and combining the three areas of marketing, education and sectoral. When these were brought together into this multidisciplinary study the synergies and contribution became apparent. A marketing view of quality takes a consumerist approach where the consumer in reference to their expectations perceives quality. This is quite a narrow viewpoint for education and throughout this thesis, the difference between a normal product or service and the educational product is emphasised. Education has to involve the student in the production of outcomes and a simple evaluation of satisfaction does not take into account the complexity of this relationship. A thorough analysis of the literature in educational

quality signalled that quality could be equated to learning gains or 'distance travelled' that is in turn, strongly affected by student engagement. The research indicated that the focus of this research study should be concerning student engagement and linking this to the relationship development between the student and the university. There was a wealth of research and work around student engagement and partnership and some well-established surveys in America and Australia. The HEA was at the time, piloting an engagement survey (UKES) so it was decided to approach and work with them. It was soon realised that parallels exist between the concepts of student engagement and value co-creation. The literature from marketing and in particular services and value co-creation was therefore incorporated into the theoretical underpinning and research design of this study.

1.1 Aims, Objectives and Scope

The overall aim of this study is:

To evaluate student engagement through an interdisciplinary lens of value co-creation, education, and marketing to develop an extended transaction model of symbiotic behaviour.

The subsequent objectives were developed:

- Apply and adapt theories of value co-creation, co- production, services marketing and consumer behaviour to higher education.
- Evaluate the relationships between student engagement, educational gain and educational quality.
- Assess measures of value co-creation, co-production, student attitudes and behaviour for incorporation into an amended UK Engagement Survey.
- Test the effectiveness of the amended UK Engagement Survey as an instrument to assess student engagement.

- Develop a conceptual framework for a symbiotic model of student engagement incorporating university input and student behaviour.
- Establish tutor and student roles, expectations and implications for university interventions.

This thesis covers higher education in the UK although it is recognised that the countries making up the UK have specific higher educational structural and legislative differences and so will focus more on the case in England. The central aim of this thesis is to ascertain the link between educational quality, student engagement and co-creation and the resultant role that students and universities play in successful educational outcomes. The next section will outline some of the context of the thesis to be explored in subsequent chapters.

1.2 Significance of the Study

This study comes at a time when there are major changes in higher education. The changing regulatory framework culminating in the Higher Education and Research Bill 2017 will have lasting and significant implications for universities. How they are assessed internally and externally and by whom is also under debate. At the same time, there has been a paradigm shift in the role of students and tutors. Students are paying almost £30,000 in tuition fees for a degree and as a result demand high standards of service. What this service actually entails is not very clear and whether students should be regarded as customers is strongly debated. Tutors are unsure as to how to balance the demands of maintaining standards, gaining high satisfaction teaching evaluations, managing student expectations and the pressure to raise the degree class profiles. Student satisfaction is often paramount to the university given its input into league tables but without the acknowledgement that quality does not equate to satisfaction. There is significant interest in the education field on the impact of student engagement on learning but this has not really been linked to value co-creation. Student engagement is crucial to successful study but what engagement actually comprises of and what should universities and tutors do to

ensure engagement, is a central theme of this study. The contributions of the study were established to impact on:

- the theory of educational quality and engagement
- the testing and extending of engagement research methods
- to make recommendations for practice, based on the development of a model

1.3 Higher Education and Quality – an Introduction

The UK higher education landscape is undergoing profound and unprecedented structural changes. Recently these changes have accelerated with new legislation, marketisation, increased competition, Brexit, visa restrictions and funding changes. Consequently, institutions are facing an uncertain future. These sectorial changes have focused attention and debate into what ‘quality’ is within higher education (Watty 2006, Pounder 1999, Rowley 1997). The National Student Survey (NSS), launched in 2005, is often used as a proxy for quality and is an integral component of many other published measures of quality. However, the NSS is not universally accepted as a good indicator of quality (Dean 2011, Child 2011, Gibbs 2010a, 2010b). Stakeholders in higher education include Governments, employers, alumni, sector regulators and universities themselves. The stakeholder who has been the focus of most research is, of course, students. Perceived quality from the students’ viewpoint will not just include academic input but also peripheral services and social aspects of their overall student experience and decision-making (Oakleigh Consulting and Staffordshire University, 2010, James et al 1999). The Quality Assurance Agency (QAA) who officially oversee the maintenance and enhancement of quality in the UK higher education sector is another key stakeholder currently although this may change with new legislation. National Government is an important stakeholder as universities provide substantial export income in terms of overseas students and funding and contributes to the reputation, skills base and research output of the country. Local communities also benefit economically from

universities in their area. The academic community (faculty) is an important stakeholder which is often more discipline based than geographically based; therefore there is a worldwide awareness of the quality standards and reputational measures in each discipline. The external examiner system is a cornerstone of quality maintenance in UK higher education encompassed within the QAA and 'faculty' stakeholders. The other stakeholders highlighted below in figure 1-1 are alumni, parents, employers and professional bodies.

Figure 1-1 Higher Education Stakeholders



1.3.1 Higher Education Quality Infrastructure in the UK

The HEA summarised the development and future of higher education quality in reports by Brown (2014) and Westwood (2014). The current environment is predicated by the Browne report (2010) which aimed to 'drive up quality' and

initiated major student funding changes seeing a tripling of tuition fees. The 2011 White Paper entitled 'Students at the heart of the system', based on the Browne report never materialised into law but many of the proposals were implemented. This may have resulted in more student focus on value for money, consumerism and satisfaction which I argue has diverted the debate as to what is educational quality and the student's role in co-creating quality. Increased fees may also have led to more students working during full time study or living at home and these factors might affect their sense of belonging at an institution. These are key factors in value co-creation and explored within this research.

In the UK, various bodies distribute funding for universities and have the overall responsibility for university quality. These include, the Higher Education Funding Council for England (HEFCE), the Higher Education Funding Council for Wales (HEFCW), the Scottish Funding Council (SFC) and in Northern Ireland, the Department for Employment and Learning (DEL). Each of the funding councils currently devolve the responsibility for quality to the QAA (Quality Assurance Agency) that in turn has specific departments to support England, Scotland, Wales and Northern Ireland. The QAA, recently published 'The Quality Code'¹, which are the standards and expectations universities, should meet. The QAA also publish specific subject benchmark statements that Higher Education Institutions (HEIs) should follow when designing courses. Since 1997, the QAA was contracted by HEFCE to oversee the quality and standards of universities; the most recent iteration of the review process was the Higher Education Review, which ran until 2016. This was replaced by the new HEFCE 'Revised Operating Model' for quality assessment from 2017. The new operating model enhances the existing annual reporting institutions make to HEFCE. Its purpose is to bring in a risk based proportionate approach, more direct student voice and the development of a provider register. HEFCE already visit institutions every five years on an assurance review visit and this will be used to monitor the revised operating model. There will also be more responsibility for university governors in checking university quality

¹ <http://www.qaa.ac.uk/assuring-standards-and-quality/the-quality-code>

indicators and mechanisms. Since the increase in fees in England and corresponding reduction in funding for teaching via HEFCE, the future of HEFCE has been under debate. At one point, it did look as though the QAA and HEFCE were vying for position and HEFCE was to take over the QAA role but amendments to the bill in the House of Lords ensured that there was a place for a QAA type of body. The new Higher Education and Research Bill 2017 abolishes HEFCE and OFFA (Office for Fair Access) and combines them under a new body of the Office of Students (OfS). In reality, though the functions of including the oversight of quality HEFCE will be maintained.

Higher education quality includes the systems and processes of university governance but also encompasses teaching quality. How teaching quality is evaluated and measured is open to much debate. Within the field of educational research for the school sector, Marsh's (1987) work has been used extensively as a base. Within higher education, the AHELO (Assessment of higher education learning outcomes) project is an OECD international project to measure university teaching quality. This was subject to an international feasibility study in December 2012, testing graduate skills and knowledge across disciplines, which has similarities to the learning gains approach. The project has had difficulties in the measurement of different disciplines and disparate higher education infrastructure (Marhan 2015). However, teaching quality is not directly measured in the project as it is seen as a function of learning gains. There are other factors in addition to teaching quality that would affect learning gains. These would include the facilities and resources available to students and student engagement with the resources and teaching. Following proposals for new higher education legislation a Teaching Excellence Framework has recently been piloted in the UK.

This thesis brings together disparate bodies of knowledge on the concept of quality in higher education and the particular relationship that exists for a successful higher educational experience. Educational quality research is integrated with service quality, consumer behaviour and value co-construction to develop an interdisciplinary approach. The concept of quality used here takes the learning

gains approach; that is the learning students gain from university study, sometimes termed as 'distance travelled'.

1.3.2 Student Engagement

One of the most important factors in learning gains is student engagement. There is substantial research to support their use to measure engagement and the positive link to learning gains. There is a body of opinion that learning gain is essentially educational quality as it measures the difference in what a student enters with and what they leave with (skills not just grades). However, there is no standard agreement on what engagement comprises. There are a number of well-established surveys used to measure engagement in Australia and America. The HEA have done two years of pilot studies on the use of an engagement survey and rolled out a full study in 2015, which this research study aligned itself to. The NSSE engagement survey is very well thought of in the USA, as is the AUSSIE survey in Australia and New Zealand. There is substantial research to support their use to measure engagement and the positive link to learning gains. The HEA have done two years of pilot studies on the use of a NSSE type of engagement survey and rolled out a full study in 2015, which is aligned to this research. There is substantial research to support engagement surveys to measure engagement and the positive link to learning gains.

Student engagement is usually viewed through the lens of educational policy and psychology. I have adapted this in this study to incorporate marketing concepts such as value co-creation, services marketing and consumer behaviour. However, there is not an agreed definition as to what student engagement actually is. Many of these definitions are complex and lengthy. One reason for this is that various higher education interest groups have attempted to define it by using a working group approach where the players involved all have their diverse standpoints. So

student unions often take representation in decision-making and governance approach whereas academics will take a teaching and learning perspective. Although the various positions are discussed in this thesis, the central purpose is to investigate the role of engagement in learning gains so the focus here is on teaching and learning. My definition driving this research is then that:

Students are actively participating and involved in learning activities that have been designed to enhance learning gains

1.4 Methodological approach

The literature around educational quality, learning gains, value co-creation and student engagement was analysed and evaluated. There are difficulties in defining student engagement and any study would need to address this complexity. The aim of this research was to evaluate engagement through an interdisciplinary lens and to propose a model that would inform university strategy and operational activity. There is a tradition of using surveys for the engagement in the sector and the recent work from the HEA in their pilots of the UK Engagement Survey (UKES). However, it was recognised that the concept of student engagement is socially constructed and so there had to be some acknowledgement of this in the research design. For this reason, I took the pragmatic approach, so the research objectives were the most important factor and methods chosen to reflect this. As a result, a quantitative study was the main method but there were sections of open comments included to cover the qualitative, socially constructed perspectives of engagement. The survey was distributed to all Staffordshire University undergraduate students during April- June 2015. The rationale between the objectives and the research is shown below in table 1-1. Additional questions on the survey instrument were included, for example, on aspects of value co-creation, satisfaction, entry grades and academic performance. The survey was developed on the Bristol Online Surveys platform and the population database downloaded from the Staffordshire University student information system. This included information that could be automatically included into the questionnaire responses and so

reduce the time it took for respondents to complete. A link to the questionnaire sent to individual email addresses with a password for completion.

Table 1-1 Objectives and Associated Research

Objectives:	How addressed in the research:
Apply and adapt theories of co-production, services marketing and consumer behaviour to higher education	Evaluated by secondary research and developed into the research design and instruments
Evaluate the relationships between student engagement, educational gain and educational quality.	Secondary research and literature review, informing the research design and additional components in the amended questionnaire
Assess measures of co-production, student attitudes and behaviour for incorporation into an amended UK Engagement Survey	Evaluation of the UKES Survey and development into an amended version incorporating secondary research and focus group analysis.
Test the effectiveness of the amended UK Engagement Survey as an instrument to assess student engagement	Analysis of the survey outcomes and specifically an evaluation of the adapted UK Engagement Survey questions are a reliable and valid measure for student engagement.
Develop a conceptual framework for a symbiotic model of student engagement incorporating university input and student behaviour	Developing a model of Student Engagement using data reduction techniques of Exploratory Factor Analysis and Confirmatory Factor Analysis
Establish tutor and student roles, expectations and implications for university interventions	Analysis of research results alongside literature to develop the discussion and the contribution to the research area and to practice

The response data was loaded into SPSS for analysis and the qualitative comments into an Excel spreadsheet for thematic coding. Descriptive statistics were analysed and contingency tables calculated for some demographics and the subject the respondents studied. Data reduction techniques of exploratory and confirmatory factor analysis was then conducted.

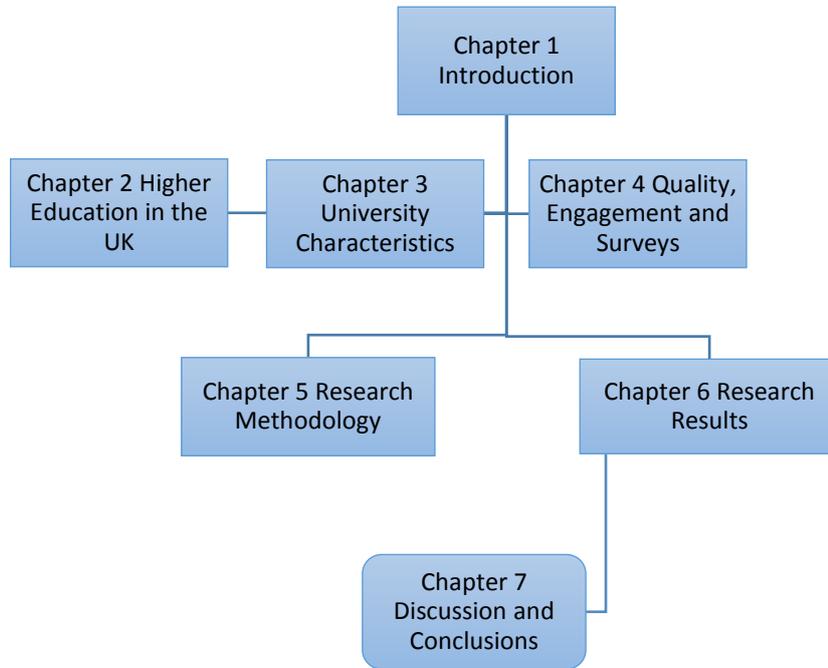
1.5 Overview of research findings

There were 891 usable responses out of 8873 potential respondents and so the response rate was 10%. In the main respondents were UK and as expected, in the younger age category; there were slightly better response rates for females than males. All the University Schools were represented in responses. The engagement sections of critical thinking, learning with others, interacting with staff, reflecting and connecting, course challenge, skills development, how time was spent and experience at Staffordshire University were analysed in depth. Scales were created for engagement factors and in the main, these were found to be valid and reliable. Exploratory factor analysis was used on the engagement items, which resulted in a 7-factor model with 44 items. This was further refined using confirmatory factor analysis, which resulted in a final 5-factor, 22 item model. This model formed the basis of the discussions and proposal of a symbiotic model of engagement that is evaluated in the final chapter of this thesis.

1.6 Thesis Outline

This chapter has outlined the aim, objectives and scope of this study and introduced the theoretical underpinning and methodology used. Chapter two gives a detailed background into the structure and development of higher education in the UK and the challenges universities face. Chapter three investigates the particular characteristics of university education and corresponding roles and relationships. Chapter four explores the concepts and definitions of educational quality, student engagement and surveys that are linked to quality and engagement. Chapter five discusses the research methodology and chapter six the results from the research. The results are discussed and evaluated in chapter seven, along with proposed interventions and sector recommendations. The symbiotic model of student engagement is proposed and the significance of the contribution and the impact of the study is presented. Figure 1-2 below shows the organisation of the thesis.

Figure 1-2 Thesis Organisation



2 Chapter Two - Structure and Development of UK Higher Education

Universities in the UK are a dynamic and important sector to the economy. There are 164 universities in the UK, with 107 in England (HEFCE 2016a) and a further 236 colleges delivering higher education courses. Worldwide comparisons are difficult as the categorisation of universities vary but UK universities are major players in international student markets and in world university rankings. They contribute significantly to British exports with international students spending around £7.3 billion a year (UniversitiesUK 2016). They provide the country with skills and research and are an important employer in many regions, with around 300,000 employees in the sector.

Student numbers have grown considerably over the past twenty years, with current figures of undergraduates being around 1.1 million (HEFCE 2016b). The number of full time undergraduates over the past decade has grown by about 80,000 over the past decade although part time numbers have substantially declined by nearly 60% over the last five years (HEFCE 2016b). Postgraduate taught students from the UK and EU has been quite stable at around 75,000 each year although overseas students who make up around 60% of the total number boost this. A quarter of postgraduates come from China although recently overall numbers have fallen due in part to more stringent immigration policies. Postgraduate research student numbers have increased by over 50% over the past decade (HEFCE 2016b). STEM subjects have increased their students significantly over the past few years, for example chemistry student numbers have increased by 66% since 2004/5 (HEFCE 2016b). This growth though has not been uniform throughout the sector and the big winners have been the high tariff universities with the low tariff universities struggling in the face of increased competition. At the same time, there has been a significant increase in the number of good degrees awarded to students. In 2016 three quarters of students gained an upper first or first class degree compared with

two-thirds five years ago. Around 25% of students graduate with a first class degree whilst in the 1990s this was around 8% (Pells 2017).

It is in this context that this research is set. It is motivated by this increase in university activity and the challenges this brings in effectively engaging a wider student base to make the experience life enhancing and contribute to a learning society as advocated by Dearing (1997).

2.1 Structure of Higher Education in UK

Public universities, a small number of private universities, some further education colleges and private providers in partnership with universities currently deliver higher education in the UK. The Bologna Process has set the qualification framework, which was a series of meetings and agreements dating from 1999 between European countries aimed to ensure the comparability and standards across the sector. There are 48 country members plus consultative members such as UNESCO and the Council of Europe of the European Higher Education Area (EHEA). The framework is described in terms of learning outcomes and credits that can be transferred using the European Credit Transfer and Accumulation System (ECTS). Qualifications can be at bachelor, masters and doctoral levels. The study hours are associated with ECTS are specified, so 1500- 1800 hours correspond to 60 ECTS. This was developed by the QAA for the UK into the current two qualification frameworks, one for Scotland and another for England, Wales and Northern Ireland. The frameworks specify the levels of final qualifications and any intermediate level. The system uses a Credit Accumulation Transfer System (CATS) where ECTS equate roughly to half of CATS. Before looking at the market of higher education, it is useful to assess what universities are and structure of the sector.

2.1.1 What are Universities?

It may be thought that the role of universities in society should be clear but it is quite contentious. Are they there to foster higher thought, to train a workforce, to provide a research base or to simply educate adults? How this is defined is central

to Government higher education policy, to sector strategic directions and individual university strategies. The traditional view of universities was that they existed to develop knowledge for the good of society and to contribute to the research agenda. Over the years subsequent Government interventions has meant this altruistic view has changed. From the Robbins (1963) report in the early sixties there has been a drive to substantially increase student numbers and open up higher education opportunities to all who might benefit and are able. This has been very successful, as student numbers grew significantly. A university education can be seen as a 'rite of passage' for many people who would not have previously considered attending university. In the introduction to the Dearing Report (1997), the purpose of university education is, *'life enhancing: it contributes to the whole quality of life... In the next century, the economically successful nations will be those, which become learning societies: where all are committed, through effective education and training, to lifelong learning.'* At the macro level, university education can focus on the economic growth of the country supporting workforce skills, innovation and research. A benefit to individuals attending university is in terms of career aspiration and one of the main 'output' or a key performance indicator of university education is the notion of 'employability'. However, this has raised criticisms that universities have become organisations for training rather than knowledge creation. It has also meant that the expectations of students as to what they will gain from attending university has changed and is much more instrumental.

In 2012, Collini gave a personal account of what universities are in the light of expansion of student numbers and subject areas. He advocated that universities are a public good for society that has moved to being a private good for individual benefit through marketisation.

He proposes that the modern university has four characteristics:

- 1) That it provides post-secondary school education, where education signals something more than professional training

- 2) That it furthers some form of advanced scholarship or research whose character is not wholly dictated by the need to solve immediate practical problems.
- 3) That these activities are pursued in more than just one single discipline or very tightly defined cluster of disciplines
- 4) That it enjoys some form of institutional autonomy as far as its intellectual activities are concerned.

(Collini 2012)

These characteristics may not be compatible with recent Government policy or even individual university policy. New entrants in the UK may not have this ethos and be more short-term profit driven training organisations, without a requirement for widening access and not engaging in research or specific knowledge generation. In Collini's later article in 2016, the role of the university is revisited, reflecting on whether it is a place for deep learning, the development of analytical or creative skills or a preparation for employment. Universities should also have a role, according to Collini, in developing future academics by providing PhD study. However, this role is weakened in the Higher Education and Research Bill 2017, as new providers, who are encouraged, do not have any obligation to support research. The expansion of student numbers has meant that the type of students who go to university are no longer only those who know how to study and they may need to learn this skill. More vocational university subjects are now being offered that do not have a significant academic history, for example recent launches of foundation degrees in canine training and football coaching. This again calls into question the definition of a university and higher education. The Higher Education and Research Bill 2017 supports the wider use of the terms and covers many types of post-secondary education. 'University' has prestige and so it is likely that institutions that can convert to universities will do so. The House of Lords pushed for some amendments to the Higher Education and Research Bill 2017, which included five points on what are the functions of universities. These are:

1. UK universities are autonomous institutions and must uphold the principles of academic freedom and freedom of speech.
2. UK universities must ensure that they promote freedom of thought and expression, and freedom from discrimination.
3. UK universities must provide an extensive range of high quality academic subjects delivered by excellent teaching, supported by scholarship and research, through courses, which enhance the ability of students to learn throughout their lives.
4. UK universities must make a contribution to society through the pursuit, dissemination, and application of knowledge and expertise locally, nationally and internationally; and through partnerships with business, charitable foundations, and other organisations, including other colleges and universities.
5. UK universities must be free to act as critics of Government and the conscience of society.

2.1.2 University Groups

There are a number of mission and representative groupings of UK universities where some universities are members of more than one group. Ancient universities are those who have been in existence before the 1800s include Oxford and Cambridge in England and Aberdeen, Edinburgh, St Andrews and Glasgow in Scotland. The Russell Group is a group of twenty-four research-intensive universities that began meeting in 1994 but was formalised in 2007 by the appointment of a Director General; members include Oxford, Cambridge, Birmingham, Exeter, York and Liverpool. Redbrick universities are sometimes called civic, were originally in the large cities in England, such as Manchester, Leeds, Bristol and Birmingham and is often extended to encompass those who were granted university status between 1900 and 1963 including Reading, Southampton, Bangor and Dundee. Plate glass or 1960s universities are those that were created with the expansion of the sector and include many campus universities such as York, Sussex, Kent and Essex. The Million Plus universities is a group of modern

universities with more than a million students studying with them. Members include Anglia Ruskin, Middlesex, Bath Spa and Staffordshire. New, or post 1992 universities were previously Polytechnics or Colleges and include Coventry, Birmingham City, Huddersfield and Worcester. The University of London encompasses 21 separate Colleges or Schools that are often seen as separate entities and reported as such. The 1994 group of universities are a small group of research-intensive universities that were formed in response to the college and polytechnic sector becoming universities and the creation of the Russell group. It was disbanded in 2013, as the group was under threat since the universities of Durham, Exeter, York and Queen Mary, University of London, left to join the Russell Group. There are some unique institutions such as the University of Buckingham, which is a long-standing private university, and some newer private universities. Some university colleges have degree awarding powers but are not full universities, for example University College Birmingham. Colleges of Higher Education and Further Education often collaborate with full universities for awarding degrees. The Universities Alliance is a group of 24 business and enterprise focused universities with a mission to drive growth in cities and regions.

The two main representative university bodies, Universities UK and Guild HE, again do not have mutually exclusive membership. Universities UK's mission 'acknowledges the diversity and autonomy of the UK's higher education sector are critical to its success' and aims to promote the sector excellence in teaching, research and knowledge exploitation. They currently have 133 members. Guild HE are a smaller organisation whose aim is to promote a 'sustainable, diverse and dynamic higher education sector'. The third representative body is Independent Higher Education, which has been reformed from Study UK and is positioning itself as the private sector representative body.

2.1.3 Sector Support and Governance Organisations

The Higher Education Statistical Agency (HESA) collates statistics from all UK universities from annual returns. They also currently compile the destination of leavers from higher education (DLHE) survey. The Higher Education Funding Council for England, HEFCE, has been the regulatory and funding body for universities in England although they will be subsumed under the new Office of Students remit proposed by the Higher Education and Research Bill. The Quality Assurance Agency (QAA) is currently the body within HEFCE who monitor standards and quality of higher education in the UK that lead to a UK higher education qualification.

The Higher Education Academy (HEA) concentrate their efforts on teaching pedagogy and quality. They run the student surveys on engagement (UKES) and postgraduate experience (PTES). They also offer consultancy services but recently have had their funding cut and have since expanded their services to fund their existence. They are expanding into the international market and have a well-established teaching fellowship scheme with different levels of membership, the UK Professional Standards Framework championing teaching quality. Universities pay a subscription, although since the central cuts the HEA have attempted to increase this by three fold but universities have resisted paying this increase. They also used to fund grants for teaching initiatives and national teaching fellowships but these have been reduced due to the funding changes. The Higher Education Policy Institute (HEPI) was established in 2002 to contribute to education policy and debates and is a charity funded by universities and organisations. The Higher Education Commission is an independent body made up of leaders from the education sector, the business community and the major political parties. It examines higher educational policies, holds enquiries and provides reports and analysis.

The Student Loans Company is a non-profit making, Government-owned, organisation set up in 1989 to provide loans and grants to students in universities and colleges in the UK. The Student Loans Company works with Student Finance England, Student Finance Wales, the Student Awards Agency for Scotland, the

Education Authority in Northern Ireland and Higher Education Institutions. They issue loans and grants to students, including those from European Union countries and pay tuition fees to individual colleges and universities. The Universities and Colleges Admissions Service (UCAS) runs the application process for the majority of undergraduate courses. It is an independent charity, funded by fees charged to applicants and to universities, plus advertising income and provides advice services to providers, parents and applicants. The National Union of Students (NUS) represents higher end further higher education student unions in the UK. Championing the needs of international students is the UK Council for International Student Affairs (UKCISA) and give advice and guidance to students, student unions and institutions. An online community of people working or interesting in higher education, Wonkhe, was founded in 2011 to provide a voice to individuals and investigate policies. They provide weekly bulletins, articles and responses to the changing higher education environment. JISC is a not for profit company founded in 1993; previously known as the Joint Information Systems Committee that supports higher education technology and researching new technologies that can be applied to higher education. JISC, funded by the sector, provide the Janet network to universities and Government.

2.2 University Sector Development

All Governments in the past fifty years have committed to increasing the number of students attending university. Fifty years ago, only 6% of young people went to university (Blanden and Machin 2013) and in the main, they were from higher income households. Tony Blair in 1999 (BBC News March 8th 1999) announced the Government aim to have 50% of young people in higher education and that to fund this charging tuition fees to students was needed. The Robbins report in 1963 recommended the expansion of the sector and widening opportunities; that university 'be open to all who had the aptitude and desire to go.' The expansion allowed Colleges of Advanced Technology to convert to universities; these include well-established universities such as Aston, Bath, Surrey and Brunel. Polytechnics were then established from 1966. By the mid-90s, around a third of school leavers

went to university, the sector also became more diverse in terms of types of students and higher education providers. From 1992, polytechnics were allowed to convert to universities and therefore increasing the number of university students overnight. In the 1990s, the sector was struggling with the rapid rise in students, the subsequent number controls and a lack of funding in infrastructure and research. Between 1989 and 1997, there was a 36% drop in funding per student (White Paper 2003). This led to the setting up of the National Committee of Inquiry into Higher Education chaired by Lord Dearing reporting in 1997. The Dearing report, formally known as the National Inquiry into Higher Education was a series of reports that was the largest review of higher education since the Robbins review in the 1960s. The main report is entitled 'Higher Education in the Learning Society' set out a vision for the next 20 years. The Dearing report recommended the introduction of subsidised tuition fees payable by students after graduation through a loan system along with further expansion where all who had the potential to benefit from university education could have access. It also recommended lecturer training in teaching and a credit transfer system later developed into CATS (credit accumulation transfer system) that most UK universities have adopted.

At the time, the Government set the contribution that students made to £1000 per year. The increased fee income was well received, with Universities UK stating in evidence to the Browne Review in 2010, that universities gained by the third year an additional £1.3 billion of additional annual income. This increase in fees occurred with no reduction in demand. However, this increase was not enough and funding per student was still lower than in 1992. The Government still had to limit student numbers to protect spending although the funding changes were designed to make funding more sustainable. The Government decided to charge the fee up front rather than the Dearing proposal of deferring it until graduation. Deferred payment was not put into practice until the 2004 Higher Education Act and came into effect for students entering university in 2006 where the cap for fees than was increased to £3000. Government thought that this fee would vary between institutions and courses but in fact, it did not. This potential variable fee system led to the creation

of the Office for Fair Access (OFFA) to ensure equity of access. Institutions charging more than £1000 it has to draw up an access agreement submitted to OFFA.

The Browne review was initiated in 2009 by the Labour Government and published in 2010 under the coalition Government. It highlighted analysis from UKCES that higher education did not deliver the skills that business needs and so further embedded the link between university education and employment. It reported that 20% of businesses had a skills gap in their workforce and that 48% of employers were dissatisfied with the business awareness of their graduate employees.

The Browne Review proposed six principles:

1. There should be more investment in higher education
2. Student choice should increase
3. Everyone who has the potential should have the opportunity to benefit from higher education
4. No student should have to pay towards the costs of learning until they are working
5. When payments are made they should be affordable
6. There should be better support for part time students

The previous changes in fees did not relieve the pressures on student funding or reduce student demand for university places. The review recommended £6000 to be paid for by fees from students through loans and a levy on additional fees but no cap on student numbers. Not all the Browne recommendations were included in the Government 2011 White Paper, including the levy and withdrawal of the student number cap. A stated aim at the time was to improve social mobility by expanding university education and to make students, the main beneficiaries of higher education, bear more of the costs. They increased the fees that institutions could charge to a minimum of £6000 and a maximum of £9000 per year from autumn 2012 replacing the teaching grants to institutions. Many elements of the White Paper were implemented even though it did not become law, as the planned

higher education bill 2014 was withdrawn. The Browne report recommended that HEFCE, QAA, OFFA, and the Office of the Independent Adjudicator be merged into a single body; although this was not initiated at the time it was included in the Higher Education and Research Bill 2017. The 2011 White Paper proposed that HEFCE would be at the centre of a new regulation framework as a 'consumer champion' as their traditional teaching grant funding role was diminished. It also recommended more diversity in the sector, allowing further education colleges and new providers to be able to deliver higher education. Alternative providers have been encouraged since the Browne Review but there have been some problems in quality and student visa issues. There was also support for Foundation degrees that at the time were an important new development in the sector within the newer universities and educational partnerships. The Browne Review and the 2011 White Paper confuses quality with satisfaction, assuming these are the same, saying that 'students are best placed to judge what they want to get from participating in higher education'. (Browne 2010). In the forward of the 2011 White Paper by Vince Cable and David Willetts, they said the purpose was to 'put students in the driving seat' and to 'focus on high quality teaching'. These themes will be revisited later in this study.

When the Government paid tuition fees direct to institutions (via HEFCE) university numbers were capped but with the move to a loan system to cover all tuition fees then this was phased out; in 2014-15 universities were allowed an additional 30,000 places, linked to good A level grades and from 2015-16 the cap was removed completely. Previously there were substantial fines of up to £8000 per student if number controls were breached. This change in policy was a move to a more market driven environment, which may well put additional pressure on the finance system (Shaw 2014). Nick Hillman, the director of the Higher Education Policy Institute (HEPI) reported on the removal of student number controls in 2014. He stated that although announced in December 2013 it was put together rapidly and without much analysis and should have looked at the experience of other countries such as Australia. Australia lifted their cap in 2012 and found that the costs were

substantially more than predicted and the number of low performing applicants increased (Norton HEPI 2014). The UK Government predicted there would be 60,000 extra entrants each year, which would be an increase of 20%, but this was not the case as it only grew by another 3%. This may be because there is a reduction in the number of 18 year olds in the country. It also leaves the Government no room to promote the national interest, for example if they wished to encourage applications to engineering. This removal of the cap on student numbers, may adversely affect student experience (Eames 2016, Havergal 2016a, Neves and Hillman 2017). It affects universities differently in that the prestigious names are able to recruit more but those lower ranking or newer universities struggle with increased competition. After the cap was lifted in September 2015 there was a record number of students going to university with more than 510,000 undergraduates accepted onto courses up by 3% of the previous year (UCAS) and more placed in their first choice (Telegraph 2015) and prestigious institutions increased their places considerably.

Recent research from the Institute of Fiscal Studies by Britton et al (2016) evaluated the earnings of Russell Group graduates from England ten years after graduation compared to non-graduates. They found that graduates from wealthier backgrounds earned 10% more than poorer family backgrounds probably due to social and cultural capital factors. In general, graduates earn more than non-graduates do by around £8000 per annum and they are twice as likely to be in employment. However, there was found to be significant differences in earnings depending on the university that was studied in; with LSE, Oxford and Cambridge being the highest earners, however at 23 universities, median earnings for male graduates were less than those of non-graduates. This has called into question the value of degrees and the underlying principle of the White Paper in 2011 to put the costs onto students (Gurney-Read 2016). They also found that the subject students studied had a major impact on earnings with creative arts graduates earning the least and medical graduates the most. Morgan (2016a) reported the reaction from the chief executive of Million Plus that Britain remained a society where *'some are*

born clutching a golden ticket that provides a passport to higher end earnings regardless of where and what people study' (p7). Analysis by Darian (2016) said that there may be future funding issues as more students are taking subjects in the creative arts where earnings are low and graduates are unlikely to pay a significant amount of the loan back. This may lead to consideration of differential fees for courses by earning potential. In future, this information may be incorporated in the KISS data and then may affect student decision making. An objective of Government is to increase social mobility but the earnings differential of wealthier students will be a barrier and the withdrawal of maintenance grants (Darian 2016) may discourage applicants from disadvantaged backgrounds. These headlines may make direct employment rather than going to university attractive to potential students as may the new Higher Apprenticeships, sponsored by employers. The idea that going to university is a natural progression and the expectation of young people, parents and schools is now challenged. Opening up the sector to competition is purported to increase standards, mirroring policy in the other sectors such as health and pre-university education. These have been the subject of primary legislation whereas the proposed higher education bill due in 2014 was shelved and redesigned after the Conservative victory at the 2015 general election without being constrained by the coalition. The 'home' of universities in the structure of Government departments has also changed. Recently in 2016, Theresa May became Prime Minister, after the resignation of David Cameron following the referendum to leave the European Union. She was previously a home secretary who had a hard stance on overseas student visas and the respective of higher education exports income (Morgan 2016b). The higher education element of universities has returned to the Department for Education after its removal in 2009. After publication of the White Paper for Higher Education and Research in 2016, there followed intense debate in the sector and the House of Lords until the Higher Education and Research Bill became law in 2017.

Research from Which in 2014 and the HEPI/HEA Student Academic Experience Survey 2015 indicates that students view their courses as being poor value for

money. The concerns centre around the contact hours on courses, although Gibbs (2010a) reported on a number of studies that indicate that contact hours per se do not affect outcomes, rather it is effective pedagogy. The HEPI/HEA study also reported that students have little information on how fees are spent and this is something that universities could work on relatively easily. The White Paper in 2016 stated that many students are dissatisfied and they quote from the HEPI 2015 student academic experience survey that 60% of students felt that some aspects were worse than they expected and a third of these said it was around teaching quality. This is a very broad question and over a three-year period of study it would be very difficult to not have some elements that were not as good as expected. In the same survey the direct question was asked as to how satisfied they were with their course and 87% said they were fairly or very satisfied. In the 2015 HEPI student academic experience survey the trend for English students to say that a degree was poor value for money rose sharply from the 2012 introduction of £9000 fees. There did seem to be a relationship between higher contact hours and satisfaction but 40% of students did say they did not attend all their scheduled hours, one reason given was that they could access notes on line. Nick Hillman, HEPI's director stated in a recent Times Higher Education article (Havergal 2016a) on this survey that value for money perception was due to "a consumer mind-set amongst students" and that universities should do much more to communicate to students what fees are used for.

The Diamond review in Wales published in 2016, builds on the work of the 2011 Universities UK Efficiency Task Group, to evaluate value for money in higher education. It found that universities make a significant impact on the economy, contributing at least £73 billion a year to the UK economy, responsible for over £10 billion in export earnings and supports more than 700,000 jobs. These findings are supported by McGettigan (2013), *'On almost every international survey, once size of population and the economy are factored in, English higher education demonstrates excellent value for money in relation to the public spending that supports it'* p6. In addition to the changes in the higher education arena, there are

also major changes in the secondary education sector that will affect the operation of universities. The Sainsbury Review (2016) of technical and vocational education proposes sweeping changes to the post 16 education era where students post GCSEs would have to choose a vocational or academic pathway. A high number of existing vocational courses would cease to exist and the current vocational and academic combinations would be prohibited. This will affect universities, as a high proportion of applications hold vocational qualifications and it is unclear at present how this will influence applications. This section has highlighted some of the changes to the financing of university education and this is evaluated in more detail below before a discussion of the marketisation of higher education in the UK.

2.2.1 Student Finance

The Department for Business, Innovation and Skills (BIS) oversaw higher education funding, until 2016 when the Department for Business, Energy and Industrial Strategy replaced it. The past thirty years has seen significant and inconsistent changes in all aspects of student finance. All main parties have stated their objection to students paying tuition fees and then introduced, confirmed and increased them. From 1962-1989 students could access maintenance grants to cover both living costs and tuition fees. In 1989, the Tories froze grants and introduced student loans for living expenses; tuition fees were still paid directly from the Government. Before 1998, student loans were for living expenses and not tuition fees and sold like a mortgage. They were payable over 60 monthly instalments at the rate of inflation and the debt cancelled when the graduate reached 50 years old but payment could be deferred for low-income earners. When tuition fees were first introduced in 1998 they were £1000 per year and payable up front rather than on graduation as the Dearing report recommended. In 1998, the Labour Government introduced upfront tuition fees of £1000 per year payable by the student and abolished student grants to be replaced by loans. Some disadvantaged students could still access certain funds and universities were encouraged to use bursaries although paying fees up front against the Dearing report recommendation proved very unpopular. At the time, before devolution all

the nations of the UK had the same system following devolution in 1998 they differed in terms of their approach to student funding and tuition fees.

When Labour was re-elected in 2001 their manifesto said they would not introduce top-up fees (Blake, 2010). The 2003 White Paper then outlined proposals to allow universities to introduce tuition fees up to £3000 per year payable after graduation, that were introduced in 2006. The Conservative leader at the time Iain Duncan-Smith pledged that a future Tory Government would abolish tuition fees adding they were 'a tax on learning'. When the £3000 fees were introduced some concessions were made such as an increase in maintenance grants for eligible students, student loans increased to meet the real cost of living and all student debt written off after 25 years. Almost all universities set their fees at £3000 but this still did not solve the funding situation universities faced. Between 1998 and 2012, a graduate would pay 9% of their annual income each year once earning more than £15,795 a year. Interest rates are capped on these loans; graduates pay interest at either the RPI measure of inflation or banks' base rate plus 1%, whichever is lower although since 2012 it has risen to RPI plus 3%. The Government has recently sold student loans taken out in the 1990s and there is pressure to retrospectively raise the interest rates paid by graduates to increase the attractiveness of the loan book to private buyers.

After the 2010 election, a Conservative and Liberal Democrat Coalition Government was formed and although the Liberal Democrats pledged prior to the election to abolish tuition fees the Coalition accepted the main findings of the Browne Review (2010) initiated by Labour which included a proposed tripling of maximum tuition fees to £9000 from September 2012. The 2012 student loan agreement saw the minimum earnings threshold required to begin paying back raised to £21,000 a year but some Treasury officials are saying this should be reduced to plug the shortfall in funding. This is because there is a higher than expected outlay for loans as the maximum loan was charged by the majority of universities and that they at the time it was agreed the repayment threshold was set in line with average earnings.

The loan scheme from 2012 has been criticised as ‘botched’ because the treasury had to enforce a cap on student numbers (McGettigan 2013). When the higher fees were announced it was thought that institutions would compete on price although in reality the vast majority pitched fees at £9000. This is because of the intangible aspects of higher education, that price can be used as a signal of quality when there is little else to make judgements. However fees are misleading, as the cost of repayments are the same but headline fees and initial graduate debt may signal something else to applicants. The changes were meant to focus institutions on the quality of teaching experience because they were competing for students (Willetts 2012). However, quality may not be teaching quality but may be more akin to the general student experience (McGettigan 2013).

In the 2015 spending review, it was announced that maintenance loans would be available for part time and postgraduate students following the earlier announcement of access to tuition fee loans for these students. Most undergraduate education now is funded through Government backed student fee loans or tuition fee grants in Wales rather than through the funding bodies. Table 2-1 shows the fee situation as of 2016.

Table 2-1 Tuition Fees by Region. 2016

Tuition fees by region				
Student's home region	Studying in England	Studying in Scotland	Studying in Wales	Studying in Northern Ireland
England	Up to £9,000	Up to £9,000	Up to £9,000	Up to £9,000
Scotland	Up to £9,000	No fee	Up to £9,000	Up to £9,000
Wales	Up to £9,000	Up to £9,000	Up to £3,900	Up to £9,000
Northern Ireland	Up to £9,000	Up to £9,000	Up to £9,000	Up to £3,925
EU	Up to £9,000	No fee	Up to £3,900	Up to £3,925
Other international	Variable	Variable	Variable	Variable

Source UCAS

Scottish and non UK European Union students pay no fees if studying in Scotland; however, this has caused significant funding problems. The Scottish Government

will pay universities £7,500 for these students but the places are capped, although they can recruit additional students at £1,820. There has been a significant reduction of students coming from the rest of the UK to Scotland (Denholm 2015), perhaps because they would be taught with students who would not be charged. There have been reports of an annual £60 million shortfall in funding after the reduction of UK students and cuts in the education budget of 3.5% (Denholm 2016). The concern is that there are high numbers of students on the lower fee tariff and that teaching quality may suffer. There are also concerns that Scottish universities may lose their reputation and research expertise. The Government has also encouraged alternative providers since the Browne Review, which will be discussed later in this chapter. Their fees are generally lower, with the exception of the well-established University of Buckingham who hold a prestigious reputation and charge a premium. Alternative providers used to only be able to charge a maximum of £6,000 of Government backed tuition fees that can be supported by student loans but this has changed in the Higher Education and Research Bill 2017, where they can charge the same as universities.

Tuition fees and maintenance loans are perhaps better thought of as a graduate tax, as students do not pay anything back until they graduate and are earning £21,000 per year, then they pay 9% direct from their earnings. There are questions on how fees are recovered if UK students move overseas, or if EU students return home, as they are not covered by the UK tax system. When evaluating the debt from university education it is not the £50,000 debt graduates have when they leave university that really counts, it is how much will be paid back. Some people would pay much more, given interest rates and length of payment and others will never pay anything (McGettigan 2016a). How much graduates actually pay back may also depend on any retrospective changes the Government makes and if it is sold to the private sector. In 2013 £900 million of student loans taken out in the before 1998 were sold to a private company for £160 million. Recently the Government have reneged on their promise to raise the income level graduates who took out loans before 2012 start paying, which was supposed to rise with

average earnings but was frozen in the 2015 spending review. Only graduates with the high incomes were ever expected to pay back the original outlay and any outstanding debt is written off after 30 years. This essentially means that Government is subsidising individual borrowers rather than financing the sector. The Government's estimate of the portion of loan outlay that will never be repaid by graduates is termed the resource accounting and budgeting (RAB) charge. This has risen significantly from 28% to 45% and is set to increase further. Consultants, London Economics (Morgan 2014a, 2014b) calculated that when it gets to the level of 48.6% there would have been no savings for Government from the trebling of fees and the withdrawal of direct grant. Willetts, the universities and science minister at the time of the increase, reported in Morgan (2014b), said that the RAB charge is not particularly important but the then HEPI director; Bahram Bekhradnia disagreed in evidence to a select committee on student loans (2015). McGettigan (2013) views that the Government has chosen to subsidise individual borrowing, which is why there is so much debate on the RAB charge.

2.2.2 Marketisation of Higher Education

The beginning of marketisation of higher education can be traced back to the 1980s and the Thatcher policies deregulating markets and encouraging competition. Government intervention in the sector has however been characterised by a confusing combination of deregulation and tighter regulation. Governments from all parties have tried to bring about a market-based approach for higher education where students are treated as 'customers'. It is not helpful to either students or universities to view the relationship between them as customer and supplier for many reasons that will be explored in chapter three. Student expectations due to this language of consumerism have grown with an underlying belief that they have paid for a degree rather than an opportunity. The emerging debate centres around the role and identity of students as to whether they should be considered customers, co-producers, partners or even students, (Hart and Rush 2007, Acevedo 2011 (a), Obermiller and Atwood 2011, Streeting and Wise 2009, McCulloch 2009, Kotze and du Plessis 2003, Finney and Finney 2010, Curtis 2010, Gruber et al 2010).

They certainly have more choices and even though there is intense competition for higher education places at the 'top' universities there are more 'places' than students in the sector as a whole. Fee increases have not resulted in a reduction in the number of students applying for university places but there may be more subtle changes in how a course is chosen (James et al 1999) and the perceived view of the quality they get from their higher education experience (Rowley 1997).

It can be argued that higher education is not a consumer good (Collini 2012), although a counter argument can be made. Higher education can be regarded as a professional service where the student is a co-creator of the value they receive from the service, which is proposed in the next chapter. However, due to the fee regime there is no real price signal; the fees published are not what the graduate pays. The 'product' itself is not something that can be explained fully by consumerism. This is further analysed in the next chapter and developed into the research design. A strictly consumer- producer model could be applied to a short training course but not to a full undergraduate degree. A degree is usually experienced only once and although in theory, students can transfer institutions or courses; in reality, it is quite difficult. Many of the benefits are not experienced during consumption but later and so it can be described as a 'post- experience' good (Brown in McGettigan 2013). However, the university environment is becoming more commercial including:

1. Marketisation – the opening up for new entrants and relaxing the operation of current alternative providers.
2. Commodification – proposing the sole beneficiary of higher education is the individual student and the return of investment is higher graduate earnings.
3. Internal privatisation – direct public funding is replaced by private tuition fee income.
4. Outsourcing of functions within universities to the private sector
5. Partnership work bringing in private finance

(McGettigan 2013)

This focus on the student is aimed to 'drive up quality' (Browne Review 2010); this is the application of a basic economic concept where consumer choice is used to provide differentiation and quality. This simple competition ethos to increase quality and reduce prices ignores the complexities of higher education. The Government has become a regulator to ensure competition and ending perceived monopolies and price fixing (Collini 2016). Collini in an earlier work said, '*...all problems which will be exacerbated rather than solved by placing them in the lap of a deity called "the market"*' (Collini 2012 p167). Governments have encouraged new providers, such as private colleges to offer cheaper provision and increase competition in the sector. The premise behind increasing student choice is that it will improve quality and the measure of quality used, being student satisfaction. The underlying assumption is that students are rational consumers and hold perfect information. However, how do students make this judgement and is this the same as quality? Students cannot try before they buy and information available cannot capture quality objectively. Indirect and symbolic proxies are used, including league tables and perceptions of prestige and reputation. The institutions of the Russell Group are often described in the press and by schools and colleges as 'good' universities. Value is perceived by how hard it is to get into, so it is not a consumer good in that not all who want to purchase it are allowed to. Students who attend these universities in general gain better employment opportunities because of social capital and employer recruitment policies. Many universities set high entry requirements to signal higher quality but may reduce these in clearing anyway or even as has been the case recently giving unconditional offers to students still awaiting results. If some of the more popular institutions increase their numbers substantially, it may affect the student experience. An interesting aspect of the marketisation of higher education is in the relationship between students and Government, which traditionally may have been confrontational. As Government has now viewed students as consumers and they are pursuing consumer rights, they are in essence on the side of the student. As Collini explained in 2016, '*A curious inversion has taken place whereby academics now occupy the demonised*

role formerly assigned to students, who must now be defended in their efforts to obtain "value for money". The recent Higher Education and Research Bill 2017, reinforces the Government support of students as consumers and the concept of value for money. The assumption that competition would be good for students is emphasised in the White Paper in 2016, *'Competition between providers in any market incentivises them to raise their game, offering consumers a greater choice of more innovative and better quality products and services at lower cost. Higher education is no exception'*. Martin Wolf who argued that the idea of a competitive market in the sector was flawed provided a rejoinder on this in the Times Higher in February 2017, and that student satisfaction did not correlate with good teaching.

In most consumer or economic behaviour models, the consumer or client in a professional service, is assumed rational and has access to complete information. In 2010, HEFCE commissioned research into the type of information prospective students wanted and where they searched for information. Applicants generally looked at the UCAS website and individual university websites and did not at the time use sites such as the central repository, Unistats, although this may be because it was only recently launched. The Government and QAA have focused on the information that prospective students by promoting Key Information Sets via Unistats and section C in the Quality Code. More recently, the information that universities provide are now subject to the Competition and Markets Authority (CMA). However, this information does not really give the prospective student a full picture of costs and the experience they will have, *'...the idea of students paying 'the cost of a course' is one of the places where the whole commercial language of students as customers making price-sensitive purchases is so misleading'* (Collini 2012 p166). Information on teaching quality is particularly difficult to judge, especially in advance of the experience. The metrics that are provided make it very difficult to see differences between subjects and institutions. League tables concentrate on inputs such as the selectivity of the institution; spend per student, wealth of the university and research profile rather than student experience. Student experience is captured by using National Student Survey (NSS) scores in

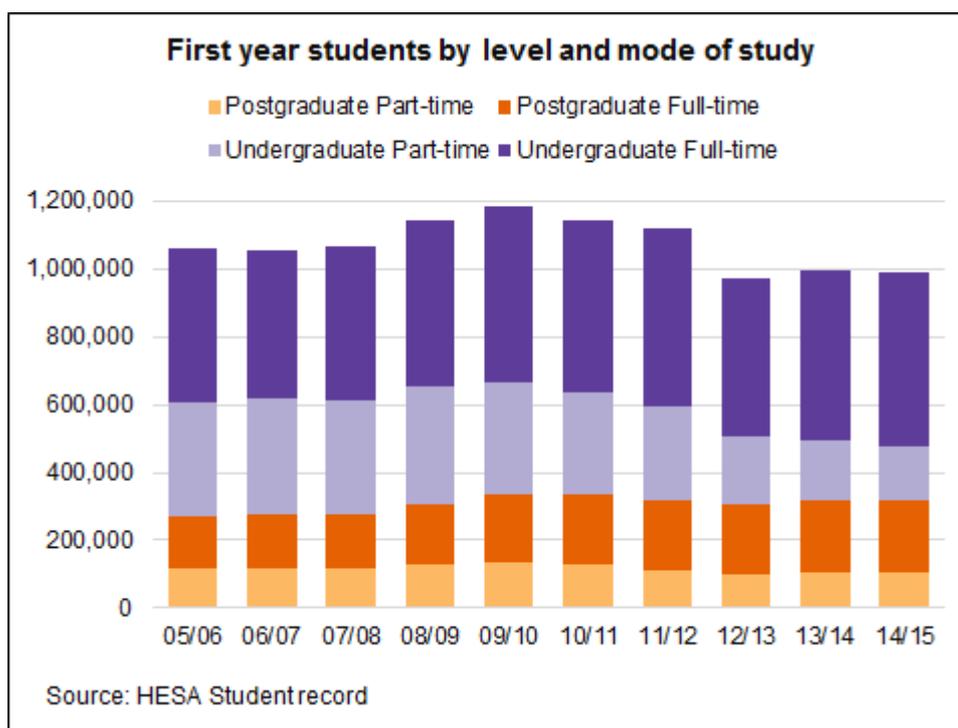
league tables. The NSS is also published within KIS data and will be included in the new Teaching Excellence Framework (TEF). The assumption that increasing competition would result in strategies to improve teaching quality has led instead to more emphasis on data gathering and improving universities' metrics.

2.3 The Student Market

Over the past thirty years, there have been significant structural shifts in the higher education landscape, which has had significant implications for universities. Popular universities can now offer as many places as they wish and the less popular ones are struggling with a downturn of numbers. This popularity may not be anything to do with quality or the experience students would have attending the university but is influenced by league tables, university guides and recommendation from teachers. Many schools actively promote where their previous students are studying and the number attending Oxbridge and Russell Group universities. It seems likely that the traditional 'old' universities will continue to grow and be highly selective in their recruitment but they will encounter pressure and challenges on their students' experience. At the other end, some institutions will be struggling for students being squeezed by the top universities at one end and new providers at the other. There may be some well-established universities that close in future, leading to further structural changes in the higher education market.

Table 2.2 below shows some of the main trends of the last few years. As can be seen full time undergraduate numbers have been relatively stable with some small increases but the part time number has reduced substantially. These trends will be discussed in further detail.

Table 2-2 First Year Students 2005-2015



Source: HESA

2.3.1 Full time Students

The proportion of young people who go to university throughout Europe differs considerably. In Germany, about 27% of young people gain higher education qualifications. In the UK, the comparable figure is 48% (Coughlan 2015). However, the number of university students in the UK has fallen in comparison with other European countries. According to figures from the OECD between 2000 and 2008, the UK fell from third position to 15th; Scandinavia leads the way where in Finland 80% of young women attend university. University attendance also varies considerably across the UK with some parts of Sheffield and Nottingham with only 8% - 9% attendance (Coughlan 2010). In the UK though, there is still strong parental demand for their children to go to university. A study in 2010 from the Institute of Education showed that 97% of mothers of children born between 2000 and 2002 wanted their children to attend university (Hansen et al 2010).

There was a significant growth of full time undergraduates in the 1980s and 90s stabilising in the 2000s. Direct comparison can be difficult, as figures sometimes

only include those students who had UK Government grants and polytechnics are only included in 'university degree' figures after gaining university status in 1992. The £9000 fees introduced in 2012 caused a spike in numbers and although total university student numbers have decreased, this is really due to a steep reduction in part time students. New undergraduate students entering in September 2015 was just over 510,000, which was an increase of 3% from the previous year and 7% higher than 2013-14 and 16% higher than 2012-13 (UCAS 2015). In 2015, there were also (27,000) more females than males going to university. There was an increase of EU students by 11% (24,090) and other international students up by 29,170 up by 6% and more UK students from disadvantaged backgrounds. (Espinoza 2015). However, there are fewer applications from mature students; it may be that those students put forward their plans to go to university when the new fee regime was announced. In 2015 the numbers cap was lifted and there was a polarisation of universities where popular universities could expand their student base considerably but those less popular struggled with student numbers. There is also a demographic factor in that the decline in the birth rate has meant the number of 18 year olds will fall until 2020. Recently the Government have ruled that 16 year olds cannot now leave education completely and have to be in some form of education or training. This means in theory that there may be more qualified school leavers. It has meant though that some FE colleges now have students who do not wish to be there and may be disruptive and affecting the long-term health of those institutions as student who may have chosen to study there are deterred. The number of students attending university will also depend on what alternatives there are. Some students who have gained new Intermediate and Higher Apprenticeships, where training and employment is given alongside study, may continue to work rather than go to university. There are also new Degree Apprenticeships that link an employer to a University course that may well become popular as fees are paid for by Government and employers, being delivered alongside an employer, giving work experience and a salary.

The more recent application figures from February 2017 showed a 5% fall in full time undergraduate applications, especially from over 25-year-old applicants and from nursing in particular due to the withdrawal of nursing bursaries. This fall will be due to the reduction of the 18-year-old age group in the population and alternatives to university education such as apprenticeships. This fall has hit the lower tariff universities disproportionately, as applicants to higher tariff universities has risen slightly. Brexit has meant that applicants from Europe has fallen by 7% and applications from overseas have stayed the same at present although again disproportionately (Times Higher Education Feb 2017). Full time UK student postgraduate numbers are struggling after the introduction of £9000 fees for undergraduate courses although overseas students keep the sector buoyant. There are career development and student loans now available for postgraduate and part time study for UK and European students.

2.3.2 Part Time Students

Part time student numbers have fallen dramatically in recent years by 46% between 2010 and 2014 from 259,000 to 139,000. One reason for this decline include the withdrawal of funding for students studying an equivalent or lower qualification (ELQ). This deters students who already have a degree to study for another in a different subject area. Traditionally universities charged a lower fee for part time study than the equivalent full time fee as it was recognised that they could not access the same funding. Universities now have to charge the equivalent fees so it is much more expensive now to study part time than in previous years. The recession from 2008, affected employer training budgets so there was a 44% decline in employers being the main source of funding between 2011 and 2013 (Shorthouse and Dobson 2015). Many public sector employees previously were sponsored to gain higher qualifications and as this sector has had significant cuts it affected the part time market, especially the teaching sector. There are also restrictions on the eligibility of part time students for tuition fee loans. There has also been a significant decline in part time postgraduate students by 28% from 97,000 to 70,000 during the same period (Shorthouse and Dobson 2015).

Something that could improve the situation would be to emulate Singapore, who introduced a Lifetime Learning Account, into which Government, employers and individuals can contribute to fees. In 2016, the Higher Education Policy Institute (HEPI) publishing a report on employer sponsored higher education outlining the many benefits to employers, students and taxpayers (Phoenix 2016). This traditional route of part time study is more established than the Higher and Degree Apprenticeships that the current Government is promoting but not equally funded. There was a £3 billion apprenticeship levy on firms introduced in 2017 which HEPI believes should be extended to cover other employer sponsored higher education. Reporting in the Times Higher Education, Morgan (2016c) provides an analysis of the report and reflects that to be of most use to businesses there should be flexibility in how employers spend the apprenticeship levy to include other forms of courses.

Since the 1960s, there has been a commitment to increase the number of university students from backgrounds who have previously not been well represented. Recently there has been a renewed pledge to increase the number of students from disadvantaged backgrounds; however, it is likely that these targets will be missed (Richards 2016 for the Social Market Foundation). Policies designed to widen access to higher education should cover part time and flexible short courses. Peter Horrocks (2016) the Vice Chancellor at the Open University says, *'Top of my wish-list along with further ELQ relaxation is loans for those who just want to study single modules rather than whole degrees. These would open doors for people who might be tempted to try higher education but don't have the confidence to sign up for a full degree, or are put off by big loans yet still want to improve their career prospects and life chances.'* Flexibility would also improve if academic credit were more transferable particularly from short courses or MOOCs. However as the new Teaching Excellence Framework, measures success through degree progression or completion it may deter institutions developing flexible courses.

2.4 University Strategic Directions

Universities have faced major changes over the over the past few decades in administration, finance and the market environment. Many universities have been embarking on extensive building programmes including social and sporting facilities to attract students. This has resulted in some having significant debt, which commentators have described as the 'Taj Mahal Complex' (Martin in Dunne and Owen 2013). Havergal (2016b) reported that the investment in estates does not necessarily result in an increased satisfaction in the learning experience. Staff and students reported to be unsure on how to use digital learning spaces, lacked the skills to use the technology and had inadequate technical support. Recently there is much more managerialism in universities with more central control and polarisation of academic and manager roles. The increased significance of metrics that contribute to league tables, such as the NSS have increased scrutiny within universities. The middle tranche of universities are being squeezed both ways by the recent changes to funding and the rise of consumerism. League table position, fees and work experience opportunities influence the overseas market strongly and many universities have relied on these students as a good income stream. Visa regulations have been significantly tightened and overseas students are included in figures of net migration, which the Government is committed to reducing. The outcome may well be that some universities may not survive in their current state; some may be dissolved or merged. Certain subject areas may be threatened if they do not attract high graduate earnings, as universities become more sensitive to this metric. However, there may actually still be high demand for these courses. Conversely, some subjects may be threatened but there is a high institutional commitment to them, for example if there is a strong research department but there may not be a high student demand for the subject. There is likely to be more intensive competition, characterised by innovation, new markets, modes of delivery, location, collaborations, employer input and technologically supported learning, raising questions on the appropriate quality assurance needed. The trends

in quality assurance and enhancement concern learning gains, graduate attributes and skills and are central to this thesis. However, Collini (2012) argues that these skills are not really how employers recruit graduates but instead prefer to recruit from institutions that are hard to get into and that the academic subject is of little concern.

2.4.1 Competition and internationalisation

Competition has intensified between universities and with new market entrants from the further education and private college sectors. Collini (2012) however, disputes this to some degree as many aspects of university operations rely on the cooperation between universities, including research and the external examiner system. He does concede that universities are in competition at an applicant level though. Higher education is now a global marketplace with many overseas students studying in the UK and universities developing partnerships with overseas colleges and universities. Fees have increased threefold in England in 2012 and as comparative costs for education overseas and in the UK have fallen this may incentivise more UK students to study overseas. Significant players in the global higher education market include Australian and American universities in addition to UK universities. The increased participation in higher education, or massification as it is termed, is a worldwide phenomenon that has led to increased student movement and increased internationalisation of the curriculum (Biggs and Tang 2011). John Elmes in 2016 reported on the fall in overseas students coming to UK business schools of 9% according to a report from the Chartered Association of Business Schools. This is important to universities as Business Schools often subsidise other courses and Faculties. The reasons behind this may be the very competitive MBA sector, perhaps a disillusionment with the MBA qualification and the situation with UK Visa and Immigration, which has deterred overseas students from applying. Overseas students used to be able to stay after graduation for a limited time to gain work experience; this is not the case now. Other countries such as Australia are now more attractive in encouraging postgraduate work experience.

Policy changes have encouraged the expansion of providers in the sector by allowing further education colleges to deliver higher education and some private providers to have degree awarding powers. There have been increases in alternative providers but at the same time some have closed leaving students adrift; some are partnered with UK universities and others are independent. Some private providers concentrated on overseas markets, undercutting UK university fees but changes in UK Visa and Immigration rules have meant that some of these have closed. There has been reports of high dropout rates, poor quality provision and fraudulent claims for tuition fees by institutions and students (Hodge 2015 for the Public Accounts Committee).

There has also been changes in the type of educational products marketed by universities and other providers recently. There are significant developments in internet-based higher education provision that is online, distance and blended provision with greater use of embedded social media. There is a new market for Massive Open Online Courses (MOOCs) that are usually free with a small fee for assessment. There may be a move for more professional, technical and vocational courses within university provision. Employers could be involved in part funded, co-developed, delivered or designed courses. Courses such as Foundation degrees have taken a significant proportion of the market share that HNDs used to hold. New Apprenticeships and Degree Apprenticeships have been introduced where universities are encouraged to provide opportunities for these learners to gain higher qualifications. There was a movement a few years ago to encourage two year, fast track degrees. These have been in part successful but they are not without issues as it is difficult to include them in the good degree data to HESA and to include in the NSS as they study more than one level in a year. They also are costly to run as they have summer delivery and universities used to be prohibited to charge for but this has recently been allowed.

2.4.2 Teaching and Satisfaction

The expansion of higher education has been a challenge to university teaching and learning because of the increased numbers, student' study skills and motivation.

The diversity of students now coming through university are different to the traditional students who may be adept at independent learning and academic writing. Biggs (1999) illustrated the different types of students and learning by the 'Robert and Susan' example where Roberts would not have considered going to university a few years ago and needed to be taught whereas Susans 'tend to teach themselves'. There has been a move from traditional academic drivers to go to university to more employment led motivations, which has fostered a wider range of student abilities. Teaching was not something that used to be particularly highly rated at universities and lecturing was considered different to teaching. Another trend that has been seen lately that can be linked to teaching, learning and assessment is the rise in the number of upper second class and first class degrees as can be seen in figure 2-1. These figures from HESA (2017) shows a steady increase over the past decade in the proportion of students who gained a first or upper second. In 2011/12, 66% gained a first or upper second compared to 73% in 2015/16. This has been criticised as lowering of standards but there is a natural inclination to rise with the inclusion of more coursework assessments and with pedagogical approaches. In addition, good degrees as categorised as first and upper second classes are factors in many league tables and are now a key performance indicator for courses, departments and universities.

Figure 2-1 Percentage of degree classifications 2011/12 to 2015/16



Source HESA (2017)

Student satisfaction is often a measure of quality that is used by sector commentators and universities and has been the subject of a substantial amount of research (Aldridge and Rowley 1998, Angell et al 2008, Brochado 2009, Douglas et al 2006, Munteanu 2010). The predominant measure of student satisfaction used in the UK is the National Student Survey (NSS). Launched in 2005, the NSS is a survey of final year undergraduates in UK universities. It is used in the collation of league tables in the UK, as a measure in its own right and by university management. The NSS and league tables are often used as a proxy for quality by the sector although this is not universally accepted (Dean 2011, Child 2011, Gibbs 2010a). The NSS is weighted more than any other factors in most league tables, for example, it is used three times in the collation of the Guardian league tables. If student satisfaction is the only measure used for assessing quality then there are significant credibility issues. Students may not have the necessary expertise to assess quality, as it is probably the only higher education experience they have.

2.5 Performance Indicators, League Tables and Guides

Individual university performance data is published on the HESA website alongside benchmark tables that take into account differences in entry qualification, subject and age on entry. In 2013, there was a review of the performance indicators for higher education for HEFCE by Pollard et al at the Institute for Employment Studies and the National Centre for Social and Economic Research. Their aim was to develop objective measures of performance but not to be used for comparison of individual universities or in league tables. This is because the focus of the review was on full time undergraduate students and the diversity within the sector. The proposed performance indicators cover:

- Widening participation
- Non-continuation
- Module completion
- Research output
- Graduate employment

There are various published guides as to where to study including key information sets (KIS) data on the Unistats website. Newspaper league tables for UK universities are published annually in the Guardian and the Times and Sunday Times Good University Guide, where rankings are produced at institution and subject levels. There is also a league table published online by the Complete University Guide. Most universities are included although Wolverhampton have made the strategic decision not to be involved. League tables are supposed to help applicants make decisions although their use and composition is contentious. Each has its own algorithm that has been developed by the authors and include criteria on for example, expenditure on students, entry grades, degree classifications, student satisfaction and destinations as shown in table 2-3.

The Times Higher Education also annually publish a combined ranking from these tables. In 2016, the top three were Cambridge, Oxford and St Andrews. It is of no surprise that the highest ranking institutions have the highest UCAS tariffs and can

be most selective in admission. Each of the league tables use data that is mainly provided in information returns to HESA that all public universities have to make in the autumn each year supplemented by DLHE and NSS data. The Guardian University guide emphasised student satisfaction, from NSS scores, more than the others and does not include research ratings. They do not have a score for degree classification but they do have 'value added' which is essentially the difference between entry qualification and exit qualification.

Table 2-3 Comparison of league table components

Guardian	Sunday Times/ Times Good University guide	Complete University Guide
Satisfaction with Teaching	Teaching Quality	Entry Standards
Satisfaction with Feedback	Student Experience	Student Satisfaction
Satisfaction with Course	Research Quality	Research Assessment/Quality
Spend per student	UCAS Entry Points	Research - impact
Student- Staff Ratio	Graduate Prospects	Graduate Prospects
Career after 6 months	Firsts and 2:1s	Student staff ratio
Value Added	Completion Rate	Academic Services Spend
Entry Tariff	Student-Staff Ratio	Facilities Spend
	Services/Facilities Spend	Good Honours
		Degree Completion

There is a disparity between the UK University rankings and the World University rankings tables where only a handful of UK universities are represented. For example the London School of Economics (LSE) is high ranking in UK tables but only 327th in the US News and World report rankings, 35th in the QS rankings and 23rd in the Times Higher rankings. However, when size is taken into account, LSE ranks second in the world out of small to medium-sized specialist institutions. Other UK

universities such as Manchester have not done so well in the UK tables but have done better on the international rankings. Again, each of these have their own criteria. International university rankings primarily use criteria such as academic and employer surveys, the number of citations per faculty, the proportion of international staff and students and faculty and alumni prize winners. The national rankings, on the other hand, give most weighting to the undergraduate student experience, taking account of teaching quality and learning resources, together with the quality of a university's intake, employment prospects, research quality and dropout rates. International league tables disadvantage smaller specialist universities that do not have a full offering of subject areas, especially in the sciences.

The obsession on league tables has been criticised from a number of quarters. Collini (2012) said that they were 'practically worthless' because the data uses subjective satisfaction surveys and gives disproportionate weight to science and research projects. There are also criticisms on their accuracy as they depend upon quite difficult data collection and can be manipulated. The way in which they have been designed also favours the Russell Group universities. Government policies on widening access can be counterproductive to universities improving their league table scores as entry grades are included. To keep a higher ranking, universities may choose not to recruit students with low grades, disadvantaged backgrounds or who may not complete the degree. Universities themselves will often have a team of people to look at how they appear on the league tables and how they can raise their scores. There is also the accusation that as 'good' degrees are an output measure, this may lead to grade inflation discussed earlier in this chapter. Some universities that have prestigious courses are not included in league tables, such as the Institute of Education, which is part of UCL and the Open University due to a bias towards full time provision.

In addition to league tables, there are a number of consumer-focused organisations. The consumer organisation, 'Which?' in 2012, launched 'Which? University' giving profiles of universities and guides. It shows Key Information Sets

data such as typical UCAS entry points, NSS data, employment and graduate salary. What Uni was set up in 2007 and is part of the Hotcourses group providing a university comparator tool. The Complete University Guide, compiled by Mayfield University Consultants, has been published since 2007 and in 2015 was acquired by Hotcourses. Hotcourses is an international organisation that runs a number of websites for post-secondary courses. The University and Colleges Application Service (UCAS) manages most of the applications to UK universities, has an advice and guidance service and markets universities in their website and publications. The Unistats website runs via HEFCE and is the official site that allows applicants to compare information on universities in the UK. It compiles information into Key Information Sets (KIS) from the NSS, Destinations of leavers, course teaching and assessment, accreditation and tuition and accommodation costs. The Student Room is an online forum for all students, not only university level, it also provides revision guides, and advice on student life, relationship, health, finance and careers

The Competition and Markets Authority (CMA) published a report bringing together the various consumer legislation aligned to universities in the light of the new Consumer Rights Act in 2015. The Government has now instigated a compliance review and published advice to universities on the application of consumer protection law (Competitions and Markets Authority 2015). Recently the Government have increased the school leaving age to 18 unless they are in some form of training or apprenticeship. This may lead to young people opting out of going to higher education as they have been exposed to structured training with employment. Alternatives to going to university are promoted by the organisation 'Not going to Uni' through their dedicated website.

2.6 Development of Quality Assurance in Higher Education

To reflect the autonomy of the sector, the primary responsibility for quality of education and standards lies with individual institutions. However, The Higher Education Bill 2017 may threaten this system of self-regulation (Alderman, 2016). The funding bodies then assure themselves through assessment that providers are doing this. External examiners from other institutions are appointed to assure comparable standards. Academic standards in the UK in course design are set around learning outcomes as detailed in the QAA standards frameworks. Other countries in Eastern Europe and the Far East are input based using a learning hours system. There is emphasis is on the comparability of standards between institutions and to a lesser degree the comparability between subjects. HEFCE (2015) said that there was not a consistent interpretation of standards that covered all stakeholders. They noted that diverse learning opportunities such as placements and professional practice was complex to quality assure and the role of external examiners and professional bodies difficult to define.

In 2014, Roger Brown reported for the HEA, the development of quality assurance and enhancement in England since 1992. He defined quality enhancement as *'the improvement of pedagogy through information and ideas from research, benchmarking, quality assurance and other exchanges of experience and practice.'* (p2). In 1990, universities set up a body, the Academic Audit Unit, as they thought the Government might impose a body on them. After a year, the Government announced that polytechnics could gain university status. This change heralded the introduction of a new body to replace the CNAA (Council for National Academic Awards), the awarding body of the polytechnics. In 1992, a new Higher Education Quality Council was formed that monitored systems and structures supporting teaching and sharing best practice. Meanwhile each Higher Education Funding Council was given the role of assessing the quality of the teaching provided through subject institutional inspections. This was unpopular because of the administrative burden on universities and having the two quality bodies (the so-called quality

wars) was inefficient. As a result, the Quality Assurance Agency for Higher Education was founded in 1997. By 2000, they had developed a new review regime succeeding the dual approach. The burden was still very high and some Russell Group Universities considered pulling out of the system, so inspections were reduced by 40%. All departments that had good reviews were to be exempt the next round with a few sampled for benchmarking so after an initial 3 year cycle the 6 year institutional audits would start. Wales and Northern Ireland broadly followed England but since 2001, quality assurance in Scotland has a 4-year cycle of institutional reviews, with a subject review for newer universities or for institutions where there are concerns. The emphasis in Scotland has been on enhancement rather than assurance with the aim of identifying and sharing good practice. In England, the then QAA Chief Executive, Peter Williams, in 2008 questioned the comparability of degree standards between different institutions. The Government at the time, through the Innovation, Universities, Science and Skills Select Committee criticised the QAA saying it had 'no teeth' and the result was a number of changes in the institutional review process. Again, universities complained about the administrative burden of quality assurance and in 2011, the White Paper 'Students at the Heart of the System' proposed a risk-based regime where leading institutions may have a review every 10 years or not even at all. However, in 2012 HEFCE decided to maintain the existing arrangements although risk based variation in intervals between reviews was introduced from 2013/14. After the Conservative's victory in 2015, the Government have felt confident to propose a new Higher Education and Research Bill outlined in the White Paper 2016 that became law in 2017. This proposes a far-reaching change to quality assurance, which will be evaluated further in the next section

In 2015, the Conservative Government's Universities and Science Minister, Jo Johnson, announced the new system to 'root out bad teaching' utilising a teaching excellence framework alongside the research excellence framework. He said their proposals, which were later published in the 2016 White Paper, would tackle grade inflation and force coasting students to work harder. At the same time, HEFCE

published a consultation document to change the quality assurance system in the UK (HEFCE 2015) and to strengthen its own position. They proposed to exempt established institutions from the 6-year institutional reviews by the QAA and strengthen the existing HEFCE on student outcomes such as recruitment, progression and achievement. The current system of quality assurance is costly, HEFCE estimated £90 million but HEFCE's move was criticised (Williams 2014) in that it was attempting to protect its own position since their role as a funding body has been eroded when tuition fees were introduced. There were question marks over the QAA's future when in 2014 HEFCE announced that it would invite external bodies to bid for the work undertaken by the QAA. The report above suggested that the QAA could make a bid to retain some review work. John Gill in the Times Higher (2015) discussed the possible metrics to measure teaching quality in universities including efforts to measure 'value added', career outcomes, student engagement and classroom observations. None of these metrics are easy to measure and all have critics who say they are poor proxies or overly bureaucratic. He questions whether the TEF would become like the REF where *'many feel has polluted higher education and left universities choking on bureaucracy'*. The lifting of the student number cap has caused concern about the quality of the student experience although HEFCE's response is to place further reliance on internal governance mechanisms and monitoring recruitment data. However, students would not know if there are problems on quality due to over-recruitment and they should not know before bodies such as the QAA or HEFCE.

Quality assurance and enhancement in higher education is not without its critics. Collini (2012) pointed out that the preoccupation with enhancement is unhelpful as excellence is never good enough and has led to a loss of confidence in the sector. He goes on to say that, the bureaucracy has meant that the process is more important than any value gained and that these processes stifle flexibility. The Government's plans regarding quality assurance and enhancement is indicated in the Higher Education and Research Act 2017. The systems and bureaucracy as

discussed by Collini seem to be even more evident in this Act, especially around the Teaching Excellence Framework (TEF)

2.7 Higher Education and Research Bill 2017

When the Conservative party won the election in 2015 it lost no time in announcing radical reforms to the higher education system now it was free from the compromises of the coalition. In November of that year, the Government published the Green Paper 'Fulfilling our Potential – Teaching Excellence, Social Mobility and Student Choice' for consultation. The stated drivers for the paper were deregulation, encouraging new entrants and the launch of a Teaching Excellence Framework (TEF). There was an underlying assumption throughout the language of the Green Paper and subsequent White Paper that teaching quality in universities is poor and that students are customers who need to obtain value for money. Indeed, in the White Paper the phrase 'value for money' is used eleven times and is particularly selective in the data it presents as evidence. The Green Paper admits to the complexity in assessing teaching quality and the use of metrics; '*... we recognise that these metrics are largely proxies rather than direct measures of quality and learning gain and there are issues around how robust they are*'. It proposes to remove barriers to new entrants and minimum numbers of students for non-university providers. Teaching quality metrics will include retention rates, NSS data and graduate employment. The subsequent White Paper published in May 2016, 'Success as a Knowledge Economy: Teaching Excellence, Social Mobility and Student Choice' outlined the proposals for the Higher Education and Research Bill (2017). The Higher Education and Research Bill combines OFFA and HEFCE into the Office for Students (OfS), to be launched in 2018, to be a consumer focused and pro-competition body. It will also merge the current research councils into one body, UK Research and Innovation (UKRI). The Act was passed in April 2017 after a protracted debate with the House of Lords and was one of the last Acts of Parliament by the Government before work was suspended for the June 2017

election. The OfS will be designating an independent body, which is likely to be the QAA, to carry out its duties on quality and standards. The OfS will also have powers to monitor the financial stability of higher education providers.

Various higher education stakeholder organisations published official responses to the Green Paper. The Chartered Association of Business School's response (CABS 2016) raised some concerns that if future earnings are used as a TEF metric as proposed it might incentivise institutions to target high-income subjects or certain types of students. The HEA's response was that the TEF should include peer review rather than just metrics. The Times Higher Education (Morgan 2016d) raised a warning on multiple fee caps, in that it may '*increase complexity without enhancing teaching quality*', reporting that GuildHE and Universities UK, gave a critical response to the consultation on the Green Paper. Collini (2016) criticised the Green Paper as not knowing what it meant by 'teaching quality' and that it assumed it was the sum of measurable items, such as course information, progression, employment and satisfaction. He goes on to say that in using these metrics that will become what teaching quality will mean. McGettigan (2016b) says that the White Paper is an '*impatient but confusing document which bristles with resentment towards an established university sector*'. He goes on to say that although the reforms are supposed to improve teaching, student experience and graduate employability that there is no supporting evidence provided.

The main stated drivers of the Bill are to improve teaching quality and access to higher education and therefore social mobility. There is still a disproportionate number of students from black and minority ethnic backgrounds attending universities and the White Paper stipulates that this should be improved. The intention is to raise the number of disadvantaged students attending universities although this may be counterproductive, in that, the best indicator of degree class is entry qualifications and so the pressure is on universities to be selective in entry. It is also argued that the current system has stifled innovation and new providers, therefore the development of new types of higher education offers such as courses

that are more flexible, short courses, accelerated degrees and degree apprenticeships will be encouraged as will new providers. The assumption is that new providers will be 'high quality' and these 'challenger institutions' will shake up the existing university sector and some may not survive. The Act allows new providers access to student funding and inclusion on the new register of higher education providers in the Office of Students (OfS) if they comply with the expectations of the UK Quality Code, hold a Tier 4 licence and register with the Office of the Independent Adjudicator (OIA). New providers can apply for degree awarding powers (DAPs) more quickly and easier than previously and full university title can be awarded without the current minimum numbers of students. This means that some current further education colleges who have some higher education provision validated by a university will be able to do this themselves. Plans to allow private providers to award degrees immediately as they start up albeit, on a three-year probation, were welcomed by some of the private sector but was criticised by the Vice Chancellor of the private Regents University as being '*dangerous for students*' (Morgan 2016e). Jo Johnson, the Universities Minister, envisages challenger institutions may include multinational companies and high calibre overseas universities (Havergal 2016c). Evidence on new entrants though is lacking. International companies so far have not announced any plans to join the sector and there is little evidence on the quality of current alternative providers. A recent report from BIS reported in the Times Higher Education (Havergal 2016d) indicated quality concerns. In 2014, there were 712 alternative providers in England with 245,000 students, which had almost doubled from two years previously. It was also reported that 90 had closed in the past two years and 23 others did not now offer higher education courses. The evidence also suggests that the student experience at alternative providers has some problems where the BIS research showed that student satisfaction was around 10% lower than traditional public universities, 46% said they would have chosen somewhere different to study and completions were only 75%. There are also problems of high dropout rates (Baker 2017). However, these alternative providers are more likely to have more mature

students and ethnic minorities and may be attracting students who traditionally would not go to university.

The White Paper (2016), the Which report (2014) and the Competitions and Markets Authority (2015) are all critical on the information students receive before they study to be able to make informed choices. They all propose that the information on price and quality, including quality of teaching is expanded and that currently applicants are poorly informed about the course content, teaching and employment prospects.

2.7.1 Teaching Excellence Framework

The first year of TEF, which is essentially a pilot, is already underway and results published in June 2017. This gave universities ratings of gold, silver or bronze. From the debates between the Houses of Commons and Lords, a concession on the Bill is that there will be a far-reaching review of TEF in 2019. Until 2020, the Government will allow tuition fees to increase by the rate of inflation for universities who are participating in TEF. Depending on the outcome of the 2019 TEF review after 2020 the fee caps can be varied in line with TEF awards. Originally, the White paper proposed variable tuition fees linked to TEF awards from the second year to reflect market forces.

It was purported (Grove, 2016) that the TEF is more about quality assurance than teaching. The TEF is not just looking at teaching in classrooms but a wider view of university activities. It is assessing the application process, student satisfaction, learning environment and what students do after graduation, *'the 'T' in the TEF does not really mean teaching as most staff understand it, but teaching in a very bureaucratic quality assurance sense'* (Grove 2016a). The White Paper defined teaching excellence as *'teaching quality, learning environment, student outcomes and learning gain'*. The metrics include existing data from the NSS and HESA indicators such as retention and the Destinations of Leavers from Higher Education Survey (DLHE). However, these do not really provide evidence of actual teaching quality. Other measures they may consider later are a teaching quality survey,

student engagement, 'high skilled employment', learning gains, added value and staff qualifications. HESA have been consulting on the future of graduate data known as the 'new DLHE' to cover not just salary levels but industry, occupation and skills level that would be included in future TEF. This New DLHE will be a centralised survey run by Ipsos Mori rather than the current DLHE that is conducted by the institutions themselves

These metrics are evaluated alongside a short provider submission of evidence by a TEF panel. One of the controversial components of TEF is employment data, although there is no real evidence of any link between teaching quality and employment. Graduate employment is influenced by the discipline studied and reputation of the university attended in terms of how difficult it is to be accepted there. LEO data (Longitudinal Educational Outcomes) may be used in future as it links graduates from universities with employment, benefits and earnings information, tracked for up to ten years after graduation. Data will be able to be broken down by gender, ethnicity and pre university attainment but is in an experimental phrase at present.

The Times Higher Education in June 2016, produced an analysis of what the TEF may mean for UK universities (Havergal 2016e) and how this may be formulated into a league table. This shows that the existing hierarchy of universities would be significantly different in a TEF league table and was borne out in the actual TEF results published in June 2017. Many post '92 universities outperform the Russell Group institutions where the top performers could be Loughborough, Aston, and post '92 universities Coventry and De Montford in the top six. The University of Oxford would be placed 28th whereas Oxford Brookes would be 21st. The University of Bristol, London School of Economics and Kings College London would all be ranked in the 80s. It may be that the TEF scores will link to an organisation's ability to recruit international students, as they may be restricted.

Havergal in Times Higher Education (2016f) reported from research by the Office of National Statistics that students were 'not enthusiastic' over the introduction of the

TEF. He also reported from the analysis that the use of NSS and DLHE data did not provide useful differentiation and had reliability issues. The inclusion of employment metrics could have implications as to the attractiveness of running courses that have traditionally not been highly paid, or perhaps take time to develop a career. In a special TEF Edition of the Journal of Learning and Teaching (Compass 2017), a number of well-respected commentators gave their views of the TEF. These included Graham Gibbs, Nick Hillman and Chris Rust. Graham Gibbs was particularly critical of the TEF, which he viewed as being deeply flawed in that the metrics are invalid and institutions will tend to be scored close together. Nick Hillman expresses concerns on the possible link to fees although he does recognise that it has fostered positive debate on teaching quality. Chris Rust argues that the student at prestigious universities are high achieving and motivated and would not drop out even if the teaching quality was poor and that students who drop out do so because the course wasn't for them and not any quality issues.

Nick Hillman from HEPI predicted that almost all universities would be in the TEF, including those in the Russell Group, as did the Compass analysis (2017). The reasons for this would be that they would want the extra fee income and that it would be a useful management tool. Universities themselves are looking at strategies to improve their TEF ratings for example, recruiting on combined undergraduate and masters' courses to gain better DLHE scores, specific NSS strategies and DLHE completion promotion. The next chapter is going to look at how universities approach students, whether they are customers, partners, or co-creators and how this influences this study.

3 Characteristics of University Education, Relationships and Roles.

This chapter builds on the analysis of higher education in the previous section and applies services marketing concepts to the sector. The chapter will then propose a value co-creation approach to the analysis of the relationship between students and universities. The benefits of this application is highlighted throughout, alongside an evaluation of whether students should be considered as customers.

The debates on service quality in higher education and the use of the NSS as the main measure of this has meant that this has had a major impact on strategic decision making in UK Universities. The significant increase in fees from 2012 has raised the issue of whether students' expectations will be higher or different in the new fee regime. Added to this debate is whether students are considered 'customers' and the 'consumerisation' of education. Many Universities have their strategy driven by a customer-oriented approach with the premise that it will increase enrolment.

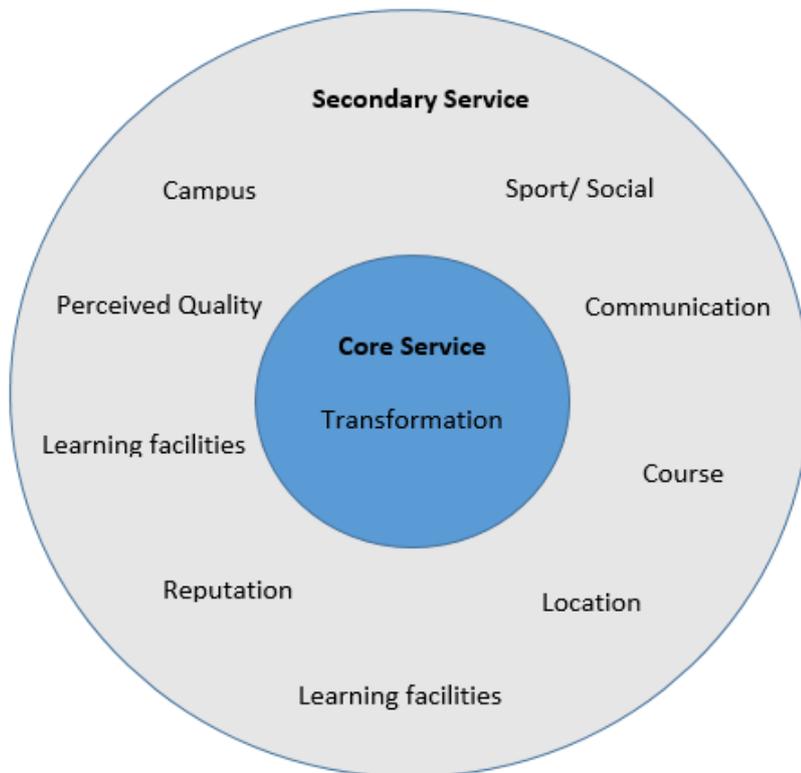
Studying for a university degree has many service elements and as such will have certain characteristics that will affect how it is perceived by students and marketed by universities. A service is defined as *'The production of an essentially intangible benefit, either in its own right or as a significant element of a tangible product, which though some form of exchange, satisfies an identified need.'* (Palmer 2014 p2). Studying at university would have a number of tangible and intangible aspects to the overall experience. There is though, a debate in academic circles as to whether distinctions of service marketing are useful as these can be applied to goods marketing, termed as service dominant logic (Levitt 1972, Lovelock 1981, Vargo and Lusch 2004). It can be difficult to differentiate products from services especially when there is a substantial element of physical aspects to the service or a product that has significant service elements. Many aspects of university life have strong product features, such as retail and catering outlets. It is therefore useful to

place activities on a continuum of tangibility. The specific service characteristics of the university experience will now be investigated further.

3.1 University Service Characteristics

The core service is the essential benefit derived from the service (Grönroos 1984), although in the case of university study this is quite complex. The core benefit may be to increase knowledge on a subject for some but for others it may be self-actualisation or employment prospects. Universities need to know what is the core benefit sought from groups of students to enable them to develop their courses, learning strategies and marketing messages. So if the main driver is employment, then courses need to be designed that enables employability skills to be developed, opportunities for relevant work experience and networking to future employers. However, potential students may not really know what they want or need until later in their studies or even afterwards. Learning can be a painful process, not all the activities students have to undertake will be pleasurable and they may not know what knowledge and skills they need at the outset. The way in which it is presented here will be in terms of 'transformation', which covers the different personalised benefits. The secondary service refers to how the core service is delivered and any consumption or after purchase factors. The core and secondary service for university study is presented in figure 3-1 below. The core element of university study is defined here as 'transformation' and this is something that will be re-visited in the results and conclusions sections of this thesis as this is one of the main contributions of this study that has an impact on further research.

Figure 3-1 Core and Secondary Service applied to university study (adapted from Palmer 2014)



Services have a number of specific characteristics identified by a number of authors (Grönroos 1990, Shostack 1985, Palmer 2014) that is applied below to the university experience.

3.1.1 Intangibility

Universities have both tangible and intangible aspects in their service offerings. Products and services can be thought of as being on a continuum of tangibility, with more pure products at one end and services at the other. If a service lies towards intangibility, there is more uncertainty for the customer. Intangible aspects include the learning that occurs in studying and the benefits of attending university can be difficult conceptually and to articulate (Rushton and Carson 1985). Tangible facilities are buildings, teaching rooms, library, computer facilities, laboratories, catering outlets and sports and social facilities. Many universities have recently spent a great deal of time, effort and money on upgrading facilities and ambitious new building programmes. Services businesses often will emphasise the tangible

aspects in their marketing. In many aspects, customers of services are being sold a promise of something. Traditionally universities would market themselves using their prospectus' and open days. These are still important marketing activities for most universities but are now augmented strongly with website presence. Websites tangibilise the service aspects by using visuals such as virtual campus tours, live chat activity and photographs of the campus and students. The main aim is to encourage potential students to visualise themselves at the university and then choose them as UCAS first choice in the case of undergraduates or directly for postgraduate and part time students. Many overseas students would not have had the opportunity to visit the university before their first day of enrolment so the website is a key promotional and informational tool. Previous and current students are used by universities on their websites to talk about their experiences. To a lesser degree staff are sometimes also on the websites to talk about their courses or subjects. The images and messages a particular university uses will depend on the differentiation and USPs that they have identified. Durham University website depicts 'a world top 100 university' and research, Wolverhampton emphasise 'employability', Southampton the top 1% in the UK and Teesside 'inspiring success'. The problems that arise from intangibility include a difficulty in comparing universities and a high-perceived level of risk if the 'wrong' decision is made. Price cues may be used as a proxy for quality and personal information sources are influential. Some ways in which universities manage these problems are that they stress tangible cues, facilitate word of mouth recommendations, reduce complexity (for example, expert guidance on fees) and focus on service quality. Another problem with intangibility is that there is little opportunity to experience the service until post consumption.

3.1.2 Inseparability

The production and consumption of goods are usually able to be separate but with services, these are simultaneous. Usually the expectation is that students would be present during a lecture. There is now video capture of some lectures but the full experience cannot be replicated in this way. Even within distance learning courses

there are often some elements that are dependent on the tutor and student being somewhere, perhaps on a virtual learning environment (VLE), at the same time. This simultaneous production and consumption means that students are co-producers of their own learning; a central theme to this study. They are often also co-consumers of the service, so if there are students in a class who are being disruptive then this will affect the experience of other students in the class. The opposite is also true, in that if there are a particularly engaged group in the class it becomes the norm for the class behaviour. In essence, their own effort is part of the secondary service. Some ways that these adverse effects are lessened include the attempts at separating production and consumption and improving or managing service delivery. These can include for example using VLEs and managing lecturing inputs such as defining minimum standards on module guides and assessment processes and feedback. The people involved significantly affect the perceived standard of delivery. For example, if the module leader is ill for a few weeks and other lecturers cover the missed classes. One benefit of the simultaneous production and consumption and the length of time consumption occurs over is that there are many opportunities to confirm that students are satisfied and for them to feedback their perceived service.

3.1.3 Variability

There are two aspects of variability of services; if the performance of the service varies unintentionally then it can be problematic but if a service is deliberately tailored to a customer then it is fulfilling needs more precisely so is viewed positively. Services depend on people and people are inherently variable. Where a service such as a lecture is inseparable then it can be difficult to monitor for consistent standards. Consistent standards may not be fully achievable. Lecturers may give a particular outstanding class one day and be below par another. The co-production with the students may be successful in certain situations and not in others, even with the same student group. If a tutor though gives individual feedback, therefore customising the service, outside of class to students this is appreciated. Again, VLEs are used to reduce variability in the classroom and a more

consistent service delivery standard. Variability is something that should not be eliminated completely, as different teaching styles suit different learning styles and is what makes the experience enjoyable and memorable.

3.1.4 Perishability and Trialability

Perishability is linked to simultaneous production and consumption. Services cannot be stored so if a class is timetabled at a certain time and place and is missed then it cannot easily be repeated. Some universities have decided to use video capture of lectures to load to the VLEs after lectures. Fluctuating levels of demand means that campuses and classrooms are very crowded at certain times and very quiet at others. Students do not own the service, nor do they own for example, some of the inputs such as lecture slides that remain the intellectual property of either the lecturer or the institution. Another aspect for university marketers to bear in mind is that potential students cannot try before they buy as such. Although at open days, there may be short taster sessions and presentations that applicants can attend to get an idea as to what their experience will be like. Services are often not paid for until after consumption but in the case of tuition fees, these are paid up front for overseas students and by a loan payable after graduation for UK students. The university experience cannot be trialled before study, other than in 'taster' sessions at open days. This adds to the perceived risk attached to the purchase of this type of service.

3.2 The University Service Encounter

The experience at university is a complex service encounter with an extended process over a period of time. This encounter would include all tangible and intangible aspects (Shostack 1985) and would be a high contact service where the student is directly involved with the process. During consumption of the service, there would be a number of interactions termed as 'moments of truth' (Grönroos 1990). If a student studies on-campus, then many of these interactions would be in person but there would be times when the VLE or online library services is used

extensively. If the course is distance learning, then it may be that all interactions are virtual. If there are high personal contact interactions, then the students' likely behaviour needs to be predicted. The way in which the student can become co-producers of their own learning can be designed into the encounter. The role and behaviour of other students is particularly important during the period of study. It could be that students may be selected on the basis that they will work well with the other students on a course or perhaps be engaged in their studies. This thesis is focusing on student engagement and the idea that if you could assess the level of engagement applicants would have on their course, this may be a better predictor of success on the course than A-level results. Another way in which university service encounters can be managed is by stipulating the type of behaviour expected from students. Some universities have a student's charter or a behaviour policy. Another intervention universities can use to facilitate students' involvement is by managing student group activities where benefits of using peer support, learning and socialisation can be gained. The overall student experience can be analysed in detail by blueprinting (Kingman- Brundage 1989). This is where all the main functions and interactions are identified and responsibilities assigned and the relationships and timing then be mapped out. It would be very complex to blueprint all the aspects of the student experience over their studies but it can be used to look at, for example:

- what to do if a lecturer is ill for one week or six weeks
- students complain about the standard of teaching
- there are more students in the classroom than seats
- there is timetable clash of popular classes
- there is a very high fail rate for a module that is out of line with the cohort

There are role expectations on both sides of the service process. Students hold expectations of behaviour for lecturers and lecturers hold role expectations for students, at the same time a dynamic relationship is developed. These role expectations may well have changed over time. Lecturers may remember when students sat silently in a lecture theatre and took copious notes whereas now their

lecturers accept and even welcome the use of mobile phones and laptops in class, frequent interaction and workshop or problem based learning. The environment where a service is performed is termed a 'servicescape' (Booms and Bitner 1981). This encompasses the teaching activities that a student would experience in addition to the campus facilities and any tangible cues. This has focused on the term customer experience (Gupta and Vajic 2000, Harris et al 2003) to encompass the process of delivery, customer focus, and service quality, tangible and intangible aspects of a service. In higher education, the HEPI student academic experience survey discussed in a later chapter attempts to gather this wide construct. An approach similar to blueprinting of a service experience could be used that would take into account the emotional aspects of the consumption of a service through time although for the university experience this would be extremely complex. This can be simplified by investigating critical incidents in the provision of a service (Bitner et al 1990). In the case of university study, it would be lengthy and complex; as many modules would be started and finished that would, all have individual critical incidents during a course. Critical incidents of the overall course experience as a whole and the total university experience could also be evaluated. A simple, but perhaps cynical example of this is where universities sometimes plan positive activities or avoid assessment in the immediate run up to the launch of the National Student Survey in an attempt to glean positive scores.

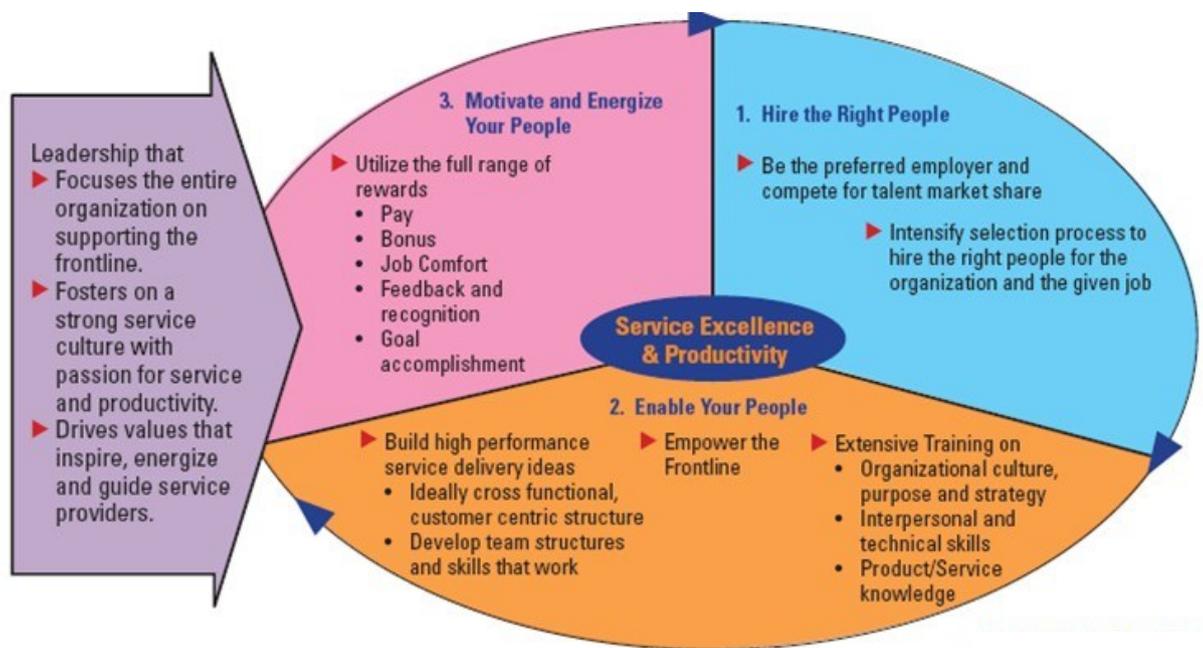
3.3 The Importance of University Employees

People are of paramount importance in any services business but has some specific implications in the university sector. The reputation of the university is often based on its staff and this is the case throughout the university and not just for staff in roles that are student facing. Academic staff may be at the forefront of specific research or world leaders in certain fields and may not be particularly undergraduate student focused. The emphasis on research reputation has overshadowed teaching reputation although this may change with the introduction of the Teaching Excellence Framework. Teaching may be underrated by universities

although it is one of the most important aspects students would consider. What is key in any relationship strategy is that all employees of the university are of prime importance. Universities should practice internal marketing to all staff, as they are so important in the overall perception students will have on their experience. Internal marketing is essentially an organisation treating its employees as customers and is especially important in very high people contact services to create a positive culture. There are conflicts sometimes with some of the important services that students have to engage with such as problems with enrolment, finance and timetabling. Module tutors and course leaders are of paramount importance in the delivery of the student experience. This thesis is concerning student engagement but there can be no student engagement if the staff are not also engaged. University management have to decide between the balance of control and empowerment for staff. There are cases where a lecturer will remain in post although they are substantially damaging the students' experience but it is very difficult to introduce performance management due to the nature of lecturing contracts. On the other hand, lecturing is a creative process and is concerning specialist knowledge so empowerment is very important. Lecturers are experts and should be able to use what they feel is appropriate pedagogy to get their subject across. Evidence also suggests that if employees feel empowered they have increased job satisfaction, less stress and more engagement (Palmer 2014). As previously stated, staff engagement is needed to foster student engagement. Aspects that may increase staff engagement are a belief in the organisational goals and a stress on an individual's importance in the organisation. Strategies that can increase staff engagement involve consultation and communication, specifically suggested by Palmer (2014) are open door policies, team briefings, that for universities could be subject team meetings and using quality circles which could be course leaders meeting with core module leaders. If a service employee believes that they are treated well, this leads to an increase in the perceived quality of service and service delivery (Bienstock et al 2003). The leadership of the university is very important for setting the direction, culture and values of the organisation. The human resources function in a university would be leading on policies including

recruitment and selection, training and career development. What motivates university staff needs to be understood by human resources and management when looking at performance and rewards. It may not be simply financial benefits that lecturing staff are looking for; there is a degree of flexibility, pursuing research or subject interests and a certain degree of autonomy. Service variability is often reduced in commercial sectors by using mechanisation or digitalisation and universities have embraced this to some degree. Virtual learning environments are used extensively although these do rely significantly on tutor's expertise and are often used as additional to face to face learning unless the course is purely distance learning. Automatic video capture of lectures is a newer and perhaps a more serious erosion of the lecturer's autonomy. The supporting systems of a university have become more mechanised over the past few years. Students now often enrol themselves electronically, log onto timetables and log attendance with a swipe card. The inseparability of the service and co-production has led to students now having to download materials themselves rather than be given them. Staff now will have to do much of the administration themselves on submitting marks, using electronic submission systems and using electronic systems to book annual leave and claim expenses. Wirtz et al (2012) proposes a service talent cycle that incorporates leadership that is supportive, has a service culture and inspiring values that in turn works on hiring motivating and enabling staff in service sectors as can be seen in figure 3-2 below

Figure 3-2 Wirtz et al Service Talent Cycle



3.4 Co-Production, Value Co-Creation - Marketing Perspectives

The extant literature on value co-creation and co-production within marketing can be quite abstract in nature (Saarijärvi 2012, Vargo and Lusch 2004, Prahalad and Ramaswamy 2004, Payne et al 2008) and can overly focus on definitions rather than its use. Co-production can be thought of as customers being directly part of the production process whereas co-creation can be the creation of a new product, concept or service. However, value co-creation is a more overarching term to cover co-production and co-creation in terms of 'value in use'. Early views on co-production centred on concepts of relationship marketing (Gruen et al 2000, Sheth and Parvatlyar 1995) where the aim is to develop relationships between customers and the organisation and customers with other customers. Sheth and Parvatlyar (1995) considered co-production being part of an organisation's citizenship behaviours where customers could be involved in governance, public relations activities, research activity, word of mouth communications and suggestions for

new or improved products or services. It could also encompass alerting the organisation to possible problems and even policing other customers. In higher education, these can be applied to student activities in marketing, representation, governance and role in course developments and reviews. In Sheth and Parvatlyar (1995), three types of commitment, or psychological bonds, are proposed for value co-creation: normative, continuance and affective which can be evaluated by metrics on retention, co-production activity and participation. Normative commitment is the perceived moral obligation to maintain the relationship with the organisation, so in higher education, might include students' relationship with tutors. Continuance commitment concerns the customer's interest in the relationship and the perceived cost of leaving the organisation. Affective commitment is the positive emotional attachment customers feel towards the organisation, which is aligned to student satisfaction for universities.

Vargo and Lusch (2004 and 2008) have undertaken significant work on value co-creation that has been the basis for many future authors. They proposed that marketing dominant logic at the time was goods based and that a shift to a services base would bring a new more useful perspective. This service dominant logic (S-D) was the basis for proposing a value co-creation proposition where consumers create 'value in use'. Around the same time, Prahalad and Ramaswamy (2000 and 2004) were exploring the meaning of value co-creation. They believed that although customers had more choice they were less satisfied and that producers were providing more products but there was less differentiation. They viewed co-creation as the joint creation of value within the changing nature of consumer-producer interactions. Here the emphasis is on individual personalised experiences that are co-constructed building on their DART model, encompassing, dialogue, access, risk and transparency. This co-construction of service experience incorporating flexible delivery can have some practical issues when applying directly to higher education. There are various external constraints on physical attendance and monitoring imposed by HEFCE and UK Visa and Immigration. Internally too there are resource implications in the delivery of teaching sessions

and material that are time sensitive. However, much can be applied to higher education especially using public services applications. Osborne and Strokosch (2013) undertook a useful analysis of co-production in the public services domain where they said that co-production was essential and inevitable to service delivery, which is certainly true of higher education. If students do not put any effort into their studies, they will not be successful and peer relationships will significantly affect the individual student experience and expectations. Osborne and Strokosch (2013) suggest a continuum of co-production could be analysed linked to the inseparability of the service. Therefore, at one end of the continuum, there is user participation then empowerment and at the other end, user led innovation. They do accept there are limits to co-production in that not all parties will have the same expertise. This again is true of higher education where there is a fundamental question regarding students' ability to make informed judgements on, for example, teaching quality. Hilton and Hughes (2013) explored further the development of value co-creation as a concept and the difference between co-production and co-creation. They highlight that there is no real shared understanding of the concepts other than the active role customer's play in co-creating value and that the customer determines value. Saarijärvi (2012) proposes that there is a need for clarification of the roles customers and producers play in the marketing process. From a university perspective, both co-production and value co-creation have to exist for successful study.

Payne et al (2008) used value co-creation to differentiate from goods dominant logic and emphasised that value is 'in use' rather than in 'manufacturing'.

Customers engage in this value co-creation by engaging in procedures, tasks, mechanisms, activities and interactions. They propose a practical process based value co-creation framework consisting of three main components:

- 1) Customer value creating processes
- 2) Supplier value creating processes
- 3) Encounter processes

Figure 3-3 A conceptual framework for value co-creation Payne et al 2008 p86

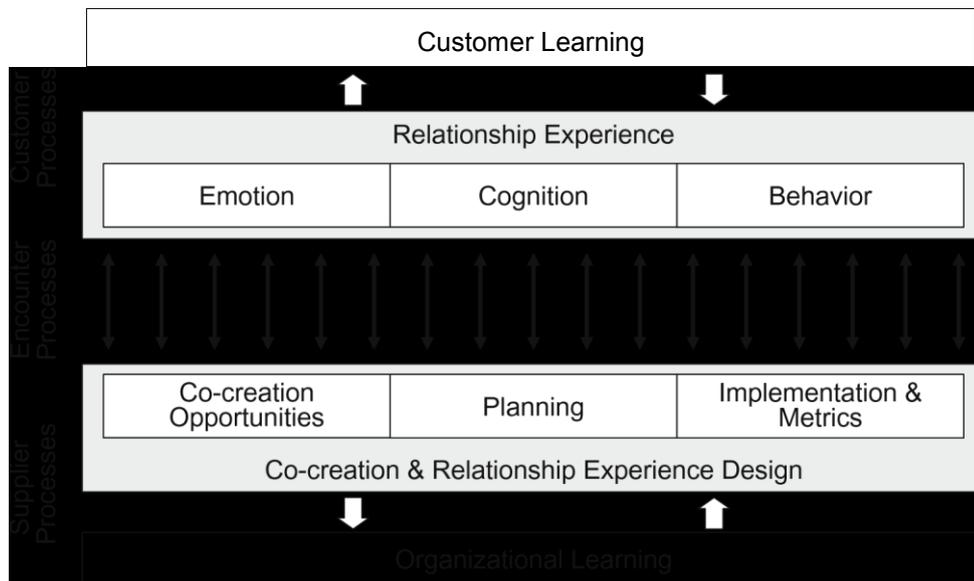


Figure 3-3 shows the interrelationship of both organisational learning and customer learning. Higher education learning would mean the learning needed to be a successful student not the subject learning. Higher education institutions then should actively develop the student’s relationship experience as far as they can using the relationship experience design. This framework illustrates the interconnectedness of processes and actors where the double arrows represent different encounters in the value creation process. The arrows between learning and experience are both ways indicating that learning and experience is a two way process. This framework highlights the importance of relationships and understanding of motivations, activities, processes and encounters. Within the relationship experience of the customer, cognition involves judgements on actual or potential encounters involving goal directed decision-making activities such as information search and evaluation. The emotional aspect here would encompass feelings and symbolism associated with the encounter. Behaviour would be any resulting actions to purchase and in using the product or service. This relationship experience then leads to customer learning. It has to be borne in mind that

students may not appreciate a partnership approach and may initially want things to be done to and for them without realising the potential to create value.

The supplier process involves the organisation's design of co-creation and the relationship, where the organisation learns from its experiences and associated metrics subsequently developed into a value proposition. Customer encounters should be designed with specific co-creation opportunities. These co-creation opportunities can include the use of technology, new channels and customer expectations. The encounter process then is key in analysing and developing 'touchpoints'. An important point to make is that there is a relationship here whether either party particularly wants it. The types of encounters can be classed as communications, usage and service and some would be termed as 'critical' in the relationship experience. These critical encounters for students may include open days, welcome week activities, first lectures and assessments. One of the suggested ways in which to manage encounters is to map customer processes or use blueprinting. A number of universities using student journey projects apply this mapping process. It is also indicated that there should be a clear articulation of the value proposition in marketing messages. This can be quite difficult in university marketing when the value proposition could be quite individual and the value may not be evident until sometime in the future.

Sector examples in the literature concentrate on technological innovation and services such as public services (Bovaird 2007), travel (Grissemann and Stokburger – Sauer 2012) and banking (Auh, et al 2007). The introduction of self-service technology such as self-scanning at checkouts and internet purchasing are frequently used as an example of co-production. An interesting application of the value co-creation concept is within business-to-business markets (Chen et al 2011) which can be aligned to university student recruitment. In business marketing, matching partners by compatibility, prior experience or learning, affective commitment and emotional attachment are all important. As Chen says '*Businesses should choose co-production partners that are compatible and can contribute towards advancing the relationship*' p1331. An implication for universities could be

to build partner match attributes into the selection of individual university compatible students as much as UCAS points. It could be then that only students who are likely to be engaged with the compatible university culture are actually recruited.

Value co-creation can reduce costs, for example in the case of self-service applications and improve levels of satisfaction, loyalty and organisation performance (Hammervoll 2014, Grisseemann and Stokburger –Sauer 2012, Auh, et al 2007). Using customers in value co-creation also increases the total amount of resources the organisation has available (Ramaswamy and Ozcan 2013).

According to Auh et al (2007), effective co- production relies on three factors:

- The perceived clarity of task (role expectation)
- The customer’s ability/ competence – quality of input
- Customer motivation – affective commitment and the feeling their contribution is fair.

Students may not be completely clear as to their role in the learning process and dislike the level of effort they need to undertake. They may have the opinion that since they have paid high fees then they should be able to get the qualification and/ or that they should not have to pay for additional materials. Value co-creation involves the consideration of the role of customer expertise, however in higher education, students would not be subject experts but they may have some expertise in their own learning approaches. Some universities have ‘partnership agreements’ to further define roles although these are not universally accepted, Joanna Williams from the University of Kent criticised them in Havergal (2014) stating that they infantilise students. A complication in the role of the student is the transient nature of study; most students would leave after three years of undergraduate study. The consumption of university services prior to study would be any open day attendance, website and pre-enrolment activities. During study, this would include for example, teaching, student union and social activities, housing, technology, website, attending meetings, involvement in committees,

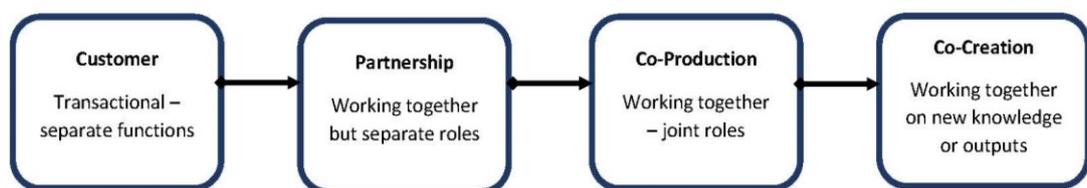
representing the course and recommendation to friends. Designing co-creation opportunities during study may include more individualised learning options taking into account the way in which individuals learn, whether face to face, on-line, action learning, visual, aural, peer or experiential. Post consumption may include further consumption in the form of postgraduate courses, alumni activity and again recommendations. Value then is individually created, so for example engagement for a 35-year-old part time student will not be the same as a full time 18-year-old student. Value is not inherent in the university product as such but in the way in which the customer interacts with the university. The producer creates potential value (Grönroos 2011) but it is the act of usage that creates value. The exact roles and responsibilities of the university and the student is a central concern of this thesis.

Some authors (Ertimur and Venkatesh 2010, Zolfagharian and Sheng 2012) view the customer as a partial employee. The role which each party plays must be clearly defined and supported and there may be some training or support needed to be able to successfully contribute to the service delivery (Grissemann and Stokburger – Sauer 2012). In higher education, this can include study skills, time management, virtual learning environment orientation and communication skills. Zolfagharian and Sheng (2012) proposed a five factor model for the co-production of services where latent variables included time (willing to spend) , familiarity (what needed) , effort doing the tasks, service production (role in process) and the role of partial employee. Some of these variables link with the UKES survey of student engagement that is used as a base for the questionnaire used in this thesis. Ind and Coates (2013) brought together different stakeholders perspectives within value co-creation where they defined it as a participative process where people and organisations come together to generate meaning. There can be a customer backlash if organisations are perceived to be imposing a role onto customers they do not want. This can be the case if students feel too much is expected of them out of the classroom and not supported by lecturers input or resources. It does depend

though how this value proposition is presented to students as it can bring about a synergistic and symbiotic relationship as proposed in the discussions chapter.

Literature on value co-creation can be usefully applied to the university experience but taking a purely customer orientated approach does not quite fit with the university scenario. There are very few sectors where the producer (university) makes judgements on the consumer (student) and can stop them from continuing to use the service. This power relationship can affect how each party within their respective roles and responsibilities perceive the service. Examples in the education sector do not usually come from the marketing discipline but from educational research to be evaluated in the next section. Taking the narrow view of co-production and co-creation within higher education, co-production occurs when students are involved in the production of materials, artefacts or service such as being a course representative. This narrow view can be defined as, 'Engaging customers as active participants in organisation's work' (Lengnick-Hall et al 2000). Co-creation could be the involvement of research students developing clinical trials of drugs. Value co-creation though is directly aligned to the concept of student's learning and engagement as students and tutors having to work together to add value rather than the production of an item. Chathoth et al (2013) propose that there is not a dichotomy between co-production and co-creation but instead it is a continuum. Co-production emphasises a firm centric view of customer involvement and co-creation takes into account reciprocity and mutual dependence.

Figure 3-4 Continuum of co- production and creation



Source: author's own

What actually is 'value' in higher education is a difficult question. This can be thought of as learning gains, that is the difference in students' skills and knowledge at the beginning of a course compared to the end, which is the approach in this thesis. It could however be more instrumental output measures such as a certain grade, for example where league tables classify only first and upper second class degrees as 'good' or graduate level employment. Value can be functional, emotional and symbolic (Saarijärvi 2012) so included the self-actualisation and esteem of gaining a degree. Value could also include the process, so how satisfied students are, how engaged they are, whether they feel an affinity with the university. It can improve metrics, build a community and improve self-actualisation. Students and wider stakeholders such as tutors, support services, other students, facilities and social aspects create this value. It is also recognised that students are not the only stakeholders or users in the higher education system; there is the wider economy, Government and employers for example. Value co-creation is often facilitated by technological advancements and this can be the case in higher education in the use of the virtual learning environment.

Kotze and du Pressis (2003) advocate students as co-producers in their education, rather than passive recipients. They add that students should be viewed not only as co-producers but also as co-creators or partial employees of the organisation but they need to have clarity of role. It is then useful to have service level agreements, which has resulted in the production of student charters. Díaz-Méndez and Gummesson (2012) examined value co-creation in higher education acknowledging the different participants, for example, tutors, students and university services. They recommend a value co-creation perspective as it takes into account the complexity of the higher education service and the link between value and quality. Quality can be considered as a service measured by satisfaction where students are perceived as customers. However, it is argued that the traditional market economy model cannot be applied to education; neither can satisfaction surveys assess teaching quality. The concept of higher educational quality is difficult to define since it means different things to different people (Harvey and Green 1993).

Lecturers have a significant role in value creation for students but it is questionable that students have adequate skills to evaluate teaching. Instead of this traditional service marketing approach, Díaz-Méndez and Gummesson (2012) recommend using co-creation of value. Universities then do not 'provide' value but instead there is an active joint participation process between universities and students. The question is how value can be assessed and what students gain from higher education. The learning gains approach is that teaching is only important as a function of learning (Swail 2011). Others emphasise the earnings and employment stats of graduates, although these measures are influenced by many other factors. *'Learning quality is also a function of the intrinsic characteristics of students. Curiously, this aspect is hardly ever considered when assessing teaching outcome... the quality of teacher input is appointed the sole determinant of product quality, regardless student input – raw materials'* (Díaz-Méndez and Gummesson, 2012 p575)

Lecturers are not the only source of value as it is also students themselves who create value, although satisfaction is not an adequate measure of this value, *'there is obviously a problem in the value concept in university service'*, (Díaz-Méndez and Gummesson, 2012 p575). There is a difference in short-term and long-term satisfaction, short-term is an instant evaluation and not a good base to make judgements whereas long-term is where students look back on their time at university and assess what it has given them. Student satisfaction varies with student's personality, age, preference for certain subjects, ambitions, sense of responsibility and maturity. The significant role that students play in their own learning does not justify that all learning responsibility is with lecturers. The value students get from university is a combination of their effort and resources and lecturers inputs. Student resources are intelligence, study habits, sense of responsibility, personality, critical thinking and communication skills. Lecturer resources are knowledge, teaching ability, social ability and personality. Student's ability to creating value is affected by the amount of information, skills and knowledge they have access to.

According to Díaz-Méndez and Gummesson (2012), students do not have the technical knowledge to evaluate the lecturer's knowledge and professional methods. This, they term, information asymmetry and propose that students are not aware of the long-term benefits of studying for a degree and so this disqualifies them as evaluators on lecturers performance. Lecturers provide students not with value in itself but with a value proposition where students have to study to get the benefit of the lecturer. Some of the concepts on affective commitment and communication have been included in the questionnaire design used in this research. The creation of value is not just concerning objects but also creating meaning so creating learning artefacts but also the concept and meaning of student engagement. The way co-production is used in education literature is more aligned to co-creation in that learners are active and they and tutors create personalised experiences, which is often termed as student engagement.

3.5 Co-Production, Value Co-Creation - Education Perspectives

Recently, within higher education literature, interest in student centred, social, enquiry based learning and learning communities has been growing. All of these concepts imply students are becoming active participants in their learning. This has developed into a framework of students becoming producers, partners and co-creators of their own learning (Bovill et al 2011, Little 2011, Neary and Winn 2009, Werder and Otis 2010). This highlights the difference in students simply participating in university life and them becoming partners, or co-creators of learning experiences. The theoretical basis of research into co-production at universities stems from public administration (McCulloch 2009), management (Halbesleben and Wheeler 2008) or Marxist doctrines (Neary 2010). There have been major changes over the past decade in the relationship between students and universities. The concept of student as consumers is similar to a transactional relationship versus a partnership approach, which is more transformational. Some authors emphasise the role of students as partners (QAA 2012 a and b, Little et al 2011, Cockburn 2005). This study has taken the standpoint of the students as

stakeholders moving towards co-producers and further as value co-creators. These terms are further developed by van der Velden (2013) who argued that co-creation of knowledge is where there is joint research or educational change via change agents; co-production is where there are joint development of new resources, courses and modules. Engagement of students in quality *assurance* is within the role of stakeholder, whilst in relation to learning and teaching, quality *enhancement* is when students are engaged in the role of co-creator. According to Bovill (2013a), co-creation is not about giving students complete control, it is a partnership and a relationship approach where students and academic staff working in partnership have different expertise with times when staff have more voice and influence, and other times when students do.

Mike Neary, when at the University of Lincoln, further developed this approach in a HEA funded initiative in 2010. The terminology around co-creation, partnership and co-production can be problematic. For example, Walton (2013) states that partnership implies more equality than co-creation does but this goes against the value co-creation terminology used in the previous section. The term curriculum can also be problematic. Is it content and learning outcomes or in addition teaching and learning, skills development, assessment and teaching resources? Co-creation or co-production of learning can also be at course or module level and is a dynamic collaborative learning process where '*teacher and student being co-constructors of knowledge*' (Fraser and Bosanquet 2006). According to Bovill (2013a), the co-creation of the curriculum encompasses the content, structure and processes of course development through interaction of staff and students, informed by and influenced by the learning experience of the student. This definition puts the student firmly in the centre of the curriculum, reflecting the view of Bovill (2013b) that the curriculum cannot exist without the students. She later reported in Havergal (2015a) that there were substantial benefits for staff within a partnership approach, saying, '*they find their teaching more rewarding because they are getting feedback from classes of more motivated students*'(p34).

Co-creation of curricula implies a shift in the teacher-student relationship toward a reciprocal model where students and staff both have expertise to bring to the process. The ethos is on constructing knowledge with students rather than just handing over fully constructed knowledge (Cook- Sather et al 2014). Bovill (2013b) discusses the nature of co-creation of the curricula suggesting in practice it may include, students being consulted on the content of the course, developing learning materials or virtual environment, designing marking criteria, or designing assessment. The reported benefits for staff in this approach is a more enjoyable teaching experience and for students more interest and confidence. However, the practical application of co-creation is often hindered due to inflexible quality assurance mechanisms (Collini, 2012) and course design that can make it difficult for staff to pursue more innovative approaches to learning and teaching involving current student influence. Bovill (2013b) applied the Chickering and Gamson's 1987 principles of good practice to engagement and co-creating curricula. Her definition of co-creating the curriculum concerns the collaborative approach to the design and creation of learning and teaching and contrasts this with the market conceptualisation of viewing students as consumers. She also advocates a move away from some of the manufacturing metaphors that talk of consumers as co-producers (McCulloch 2009) as co-creation implies a more inventive mutual process.

Curriculum can be problematic as it can be defined in a number of ways particularly in an international context. According to Bovill (2013b), it is more than just the course subject content and learning outcomes. Curriculum then is considered to include the teaching and learning strategy, processes of course design, context of learning, graduate skills development and application to professional practice. Therefore, this broad definition includes the design of assessments and teaching resources. Student and tutors are then co-constructors of knowledge (Fraser and Bosanquet 2006) where inputs are informed and influenced by the experience of students. The view here is that students are central and compulsory to the curriculum (Bovill 2013b). This compares with a narrow view, as stated earlier that

the structural constraints of universities mean that the curriculum is set for a number of years and any module changes have to be approved by committee and comply with CMA legislation. In co-creation, the student –teacher relationship moves to a reciprocal model where each have a role and a voice and different expertise to bring to the process. At times, staff may have more voice and other times students. It will also depend on the level of study of the students, their experience and attitudes to what is being discussed and the involvement of professional bodies. The important aspect is that it changes the power dynamics of classrooms, whether real or virtual. Often academics act as gatekeeper in academic design although enhancing student choice can increase engagement.

At the institutional level, student engagement can include involvement in assurance and governance, such as student representation on course review and approval panels and committee structures of the university. There are also some initiatives where students are involved in curriculum design and development and in the production of teaching resources or assessment tasks. Havergal in the Times Higher reported in 2015(a) initiatives on student partnerships in America where lecturers are paired with student consultants on the design of the curriculum and delivery. This development is a more equal relationship than simple feedback. Activities linked to curriculum are at a higher level and can produce substantial educational gains. This also underlines the premise of this research where the value co-creation of the learning outputs are proposed to be the result of positive student engagement.

3.6 Relationships and Roles in Universities

Recently given the changes in the higher education landscape highlighted in chapter two, there has been a focus on the role of the student. Are they consumers, clients, customers, partners, co-producers, co-creators or simply students? The relational metaphors used determine the role that students, tutors, support staff and the university infrastructure holds. The relationship between a student and their university is not straightforward and is a central theme in this thesis. What is a

successful student experience? Does the student define this success themselves, by the university or even by a league table or TEF measure? Not all students can or should gain a first or an upper second-class degree, deemed by TEF and league tables as a 'good degree'. For someone who does not have English as first language, are new to formal education or come from a difficult background, a lower class degree is a major personal achievement. This drive by universities to increase the number of students gaining 'good degrees' is fuelled by the publishing of these metrics and the corresponding reputational influence. This drive has led to accusations of grade inflation, dumbing down content and 'teaching to the test'. Student performance at course and module level is judged by the number of students in the good degree category. This then in turn, reflects on the lecturer teaching the module.

A good relationship between the student and the university is paramount for a successful outcome on both sides. This relationship is constantly evolving, starts before application, through enrolment, delivery over a number of years, graduation and the possibility of an enduring lifelong relationship. Relationship marketing can be applied, Grönroos (1994) recognised that relationships are not simply transaction based and can offer enhanced rewards on both sides. The move to a managing customer relationships approach is essentially a move to a relationship perspective in contrast to an exchange perspective. The process of creating value for customers is different in a relationship orientation perspective to an exchange orientated perspective (Grönroos 2007, Sheth and Parvatiyar 1995). In a relationship approach, value creation is a mutual co-operation where, *'value for customers is created throughout the relationship by the customer, partly in interactions between the customer and the supplier or service provider'* (Grönroos 2007 p27). Service networks can be important in university relationships management. These networks include other organisations such as local councils, businesses near the campus and feeder schools and colleges, in addition to the students themselves.

A student would have numerous relationships with various parts of the university: the administration, tutors, library staff, technicians, accommodation services, cafes, bars, and sports facility staff, in addition to other students. Some of these services would be separately managed entities but all combine to make up the relationship with the student. The relationship can be face to face or via the online community that can have advantages to the university, as the amount and type of activity can be monitored. Social media is used extensively by universities as a marketing tool pre and post consumption although not quite so much during their studies. Online communities can also be a problem if critical comments are posted. One way in which to look at the interaction of market relationships was proposed by Payne et al (2005) that include customers, suppliers, employees, internal, referral and influence markets. University customers would be applicants or students. Internal markets are employees of the university, referral could be thought of as feeder schools, UCAS, agents and partners and influence will include regulatory bodies. A relationship marketing approach takes a long-term view of the customer lifetime with a commitment to high quality. Berry (2002) specified three levels of service, tactical, strategic and philosophical. At the tactical level, universities aim to build a relationship with potential applicants on social media and targeted emails. At the strategic level the aim is usually customer retention for services although for universities this is different due to the finite length of time for study and limited opportunities for repeat purchase. Retention can be thought of as students staying on the course until graduation, although there are structural ties that mean that it is difficult to transfer between institutions. Another element of retention and loyalty though could be the feeling of belonging that is a large part of positive student engagement. The strategic elements of a relationship strategy means that the service process needs to be evaluated covering core relationships, networks and partnerships (Grönroos 2007). The philosophical level usually concentrates on the relationship over a life cycle, which gives a holistic approach to investigating the student journey that would take into account pre-application and post-graduation.

One of the main drivers for relationship marketing is to increase customer loyalty, retaining customers rather than seeking new ones. A goal of repeat purchase is not appropriate in university education but rather it is the depth of the relationship rather than repeat purchase that is important. The concept of loyalty is different for universities but is still important. High numbers of new students are always needed for a university to survive but active students have a finite lifespan and funding but can be useful in terms of referrals and possible postgraduate study. What is meant by loyalty in higher education is different to the commercial world as it is not concerning repeat purchase for profitability. Rather than looking at retention and loyalty as the meaning of a relationship, it is more about attitudes (Grönroos 2007) where the student determines the type and depth of the relationship. Some students may approach their studies in a very transactional approach; thinking they have paid for the degree and therefore should be supplied with it. Others may embrace the partnership approach in either a passive or an active manner. The aim is to foster a feeling of pride and belonging, to become an advocate, have high engagement and hold an emotional attachment to the university or course. This can be articulated in behaviours such as:

- Playing sports for university teams
- Being a course student representative
- Good attendance in class
- Engaged behaviours in and out of class
- Independent study
- Wearing university branded clothing
- Recommending the university – personal and on line
- Alumni activities
- Fundraising – during study and gift giving afterwards

The success of maintaining a relationship after graduation will depend on accurate data collection and maintenance. Often alumni communications are via magazines or by email. Some firms have moved from customer relationship management, to an experience management terminology. Universities have also recognised this and

often now have roles specifically dedicated to the student experience. The benefits of a relationship perspective by the student can be increased engagement, which in turn positively affects the outcomes of the experience. There is evidence that degree outcomes and critical thinking skills increased with engagement, which is discussed in the next chapter. There are however, other benefits that are gained by a customer if a relationship is entered into (Gwinner et al 1998) including confidence, reduced anxiety and social benefits. University students having a good relationship with their university, the course, tutors and peers will have the confidence that they have made the right decision and therefore reduced cognitive dissonance. Social benefits would be gaining friendships and positive peer and tutor relationships during their study that may well last for their lifetime. The benefits also to the organisations are not simply financial. For a university, if students do not complete their course then there will be financial implications due to loss of fees and HEFCE funding but also reputational especially as this is to be included in the TEF. If a student has a positive relationship with the university and is engaged in their studies, they are more likely to get a good degree and this is included in the TEF and many league tables. On a more personal level, tutors benefit from positive relationships with students in terms of their professional pride in helping students and the social aspects. Field trips, industrial visits and joint research help in this development and some student-tutor relationships last well after graduation.

3.7 Students as Customers

The concept of students as consumers is a relatively recent phenomenon and is a response to the changing UK higher education and political climate that has seen consumerism and marketisation of higher education (Eagle and Brennan 2007, Owen 2013, Little et al 2009 Streeting and Wise 2009, van der Velden 2013 and Popenici 2013). This has manifested itself in greatly increased significance attached to student-satisfaction surveys. The higher fee paying landscape has meant more debate around the role of the student. The idea that students are consumers is attractive in that it promotes individual rights and challenges organisational power

(McMillan and Cheyney 1996). It encourages universities to be responsive to the higher education environment and individual students. The downside of this approach is that it leads to an entertainment model of learning and that it views education as a product rather than a process. Some commentators and universities have taken on board a blatant customer approach although there are significant criticisms of this. In 2009, the QAA worried that a consumer approach could 'throw the system off balance' (Streeting and Wise 2009). McCulloch in the same year discussed the difficulties of the consumerist approach, which included

- Increased student passivity
- Failure to encourage deep learning
- Compartmentalise education as a product rather than a process.
- Individualistic approach rather than community
- Diminishing the role students have in their own learning.
- Encouraging an entertainment model of learning.

However, he did admit that there were some benefits of the consumer model being used by a university, which included universities being able to:

- Respond to changing environments
- Maintain financial stability
- Recognize the investment role of study for a student to get a good job.
- Give the student confidence and a voice

Finney and Finney (2010) conducted a study into whether students thought themselves as customers and if this influenced their attitudes and behaviour. They found, '*students who view themselves as customers are likely to hold attitudes and to engage in behaviours that are not conducive to success.*' (Finney and Finney 2010 p276). They observed that students, who pay a higher percentage of their tuition fees, were more likely to view themselves as customers. Curtis (2010) argues that we could '*produce a generation of dependant, unmotivated, risk averse students*' who see no need to be independent thinkers as they '*have paid someone to do it for them*' (p24). On the subject of students as customers, Gibbs (2012) says,

'students do not consume knowledge but construct it in a personal way in the context of learning environments that include teaching: they are co-producers and collaborators' (p37). Liam Burns, the then president of the NUS in the foreword Nygaard et al (2013), says that it would be, 'very easy for students to revert to a 'consumer' approach to their learning' (p.vi) and 'our research continuously shows that whilst students want to be more engaged in the creation of their own learning, they feel increasingly removed from it. Too often we presume that engaging students will result in calls for shiny buildings in response to a 'consumer' environment, rather than a pedagogical change as part of a learning community.' (p.ix)

Hart and Rush (2007) discuss in detail the semantic difference between being a customer or a consumer in higher education, in that using the term 'customer' can be unhelpful as it leads to the idea that students purchase something and are not participating in the service. There has been a lively debate in the International Journal of Management Education where Acevedo (2011a) strongly advocated that the student is not a customer and that using this type of language damaged the student – university relationship. She highlights the negative aspects of using the student as customer metaphor. This includes short term thinking by students, lack of student accountability, adversarial relationships, commoditisation of education and the possible compromising of values, integrity and freedom. She also says that it emphasizes a careerist approach and the emphasis on placement service rather than education. She added, *'The names "student" and "customer" have well recognized meanings. A student is one who studies or pursues knowledge; a customer is one who buys goods and services from a business'* (Acevedo 2011a p4). In a response, Obermiller and Atwood (2011) criticised this position, saying that using the customer term is useful in running a university and in some aspects of teaching and learning. They add that the marketing concept is being misunderstood, students have complex needs but they have insufficient knowledge as to what they really need to be successful at university and some perceived needs are not appropriate. They emphasise that service depends on customer

participation and so delivery should be engaging, in a pleasant environment and at convenient times. In response to being ‘careerist’, they argue it is a legitimate goal of business education, which is also of interest to the wider higher education stakeholders of for example, Government, employers and communities; finally adding that students are customers but not the only ones of the university. Indeed, Warren in the Times Higher Education argues that students are not customers but rather, ‘...the end product of our industry. If there is a customer at all, it is society and employers’ (p24).

Consumerism can be thought of as the opposite of student engagement or participation, as termed by Coffield (2008), the difference is set out in table 3-1.

Table 3-1 Engagement versus Consumerism

	Consumerism (acquisition)	Engagement (participation)
Goal	Individual enrichment	Community building
Learning	Acquiring facts	Becoming a participant
Student	Recipient, customer	Apprentice. Peripheral participant
Teacher	Deliverer, provider	Expert, dialogue partner
Knowledge	Possession, commodity	Aspect of practice
Knowing	Having, possessing	Belonging. participating

Coffield (2008)

Within the consumerist approach, staff may feel pressure to gain good satisfaction scores, (van der Velden 2013). The student may want high marks for assessment at the same time as wanting value for money. When student and staff relations are based on meeting expectations then a consumerist supply – demand relationship results with customer satisfaction gaining primacy. If the complex relationship between students and staff move to a service provider and customer, it is not good for either party. The consumerist types of expectations of more feedback, more contact and teaching as entertainment may not be achievable. This approach may not actually address student’s real needs but rather what they think they want.

Delucchi and Korgen (2002) describe consumerism as inverting the responsibility for academic success onto the tutors. They reported a research study where students were asked to identify themselves with either a consumer or a collegiate viewpoint. Those who identified themselves with views of consumerism thought 'it is the instructor's responsibility to keep me attentive in classes' and 'If I am paying for my university tuition, I am entitled to a degree'. Delucchi and Korgen (2002) go on to say that, it is better to have high expectations of students and instil academic rigour but often the reaction of institutions is to bring in more entertainment to lectures. A recent example is the 'rate your professor' website. Van der Velden (2013) also identified 'supplyism' as an issue for universities, where staff knowledge is the supply that holds control over the educational experience with no influence by the demand side. She advocated developing the co-ownership of education between the learner and tutor. Another way of viewing the consumerist debate is by separating out transactional aspects from transformational aspects of the student experience (Van der Velden 2013, Lizzio and Wilson 2009). Transformational aspects of learning include the change that students undergo during their studies in terms of social, intellectual and cultural development and learning.

Furedi (2009) reported that the growing consumerist behaviour in students and a culture of student complaints has led to a reversal of roles of teachers and students, *'the authority of the customer trumps that of the service provider. Therefore, it is the opinion of the students and not the academic that determines the position of a university in the league table'*. A problem he highlights in the consumerist approach is that the customer is always right but this cannot always be the case in higher education. The role of higher education is to question and challenge current thinking and changing this to a consumerist approach contradicts this ethos. Since the introduction of higher fees in England though there has not been the significant rise in complaints to the Office of the Official Adjudicator that was forecast (Havergal 2016g) although the compensation amount had risen significantly. What is a good student experience also is under the spotlight, where *'friendly atmosphere, progressive marking, lots of spoon-feeding, great social life -*

may have little to do with the provision of a challenging and high-quality education' (Furedi 2009). This questions the students' ability to assess quality education and the quality of an academic experience. In the forward of a recent student engagement partnership report on student engagement (Guild HE 2015), Professor Joy Carter, the Chair of GuildHE and the Vice Chancellor of the University of Winchester says '*...any description of students confined to regarding them as customers of higher education falls well short of both the ideal and the reality. It utterly fails to capture the rich complexity of how students and their chosen universities study, learn, research and grow together'* (p4). This emphasises that consumerism is not only undesirable but also actually unhealthy for positive learning experiences.

The National Union of Students (NUS) supports students being partners rather than consumers. They formed in 2009, the Wales Initiative for Student Engagement, as an approach that engages students as active participants in their educational experience. The NUS Manifesto for Partnership (2012) criticises the consumer approach in that the, '*...conceiving of students as consumers is a thoroughly impoverished way of describing the relationship between students and their institutions'*. They propose a partnership approach to replace consumerism in education. The manifesto proposes to move beyond students as active participants of learning to students being co-creators of their knowledge, co-producers of learning outcomes, collaborators and agents for change. This has caused some confusion in the terminology and remit of student engagement that will be expanded on in the next chapter. The question is whether the focus of student engagement should be at the individual student's level of engagement with learning or their participation in a collective system of student representation and whether there are tensions between individual and collective representation. The student engagement toolkit is a web based resource hosted by the NUS and the HEA reporting on research from 2009-2011 that developed into the student engagement partnership that frames partnership as the goal of student engagement. The paper criticises Government as it has treated higher education as

a consumer good where choice will give the best experience and inflates the perception of the student's power. They say that the consumer model is dangerous as it, *'reduces the complex interactions to mere transactions and de-values the role and expertise of educators'* (NUS manifesto for partnership p5). It may be thought that the NUS would support student satisfaction but this is not quite the case. They go on to say that, student satisfaction has been substituted for learning and that student involvement is simply being able to comment on what has been sold to them. The purpose of higher education is to challenge students and if satisfaction stemming from meeting expectations is the only measure then the richness of the experience is lacking. The standpoint of students as partners as opposed to consumers by the NUS is to *'protect and grow the extent to which students are given the opportunity to experience the transformational effects of higher education'* (NUS manifesto for partnership p5).

The consumer model focuses on the individual student such as listening to and providing feedback for individual students. The NUS state that students are only contributing to partnership when educational change is happening. That partnership is shared responsibility for identifying problems or opportunities for devising a solution and for the co-delivery of solutions. When attempting to define partnership, the NUS describe it as an ethos rather than an activity, therefore not a simple sum of all engagement. Interestingly, they also support the concept of value co-creation adding, *'at its roots partnership is about investing students with the power to co-create, not just knowledge or learning but the higher education institution itself'* (NUS manifesto for partnership p8). However, their concern is wider than co-creating of learning which is the focus of this study but covers the much wider student involvement in all the workings of a university. There are problems though in this type of engagement in that there can be a trade off in learning outcomes and engagement in student social or sporting activities and the transitional nature of both the student body and student course or union representation. They list as benefits of a partnership approach, happier, more engaged students and fostering a sense of belonging, which is critical to student

retention and success that would not be found in basic customer transactions. Consumer models concentrate on student wants, resulting in an *'unimaginative and unrealistic shopping list'* (p11), rather than partnership that implies responsibility. This empowerment supports again the application of a value co-creation approach to improving learning environments.

This chapter, so far has evaluated the service characteristics of the university study experience and the complex relationship between value co-creation, quality and the consumerist approach. The final section of this chapter will apply consumer behaviour and models, to analyse the various stages students go through during their study in the light of value co-creation.

3.8 University Student Consumer Behaviour

Most approaches to consumer behaviour seek to model that behaviour. This chapter has highlighted some of the complexities in the service product, roles and relationships in experiencing higher education. Consumer behaviour models by their nature view the relationship as a transaction between buyer and seller. However, it is useful to look at consumer behaviour concepts and modelling in more detail to evaluate the relationship, over time, between the student and university. The approach of this analysis will be in terms of the conventional decision-making, input, process and output model. A complication is that the consumption of the service is over an extended period and as argued earlier depends upon the effort students put into the process. It can also be regarded as a series of decision-making processes and not simply one process of choice, consumption and satisfaction. These decisions could include:

- to attend university
- which university to attend
- where to live
- what course
- what career they want to pursue
- any options or route each year

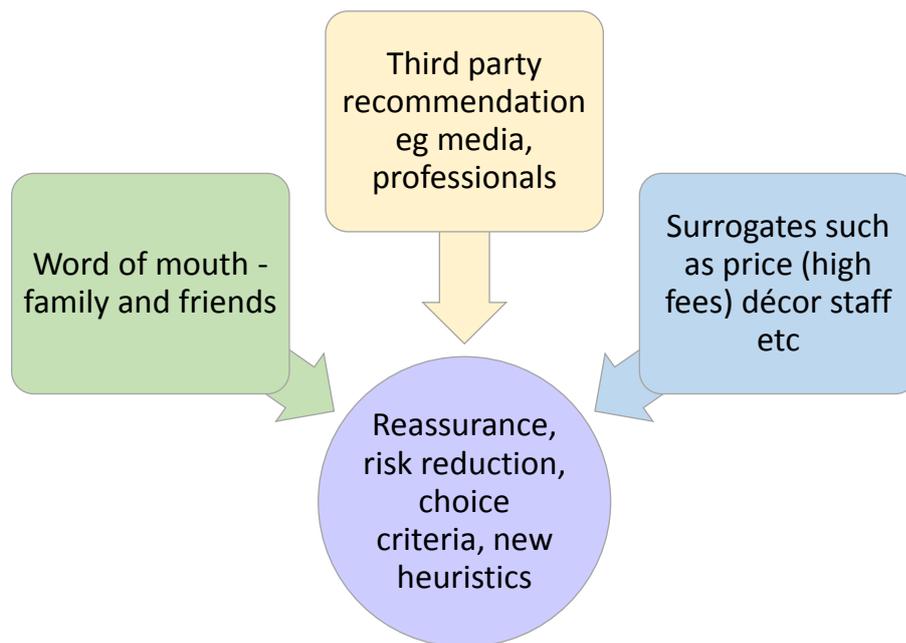
- whether to take a placement
- opportunities for overseas study
- whether to join any clubs or societies
- to change course
- to drop out of study

Each of these can be applied to a consumer behaviour model and further analysed by blueprinting or critical incident mapping, to inform university recruitment marketing, internal services and course design. Consumer behaviour models assume full access to information and that consumers have an informed choice. As discussed earlier, information on the actual experience students would receive is very difficult to obtain. It may also be that they lack the experience and judgement as to what a good university experience should be. This judgement would develop over their course and as UK higher education uses a learning outcomes approach, a total appreciation of learning cannot be in place in the early stages of the experience (Lomas 2007). When taking a value co-creation perspective, it changes what the student is actually buying or consuming into a joint experience. When the student is regarded as a customer, then the output is the qualification rather than the learning process (Bramming 2007).

An approach to analysing consumer behaviour is to define it into the levels of decision- making and the type of problem solving associated with the type of purchase. Extensive problem solving usually occurs when a product or service is purchased for the first time, is unfamiliar, expensive or has some risk associate with it. This would normally result in extensive search and evaluation activities undertaken. Limited problem solving ensues if consumers have some knowledge of the product and it is not perceived as high risk; there would usually still be some search and evaluation. Routine problem solving occurs when consumers have experience of the product and there is little by way of evaluation with a repeat purchase (Schiffman et al 2012). How a consumer actually approaches this decision making will depend upon how much information they have, their attitude to risk and whether they have a clear idea as to how they are to evaluate the purchase. Although it may seem that the decision to attend university, which university and

which course fall under extensive problem solving, much of the behaviour exhibited is more limited. This is because of the lack of clear information on the experience they will have, so prospective students rely on other, less direct, sources of information such as personal recommendation and reputation. Published information on Key Information Sets (KIS) cover probably contact hours, employability and degree class data which say little about the experience. University websites usually have module information and staff that may well change in the time an applicant is studying. In professional services, such as university education, users are likely to use proxies to judge quality such as the credentials and qualifications of tutors and seek out reassurance they have made the right decision. The type of information that applicants may use when deciding on university study is presented in figure 3-5 below

Figure 3-5 Information Sources for University Study: Adapted from Blythe (2013)



As stated earlier, the decisions linked to going to university include the initial one of deciding to attend a university, then which university and linked decisions such as where to live and who to live with. These decisions will often be made with other people and universities need to be aware of who these individuals may be so they

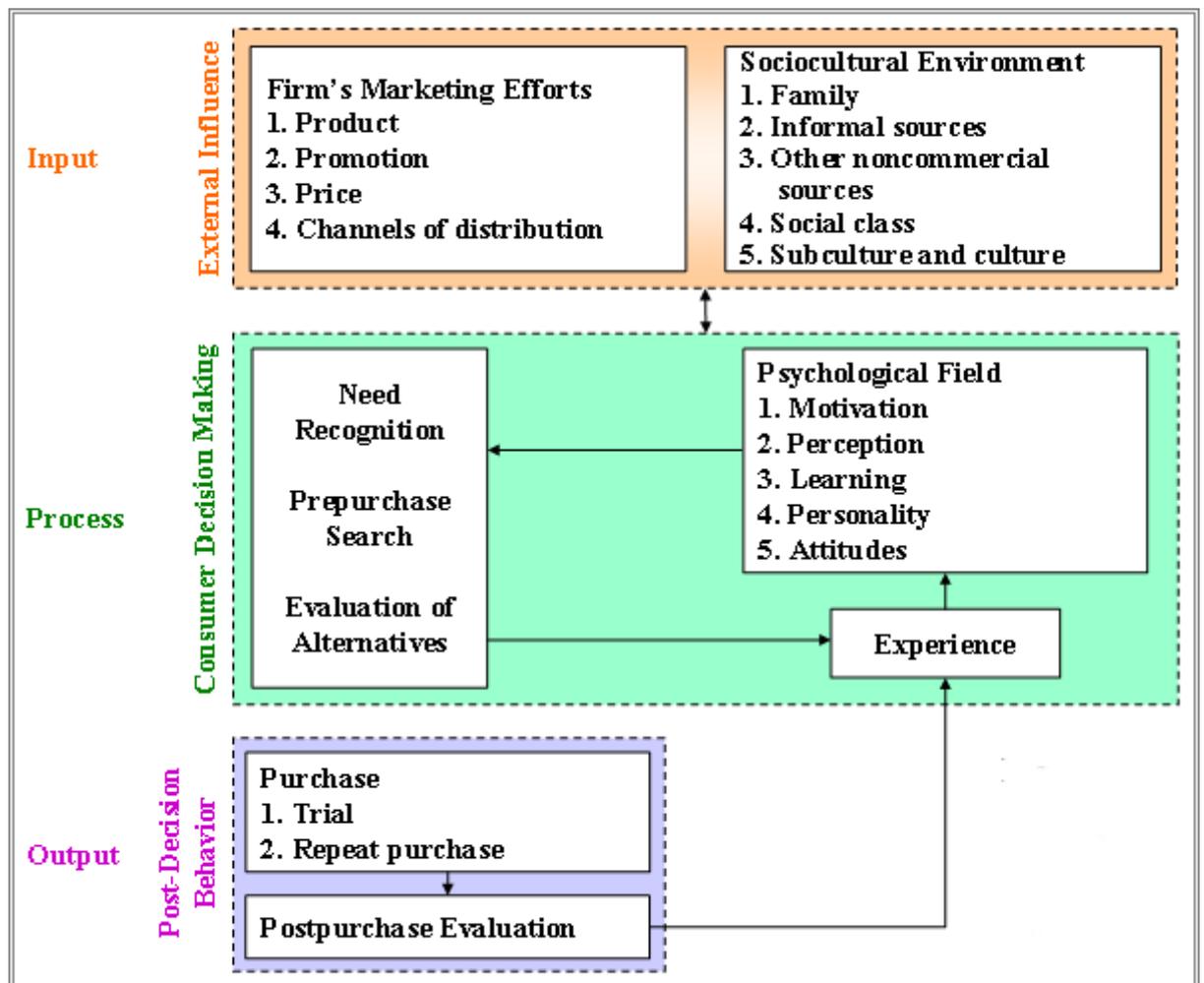
can be included in service planning and promotional messages. Roles that individuals may take through the process include influencers, gatekeepers, buyer, users and decision makers. Influencers in the decisions surrounding attending university can include reference groups such as family, friends and teachers. It can also include sectoral websites and individual university websites. Universities use current student and alumni to take on the role of influencer in addition to experts and researchers that they promote on the website. Gatekeepers control the flow of information. A family member may draw up a subset of universities for an applicant to consider or with regard to overseas students; universities often use agents who have a list of universities they actively promote to applicants. The role of buyer may be considered the student or perhaps the student loan company. If a higher education institution such as a private provider or a drama school charges additional fees that cannot be claimed on a loan, then the applicant would be liable for additional fees. For overseas students the buyer may well be a parent. The user of the service would be the applicants themselves but they may not be the decision maker. Parents may well say that their child should go to a certain university and study a certain course and may decide on the accommodation they have.

3.8.1 Modelling University Consumer Decision Making

There are a number of perspectives as to how consumers make decisions. The economic perspective looks at the consumer as being a rational being. This would assume that consumers have access to perfect information and be able to differentiate accurately between offers. Realistically this is very difficult to achieve and too simplistic. For many people a decision does not have to be perfect but does have to be good enough. As opposed to the rational economic view of the consumer this is the passive view where consumers are subject to marketing and sales influences. This does not take into account though the power consumers have. The cognitive view of purchasing views the consumer as a problem solver, where they are looking to fulfil needs. This categorisation emphasises the importance of information and is somewhere between the passive and economic views of consumer behaviour. Another way to view consumers is that they are

emotional or impulsive. This can be related to the cognitive view by homing in on the feelings that are activated in a purchase. If we then investigate in more detail the decision making process, most authorities on consumer behaviour view this as a cognitive process, with elements of emotional decision-making (Solomon et al 2013, Schiffman and Kanuk 2010). This decision making process can be broken down into three stages, input, process and output as depicted in Figure 3-6.

Figure 3-6 Schiffman and Kanuk Consumer Decision Making Model 2010



3.8.1.1 Input or Antecedent Factors

Inputs include internal and external influences that would affect motivation and decision-making. Often motivation is assumed to be future employability but it may be much more complex than this and applicants may not be fully aware of the reasons why they choose to go to university. This will be explored further in the next section. External influences would include university marketing efforts and

sectoral consumer websites, league table information and independent university guides. University marketing includes advertising, website, open days, schools links and increasingly, digital and social media marketing. The sociocultural environment is an input to decision making and includes the influence of family and teachers. It would also incorporate an individual's background. Influences then include whether, there is a family history of attending university and if it is an expectation from their family, friends or school. Environmental influences would also affect what course they would study; for example, many doctors come from a family of doctors. Sixth form colleges encourage students to attend universities as it reflects on their reputations and if groups of friends are planning to go to university then it encourages others in the group. The choice of which university to apply for is also influenced by these factors. Schools encourage applications to 'good' universities, sixth form teachers influence the subjects studied and of course, parents and peers will have a strong influence. During this phase expectations will be formed, that when the applicant attends the university will be compared against performance and a judgement made in terms of satisfaction.

3.8.1.2 Psychological Factors and Motivation

Student's psychological factors includes internal factors such as personality, attitudes, learning, motivation and perception. What a student thinks that university study will give them and which university might achieve this is then paramount. Perception concerns how something is perceived through the senses and understood. Overall perception of whether to attend a university and which one to apply for is influenced by a person's memory, experience, family, schools and friends as discussed above. Motivation can be equated to the need awareness stage of the decision-making process where needs are a perceived lack of something. This can be quite complex but is key in understanding student behaviour and later engagement and subsequent performance. Motivation can be classified by looking at primary motives, for example going to university and secondary the reasons for going to a specific university.

Some examples of primary motivation to attend university may include:

- Future employment or career aspirations
- Peer pressure
- 'Rite of passage' or low level decision as simply expected
- Lack of employment or training opportunities
- Parental pressure
- Interest in subject area
- Thirst for knowledge
- Not know what else to do

However, there is a complication in that if the motivation is for something in the future that is not guaranteed, such as employment then university attendance is essentially a facilitator to gain this need. This is therefore indirect motivation, which may not be as strong as if it were direct.

Secondary motivation to apply for a particular university may include:

- Course
- Reputation of the university – word of mouth and league tables
- Added perceived benefits such as year abroad, work experience included, professional accreditation
- Influence of parents, teachers and friends
- Marketing effort by the universities
- Open day experiences
- Experience of friends
- Independent information sources such as Unistats and Which University

Motives can be rational, such as a decision made to get a degree for a specific career path or emotional which would concern the feelings a student may have towards a university at an open day. Motives can be conscious where the student may be very aware of what they want or they may be dormant or unconscious. They may drift into university, as they do not really know what else to do.

Motivation varies in terms of intensity, therefore having an impact on the drive and commitment of the student. However, as the consumption of the experience is over an extended time then this motivation and drive can change, either become less or more intense during the student journey. The incentive to behave in a certain way can be categorised as extrinsic or intrinsic (Wright 2006). Extrinsic incentives are external to the individual and have increased recently in universities' marketing to include for example, postgraduate fee waiver if an undergraduate course is studied and free i-pads or accommodation offers. Intrinsic incentives are personal drivers and for the long-term success of the student are more important. This includes the pleasure of learning something and being able to gain skills and increase self-esteem. The problem is that if the only goal is to gain certain employment this is a more extrinsic incentive than intrinsic and therefore is not so effective in driving behaviours. There will certainly be some unpleasant or uncomfortable experiences during the student journey and motivation can only be sustained if there are clear goals. Herzberg theory can be applied to consumer behaviour (Wright 2006, Blythe 2013). This is where some aspects of university life are motivational whereas others are expected, termed as hygiene; the absence of hygiene factors can be demotivational. Some factors that a university is expected to have would include reasonably furnished teaching and lecturing rooms, a well-stocked library, well qualified tutors and infrastructure for a good social life. A lack of these hygiene factors would deter students from applying to a university. To motivate students to apply to that university though, more motivational factors are needed to be included in the proposition. The theory can also be applied to student behaviour where hygiene factors are the effort of students that would necessary to be able to gain a degree but motivating factors would need to be incorporated to reach their highest potential they could. Another motivation theory that can be applied to student behaviour is goal-setting theory (Locke and Latham 1990) where individuals put more effort into something they have a goal to achieve. Having a goal to get a certain degree class will affect behaviour and so will increase student engagement. It is therefore important to translate goals into behaviours and strategies for engagement.

Attitudes are feelings and beliefs that are learned over time towards a certain object, in this case university study. It consists of beliefs, emotions and behaviour where students would hold certain beliefs about attending university and the different universities. They would then hold some form of feeling about these beliefs and behaviour would follow if the belief and feeling were strong enough. How this affects decision-making would depend on the hierarchy of effects where the level of involvement can be categorised as a hierarchy of high, low or emotional (Wright 2006). The decision of going to university and which university to choose is a high involvement decision. The role of marketing here is to build positive beliefs about attending university and the individual university; this is then reinforced by the emotional messages (the feel good factor) which in turn motivates behaviour. In addition to this application of high involvement decision making it can be used to look at how a student behaves if they are highly engaged during their studies, which can be thought of as a consumption stage. The relationship between attitude and behaviour is complex and not linear; attitudes affect behaviour and vice versa. Attitudes can influence perception, for example in what an applicant might expect to see at an open day will be formed from their attitude to the university and therefore may be what they also then perceive.

Individual influences are important but also people live in a society and so social class, social capital and culture will also have an impact on university decision making. Reference groups are formed through socialisation. A major formal social group for university decision making are schools where it may be the social norm to go either to university (or to a Russell group university) or not. Peers have a strong impact on university decisions and will be a reference group that applicants aspire to. Group norms will determine whether university education is considered but can also be evaluated during the consumption phase. If there is an engaged class group then this encourages all members of that group to put in effort and be engaged but of course, the opposite is also true. What type of behaviour in class is thought of acceptable is not just determined by the tutor; students in a class where there are individuals or groups who are being disruptive will often complain loudly for the

others to modify their behaviour, or be excluded. It may not have to have written rules but is communicated by normative compliance.

Personality and self-concepts are important individual factors although due to the socialisation of groups this can lead to course identity and norms of dress and behaviour specific to certain courses. Therefore, it may be that although the usual dress for students may be jeans and sweatshirts, sports students may favour sportswear and arts students more colourful and flamboyant dress. Personality is important in decision making but a difficult aspect to categorise and use so psychographics, the measurement of lifestyles is sometimes used where activities, interests and opinions are gathered in addition to demographics (Wells and Tigert 1971). This approach could be used if universities wished to choose students who are likely to succeed, they could target a segment of students who showed characteristics who are going to be engaged in their study and university life. However, a downside to this may be that recruitment may concentrate on very similar people and not encompass widening participation objectives or add to the richness of the social experience of universities.

3.8.1.3 Process

Process concerns the decision flow consisting of three stages, need recognition, pre-purchase search and evaluation of alternatives. Motivation was discussed in the previous section in detail but it is also linked to need recognition. Need recognition is usually conceptualised in cognitive models as solving a problem. Therefore, in the case of university study, a person may have certain career goals and to achieve this they need to have a degree in a particular subject. Many students who start university though may not have a clear view as to what they wish to do afterwards and traditionally employers have been more concerned with the degree class and the university attended rather than a particular course unless it is a professional or specialised course such as medicine. The pre-purchase search stage is where an individual realises a product or service will fulfil their need. At this point if an individual has a memory of universities as a whole or of individual institutions then this comes into play. This internal source of information and any past experience is

considered before a more active search is made. Added to this is information from family, friends and other external sources such as schools and career advisors. External search will include actively searching for information direct from universities and various information sources such as university study guides, UCAS and attending open days. The degree of perceived risk will also come into play. Risk can be financial if there is a substantial outlay. Overseas students have to pay their tuition fees during their course so they may acutely aware of the financial risks involved. Most UK students would be paying for their tuition and some maintenance after graduation but they would still have some living costs to cover and a loss of potential earnings during study. They may also be very aware of the amount of debt they will incur during their studies. Consumers in services often look at value for money, price clues and the losses that may incur if things do not go well. Price can be a quality indicator in intangible services although most universities charge quite similar fees for undergraduate courses. When tuition fees of a maximum £9000 per annum was introduced, almost all universities pitched their fees to this because anything less may have been perceived as a lower quality. Postgraduate fees can vary much more, especially in the case of MBAs that can vary between £16,000 and £73,000 according to the complete university guide. Risk can also be social, so it may be that which university a person chooses would say something about them and would be judged by the peer group. Risk is reduced as knowledge increases so if there is a high risk perceived, then there is likely to be more pre-purchase search but a low risk will trigger a more routine decision making process with little search. However, a potential student cannot really know what the experience will be at any university and their experience will be different during the levels of study. The teaching styles may be different such as larger classes in the first year than the final year when a project or dissertation is often supervised by an individual tutor on a one to one basis.

Situational factors can also be important in choosing a university. The decision is not a free choice as they have to apply and be accepted and may not be either in their initial choices or when their A level results are released. During clearing

students may be under a tight time pressure to secure a course, or may change universities in the adjustment process. Search, experience and credence factors can be influential in services buying behaviour (Mitra et al 1999). If a service is easy to evaluate then search characteristics are used, these are services that can be shopped around for and the benefits are easy to see. Services high on experience characteristics can only be evaluated through consumption and if high on credence characteristics are very difficult to assess before purchase so the evaluation is based on credibility and reputation. The university offering is usually based on a mixture of experience and credence buying. At this point, the alternatives are evaluated; so whether to go to university in the first place and then the course and institution judged. This can include the institutions for consideration (the evoked set) and the criteria by which they will be judged. This may take account of league table position, recommendation, geographical location and word of mouth for example. For undergraduate study, this is refined into those listed on a UCAS application.

When making a decision individuals may use certain rules, termed heuristics. These can be compensatory, that is each attribute is considered and taken on balance, or non-compensatory where an option is ruled out as it does not possess a certain attribute. Therefore, for example an individual may rule out any university in London, as they do not wish to live in London. The problem with looking at university study is that there is not complete information, nor can there be. When consumers face incomplete information in other sectors, they may use certain strategies to overcome this. They could delay making a decision, ignore the missing information, or as may be the case in university study, they may decide to construct the information themselves.

3.8.1.4 Output

Output includes purchase behaviour and post-purchase evaluation. In product purchasing, behaviour may be classed as a non-purchase, trial, repeat or long-term purchase. Post-purchase evaluation occurs usually after purchase and is set against consumer expectations, however in the case of university study the financial

purchase for UK students would not be until after graduation. A purchase decision may lead to satisfaction or dissatisfaction compared with expectations and a judgements made on perceived value. Post-purchase evaluation feeds back to the consumer's psychological field in terms of experience and attitudes. During the analysis, consumers will try to reduce cognitive dissonance by rationalising their decision or seeking out positive and avoiding negative information. In most businesses, customer satisfaction is a key objective along with profitability. For universities neither may be completely appropriate. Universities do require a surplus for financial health and although student satisfaction is very important, it is not the same as educational quality. Usually customer satisfaction leads to customer loyalty and repeat purchase although as argued earlier it is not the case for higher education. After studying for an undergraduate degree, a student may remain at the institution for postgraduate study, or return at some point in the future but they will be a minority. Alumni relations are very important though as they provide referrals, promotional activities, form a community of practice and reference group for current students. Positive outcomes cannot be guaranteed, students on a course would all have the same opportunities but their degree outcomes would differ, as would their skills development and course satisfaction. A student may expect the benefit of their course to be a good job but this is not really in the gift of the university. Universities often now incorporate employability skills into their courses and they are rated on graduate destinations in league tables and Teaching Excellence Framework. Universities do have to be very careful though now as they are obligated to make sure they do not over promise and are subject to regulation by the Competitions and Markets Authority. If students are dissatisfied with aspects on their course, all universities have complaints procedures. If the student feels they do not get a satisfactory outcome, they can take their case to the Office of the Independent Adjudicator (OIA).

The output stage is very different in university study from a normal product or service and this has significant implications to both students and universities.

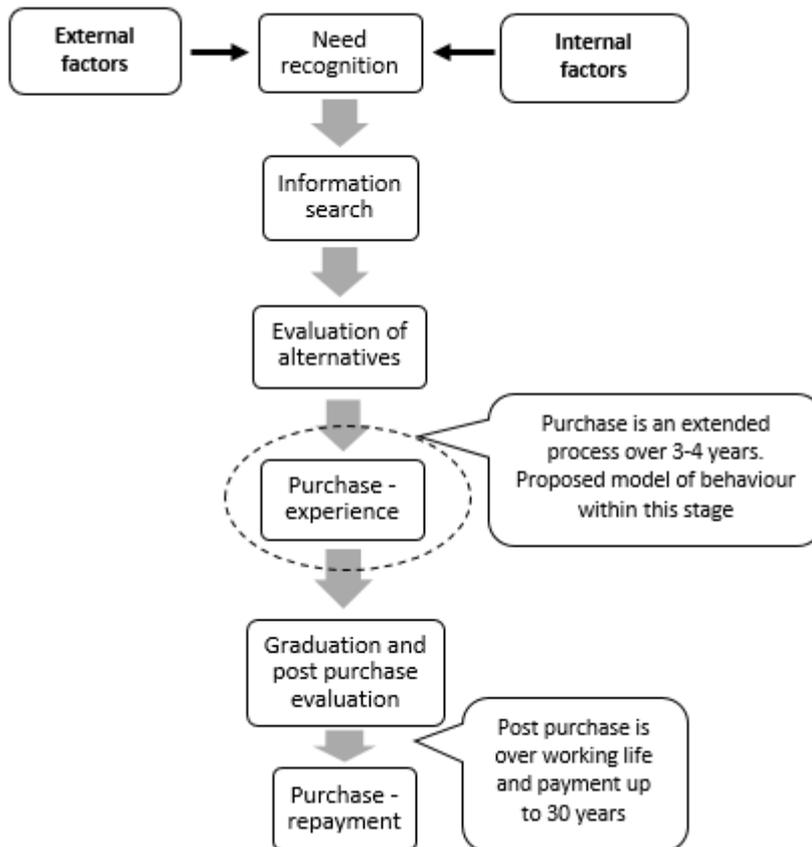
Consumption is an extended process that covers the duration of study, in addition to the benefits over their lifetime

3.8.2 Extended Experience Behaviour Model

University study is a direct experience that lasts for a number of years and has benefits for much longer rather than a discrete product. In the case of a university degree the transaction and consumption is initially over three years. However most UK students would be paying for their studies after they had graduated so in this respect the purchase transaction starts upon their earning £21000 per year up to 30 years. Although the initial consumption of the experience of the degree would be during the study period, the benefit of this consumption would be for a lifetime. There is a potential of higher earnings, more career opportunities, transferable skills development and social capital development.

What the value of the study period is will depend on the effort and engagement the student puts into this time. This is not a product that can be simply bought and consumed; it is the purchase of an opportunity and dependent on the contribution the student makes. If it is considered a simple purchase, then the output is also a simple measure of satisfaction or dissatisfaction. As this is an experience, the output is much more complex. It would include the added knowledge and critical thinking skills that the student gained during their study and in addition outputs that the student might initially think of, the degree, the class of degree and the employment that gain on graduation. This extended decision process is presented in figure 3-7 below that also shows the purchase experience as being key in this study as this is where student engagement occurs.

Figure 3-7 Extended Decision Making Process for the University Experience



Source: author's own

3.9 Chapter Conclusions

This chapter developed and applied concepts around the particular complexities of what the university experience is. It certainly has elements of service characteristics and can be viewed as a series of service encounters. However, a transactional approach is not useful or desirable for positive outcomes to the experience, either for a student or for universities themselves. Applicants do not have a free choice as to which university to attend and many universities choose the student and not the other way round. Indeed, it could be argued that rather than the student, being the customer it could be the university is the customer and the student is the provider. However, whoever is viewed as consumer or producer, neither standpoint takes

into account the richness of the relationship and the benefits of instead taking a partnership or value co-construction approach.

The prevalence of regarding students purely as customers is not conducive to a fulfilling experience and has been denounced not only by sector commentators but also by students themselves. There are some aspects of a customer approach that is useful (Eagle and Brennan 2007) and by applying a consumer decision-making model to the experience highlights some interventions marketers should use. However, the direct experience takes place over an extended period of time and the benefits for much longer. This adds to the complexity of the relationship and roles of players in the experience.

This chapter has brought together marketing and educational theoretical constructs to develop the foundations of the research methodology required for this study. Value co-construction is important in a positive learning experience and within education, this can be termed as student engagement. This will be expanded in the next chapter, which will be examining this concept in detail within a framework of quality and value in higher education. The constructs on value co-creation outlined here were analysed in detail and included in the design of some of the specific items that were incorporated into the final questionnaire used in this study. The theories and models of service marketing and consumer behaviour were used in both the research design and in the analysis and evaluation of the study to develop the final propositions from this research.

4 Quality and Student Engagement

This chapter will outline the different concepts of quality from management, marketing and the education academic disciplines. These are applied to higher education, the relevance evaluated and developed into the design of this research study. The importance of student engagement will be established as a central component of educational quality given the parallel between this and value co-creation introduced in the previous chapter. The second half of the chapter, from section 4.6 onwards, concerns initiatives to measure quality and monitor student engagement.

This study is interdisciplinary in nature, taking a unique perspective of marketing, business and education in conceptualising what quality means in higher education. Quality as a concept can be vague and have many different meanings depending who is defining it. A marketer will have a different concept for quality as an operations management specialist. Non-academics may simply have their own idea that quality is either 'high' or 'low'. Authors have tried to develop theories of quality to make this more robust. Quality in higher education has been subject to much debate with little consensus as to a definition; which can encompass assurance, enhancement, standards and latterly, satisfaction. The introduction of annual tuition fees in England of £9000 renewed the focus on the relationship between students and universities. Some commentators have concluded that students should be thought of as customers. The previous chapter argued this devalues the complex relationship between students and universities and the role in which the student plays in their own experience and educational outcomes. This relationship can be evaluated through the lens of student engagement and although there is again, no firm consensus as to what engagement encompasses there is enough to indicate the importance of this to individual students, groups and universities. Universities will often equate the National Student Survey (NSS) results with quality but in a recent Student Academic Experience Survey (HEPI/HEA May 2014) 86% of students said, they were satisfied but only 41% reported they

were getting value for money so there is a discrepancy between using satisfaction as an all-encompassing construct.

Most universities have a student engagement strategy or policy but how they define this engagement can differ considerably. Many will view engagement as involvement in committees and governance, for example student representation on faculty and university committees and on review and approval events. However, this ignores students' engagement in learning and potential conflict with the time students may spend in learning on their course and the time they spend on committees and union activities. There is growing evidence that student engagement can be strongly linked to achievement and used as a proxy for the overall quality of the higher education outcomes, which will be discussed later in this chapter. Outcomes are termed as educational learning gains, which is what the student gains from the beginning of their course to the end. There is a substantial amount of literature on quality, higher education and student engagement, which has been significantly distilled to incorporate the major works but ensuring an interdisciplinary study of the concepts and models. This chapter is going to investigate concepts of quality and student engagement, which provides the framework of the primary research design.

4.1 Concepts of Quality in Higher Education

Many definitions of quality are used within particular sectors and settings. In management academic literature these are often discipline based. There is also a sub set of quality literature on service quality which has been taken on board particularly by the marketing discipline. Quality and service quality definitions are abundant in many management fields but only a few are interdisciplinary, (Kettunen 2011). In addition, the education policy discipline has a strong conceptual and research base in educational quality with a distinct sociological theoretical base, (Lomas 2002, Filippakou 2011, Gosling and D'Andrea 2001). Although a generalisation, most business research on quality takes the consumer viewpoint; education research takes a policy and infrastructural perspective.

There are a number of studies into the definition and nature of educational quality (Cheong and Tam 1997, Harvey and Green 1993). Quality can be generally defined in terms of value, conforming to specifications, fitness of use, loss avoidance or customer expectations (Reeves and Bednar 1994). A number of authors, (Watty 2006, Pounder 1999, Rowley 1997, Chung 2010), have discussed specific definitions of higher educational quality. Some have emphasised excellence (Watty 2006), others on the transformational nature (Harvey and Green 1993) or a stakeholder approach (Green 1994, Harvey and Green 1993, Jungblut et al 2015).

Service quality definitions usually take customer expectations versus perceptions approach and most research in the marketing field has been conducted around student satisfaction as a measure of quality (Aldridge and Rowley 1998, Angell et al 2008, Brochado 2009, Douglas et al 2006, Munteanu 2010). Research interest in the subject of service quality in higher education in the UK has been on the wane since the introduction of the NSS. However, it could be argued that the debate should resurface because of the introduction of the NSS rather than in spite of it. It raises fundamental questions by equating student satisfaction to quality especially if it is the only measure used. The NSS, introduced in 2005, is a satisfaction survey that has become a key metric and therefore very important in university policy and strategic direction. This will be discussed in detail along with critiques of the survey later in this chapter. However, it is important to note here that satisfaction is a poor indicator of quality due to the complex nature of the relationship between the student and the learning experience. One concern with the current sector position is the perceived grade inflation and rising degree classifications and the possible introduction of grade point averages to replace classifications. Degree classifications have increased significantly over the past decade (HESA 2017) and may be partly due to teaching and student effort but also perhaps because of the inclusion of this metric in league tables.

The external examiner system in the UK is often seen as a cornerstone of quality although it is not without its critics (Akerman 2016) and a review by the HEA commissioned by HEFCE (2015), whose review of external examining questioned whether it is effective in safeguarding standards. Akerman says that the problems are that the size and diversity of the system means that it cannot truly be comparing standards. In addition, examiners cannot assure comparability of regulations that affect classifications and there is a lack of nationally agreed classification descriptors.

4.2 Service Quality in the Marketing Discipline

Service quality is challenging to conceive, as notions can be vague and difficult to articulate. However, we all know intrinsically that if we perceive we have had a good service we are much more likely to buy the service again or to recommend to a friend. In addition, there is a strong link between service quality and profitability. Service quality had a surge in popularity within the area of marketing in the 1980s and early 1990s. The early work concentrated on the issues surrounding the classification of services and how this affects marketing. Services have specific characteristics that make them different to manage and to market and are more difficult to evaluate. These characteristics were applied to higher education in the previous chapter. Education has all the characteristics of services to a high degree and also has very particular characteristics that affect the perceptions and measurement of quality. The 'purchase' of a degree is over 3-4 years in the UK, or longer for a part time student. The student is intrinsically linked to the 'production' of the outcome, in other words they will only be successful if they participate in the service delivery.

Service quality research is frequently based on Parasuraman, Zeithmal and Berry's (1985) seminal work on gaps between customer expectations and perceptions and the subsequent SERVQUAL model (Parasuraman et al 1988). The SERVQUAL model is the basis for much of the subsequent service quality research and development (Shekarchizadeh et al 2011, Carrillat et al 2007, Cronin and Taylor 1992). Many

authors have used the SERVQUAL or taking into account performance, SERVPERF (Cronin and Taylor 1994) model in the higher education context, (Cuthbert 1996, O'Neil 2003, Ford et al 1999, Oldfield and Baron 2000). This was developed into a specific model by Firdaus (2005) (2006) for higher education (HEdPERF). The SERPERF model (Cronin and Taylor 1992) simplifies the research instrument to only look at performance rather than expectations and is similar in this respect to the National Student Survey. However, a SERVPERF model should seek importance weightings, which is lacking in the NSS. The SERVQUAL determinants of service quality are grouped into five categories of reliability, assurance, tangibles, empathy and responsiveness (often termed as RATER). Previous research on service quality in the higher education sector has focused on the testing of these determinants, (Cuthbert 1996, Oldfield and Baron 2000) or proposing different service quality determinants (Angell et al 2008, Shekarchizadeh et al 2011). Other research, such as Brochado (2009) tests the various SERVQUAL based instruments within higher education.

Some research into service quality in the higher education sector has not used SERVQUAL methodology in both the UK (Douglas et al 2006) and internationally (Gallifa and Batallé 2010, Duque and Lado 2010, Athiyaman 1997, Jackson et al 2011, Tsindou et al 2010, Gruber et al 2010). Douglas et al (2006) designed their questionnaire from focus group research to determine service quality constructs. Examples of quality constructs is depicted in table 4-1, although often the actual terms do not quite mean the same thing. This highlights a semantic problem in research into service quality. Terms do not have universal definitions. For example, the construct, 'access' is defined as contact with all academic staff by Firdous (2005) but is physical access for disabled students by Vaughan and Woodruffe-Burton (2011). This is not only an issue when comparing international research (Firdaus 2005) into service quality where cultural differences have an effect but also within national research.

Table 4-1 Service Quality Dimensions – some examples

Parasuraman et al 1991	Voss et al 2010 (higher education)	Douglas et al 2008 (higher education)	Watty 2006 (higher education)	Firdaus 2005 (higher education Malaysia)
<ul style="list-style-type: none"> • Reliability • Assurance • Tangibles • Empathy • Responsiveness 	<ul style="list-style-type: none"> • Reliability • Approachability • Fairness • Empathy • Friendliness • Enthusiasm • Expertise • Helpfulness • Openness • Teaching skills 	<ul style="list-style-type: none"> • Reliability • Responsiveness • Helpfulness • Attentiveness • Friendliness • Flexibility • Competence • Access • Availability • Courtesy • Integrity • Security • Communication • Tangibles • Aesthetics • Understanding • Functionality 	<ul style="list-style-type: none"> • Efficiency • High standards • Excellence • Value for money • Fitness for purpose • Customer focus 	<ul style="list-style-type: none"> • Non-academic aspects • Academic aspects • Reputation • Access • Course issues • Understanding

Critical Incident Technique (CIT) studies have been used for assessing service quality in the higher education sector (Douglas et al 2009, 2008, Voss et al 2010, Munteanu 2010, Khan and Matlay 2009). These studies often still formulate determinants or constructs of service quality as their outcomes. Eagle and Brennan (2007) applied the concepts of total quality management to higher education and considered if students should be treated as customers. They concluded that if they were considered only as customers there were problems as in this case the customer could not always be right although there were some benefits. The study by Munteanu (2010) in Romania interestingly found that students with different academic performances and motivation level had different critical incidents; a factor not usually built into research on student satisfaction. However, this has been raised as an issue in a Higher Education Academy report by Gibbs (2012).

4.3 Dimensions of Quality in the Education Discipline

Throughout this study, the focus on quality is based on the work of Harvey and Green (1993), where educational quality concerns relative transformation. It is not considered an absolute threshold but rather encompassing a number of dimensions so quality is not confined to either customer or institutional definitions. The transformational nature of educational quality means that gains rather than performance is the focus. The degree class a student gains can be a combination of many factors and influences. Student views on the quality of teaching are not paramount, what a student may want or like may not be related to educational gains. The premise of this work is that educational quality can be equated to educational learning gains. The concept of quality in higher education encompassing what students do at university and the associated learning gains is the overriding definition used in this study and has been instrumental in the research design.

One of the leading authorities on higher education quality is Graham Gibbs. He has had a long career in educational quality at universities. He was commissioned by the Higher Education Academy (HEA) to gather research on what really makes a difference to students learning and achievement at university. The aim was to investigate the components of higher education quality and investigate their validity as benchmark indicators. His work 'Dimensions of Quality' was published in 2010(a) and is a seminal work in this area along with the later work 'Implications of Dimensions of Quality in a Market Environment' in 2012. Dimensions of Quality was written to collate the evidence on the aspects that mattered to learning gains from sound empirical sources; whereas the second publication investigates universities' strategic responses to these variables. The report was commissioned as a response to a select committee on the quality of higher education that concluded 'no confidence' and reports of the low hours needed to get a degree in comparison to other countries according to a House of Commons select committee in 2009. The response from the QAA was to say that it was the quality rather than quantity of

contact hours that was important and the NUS said that contact hours should be increased. Gibbs however said that there is no evidence that an increase in contact hours increases learning gains. If the number of students and staff are fixed then the only way this can happen is by increasing the class size. Class size, if increased has a significant negative effect on learning gains in that it is a negative predictor, instead of improving learning gains, it will decrease them. Gibbs took a similar approach to Biggs (1993) by looking at the input, process and output aspects to the higher education experience. These variables were analysed using numerous published studies to assess the validity of each variable and whether it predicted educational gains (learning outcomes). The variables are categorised as input, or presage, variables that are in place before the student joins the university, the process variables (what happens during the attendance at university) and output, or product, variables that occur at the end of the course. These are evaluated in table 4-2 below with the effect on performance along with associated empirical evidence.

Table 4-2 Synopsis of Gibbs' (2010) Dimensions of Quality Effects

Stage	Variables	Effect on final performance and evidence
Presage (Input)	Quality of students	Best predictor (Smith and Naylor 2005, Kuh and Pascarella 2004)
	Quality of teaching staff	Does have an effect although it is difficult to substantiate
	Funding	In general no effect (Pascarella and Terenzini 2005) However resources attracts better students It also affects some process variables (Bound and Turner 2007)
	Student –staff ratios	More direct than funding. Effects process variables (Pascarella and Terenzini 2005 and Terenzini and Pascarella 1994)
Process	Class Size	Negative effect (higher class size – lower performance) (Glass and Smith 1979, Lindsay and Paton- Saltzberg 1987, Gibbs et al 1996, Lucas et al 1996 Broun and Turner 2005)
	Class contact hours	Very little effect – depends on content of hours, independent study and total hours. (Vos 1991, Trigwell and Ashwin 2004 Chickering and Gamson 1987)
	Quality of teaching – experience and training	Positive effect (Trigwell and Prosser 2004, Gibbs and Coffey 2004)
	Quality of teaching – research record	Little or no relationship – (Hattie and Marsh 1996)
	Quality of teaching – judged by students	Positive effect. (Marsh 1987, Abrami et al 1990)
	Research Environment	No effect. (Ramsden and Moses 1992 Astin 1993)
	Level of intellectual challenge –level of the curriculum	Higher quality if higher challenge, difficult to make judgements
	Level of intellectual challenge – depth of approach to studying	Strong positive effect (Marton and Wenestam 1978, Gibbs et al 1982 Pascarella et al 2008)
	Level of intellectual challenge – student engagement	Strong positive effect (Pascarella and Terenzini 2005 Carini et al 2006)
	Formative assessment and feedback	Strong positive effect (Black and William 1998. Hattie and Timperley 2007, TESTA 2010)
	Reputation	No effect. (Astin 1985)
	Peer Ratings (on process variables)	Subjective – was attempted in Teaching Quality Assessment (QAA) but reflected reputation so little effect (Cook at al 2006, Drennan and Beck 2001)
	Student support	Difficult to assess but some positive evidence (Hattie et al 1996)
	Quality enhancement processes	Some evidence (Gansemer-Topf et al 2004)
Product (Output)	Student performance and degree classification	Not robust comparison and not a base for quality indication. (Brown 2010, House of Commons 2009)
	Student retention and persistence	Variable and other factors have strong effects (Tinto 1975, Barefoot 2004, Yorke 1999)
	Employability and graduate destinations	Difficult to interpret, not reliable data. (Smith et al 2000)

The research collated by Gibbs clearly shows the importance of process variables. What best predicts educational gain is measures of educational processes, *'The process variables that best predict gains are not to do with facilities themselves, or to do with student satisfaction with these facilities, but concern a small range of fairly well-understood pedagogical practices that engender student engagement.'* Gibbs 2010a p43. In the UK, there is not much data on these educational practices because they are not systematically gathered in quality assurance or enhancement initiatives and the NSS does not cover these variables. The best measure of engagement is widely believed to be the American National Survey of Student Engagement (NSSE), which does investigate these process variables, and the newly launched UK Engagement Survey (UKES).

4.3.1 Input variables

Input variables such as funding, research and reputation enable the institution to have selective admissions policies to recruit the most able students. Selectivity predicts performance, but not learning gains, or engagement, or teaching methods that enhance engagement. Input variables allow institutions to select the best students, quality of students is a good predictor of outputs. The quality of students on entry is the best predictor of the educational outputs of degree class and employment. In terms of funding, it helps if an institution has more money but it depends on whether they spend on educational interventions. For example, how much an institution spends on learning resources is a good predictor as to how hard students work but resources per student predict much less than one might expect. Research in itself does not predict learning gains but can encourage better students to apply and actually has negative impacts on satisfaction, cognitive and affective measures of learning gains (Hattie and Marsh 1996). Reputation predicts only selectivity, funding and research and peer ratings reflect reputation. Selectivity is a good predictor of degree class because the best students coming in are the best going out but this does not predict how they learn and what they learn at university. Measures of who does the teaching predicts performance and gains although can be difficult to gather consistent and reliable evidence. The previous

system of Teaching Quality Assessment, gave degree programmes a score out of 24 but did not really look at what and how people were taught.

4.3.2 Process variables

Process variables are the things that happen to students when they have enrolled at university. The process variables that best predict gains are not to do with facilities, or student satisfaction with these facilities, but concern pedagogical practices that engender student engagement. Having a university with a strong research environment does not make any difference to learning for undergraduate students although it does for doctoral study. There is a link in so far as research gives the university a reputation and a reputation allows them to select students. High class cohort size effects student performance very negatively. Close contact with tutors does make a difference along with positive, personal, staff interaction with students. Class contact hours are interesting in that the top two universities in the UK from the National Student Survey (NSS) are the Open University, which has virtually no contact, and Oxford that has the lowest face-to-face contact of any institution. What is important is the total student learning hours, that is class contact plus independent study. In the UK, the average learning hours is not much more than 20 hours a week, which is very low in international comparisons. Gibbs says that simply increasing class contact is not the solution and the important factor is what is done within the total learning hours.

Teaching quality matters but can be difficult to measure as can be shown in the section on the new green paper. However there are some good questionnaires proven to measure teaching quality (Marsh 1987) but are not used widely in the UK. Training for teaching also improves teaching quality, tutors who have undertaken training change the way they teach and guide study. Tutor feedback is important but it has to be timely so it can be separate from the summative mark given, as it has to be in time to feed in to another assessment to be useful. Who actually does the teaching also affects learning gains. The Russell Group universities rely heavily on graduate teaching assistants although this has a negative effect on actual

student learning. What goes on in the classroom does have an effect in that it is more effective if learning is social rather than the traditional university teaching that is solitary and competitive, collaborative and interactive learning with close tutor contact improves performance (LaNasa et al 2007). There are a number of empirically based analysis of what makes good learning experiences, one of the most important is 'time on task' (Chickering and Gamson 1987) that is how much time students spent on what learning activities.

Measuring student engagement throughout the process variables is a highly effective method of ensuring learning gains. The NSSE is highly regarded with scales that predict learning such as a deep learning approach, close contact and clear, high expectations. High expectations and challenge is very important and one that is not often articulated in the UK quality or engagement frameworks and principles.

4.3.3 Output variables

One output of university study is degree classification; however, these are not comparable between or within institutions. Other outputs include retention and employability but these are as difficult comparator as are very dependent on the subject discipline and area of the country studied in. Therefore, Gibbs maintains that the standard outputs of higher education are highly unreliable. Gibbs proposes using analysis of final year dissertations as an alternative output variable that could be an indicator of quality. There are also possibilities of using measures of critical thinking before and after university study that would show a truer output of the educational experience, which might be similar to the Ahelo project discussed earlier. Measures of output variables retention and employability are affected by other factors such as affluence, living at home, social and academic integration and working during studying.

4.3.4 Teaching variables affecting learning gains

There are other effective practices in improving students' performance and educational outcomes identified by Gibbs. A very well established approach to higher education teaching and learning is from Chickering and Gamson (1987).

Their seven effective practices in teaching and learning are:

1. Student- staff contact
2. Active learning
3. Prompt feedback
4. Time on task
5. High expectations
6. Respect for diverse learning styles
7. Co-operation among students

Some important factors identified in a number of studies (Gibbs 2010a) include active collaborative learning and course coherence. The introduction of modularity has challenged course cohesion. Formative feedback on tasks is important and reassures new students what they can achieve. It is important that academic departments have strong communities of practice along with recognition and leadership of teaching activities.

In conclusion, process variables have primacy in evaluating educational quality. The important interventions are those that make students behave as learners and for them to become reflective and aware of their own learning. In many ways, the challenge is to change student behaviour or direct student behaviour into positive actions.

4.3.5 The importance of education learning gain

There are some published or internally collated measures of input and output but very few formal measures of educational learning gain. As previously stated, the best predictor of educational output is the quality of students entering the institution. Degree classifications are difficult to compare within an institution and between institutions (Yorke 2009). When trying to evaluate learning gains

comparing what students enter with (A levels) and what they leave with (degree classifications) are different and so cannot simply be used even as some form of 'added value'. International studies such as the previously described Ahelo project use psychometric measures of educational outcomes such as a test for critical thinking testing on joining and leaving a programme. This could then be a measure of educational gain. However, educational gains should really take into account the type of institution, disciplines and missions that may have distinctive features. For example, the Open University would not wish to increase selectivity, performance and retention, as it would be against the openness of its mission. One of the main indicators of educational learning gains is student engagement something that institutional strategy can have a significant affect upon. There are a number of initiatives around the concept of leaning gains, or 'distance travelled' and there is interest in using measures of learning gains into the TEF in future. In the US, Arum and Roksa (2011) analysed the Collegiate Learning Assessment test and showed that many students do not actually learn anything in their time at university. In September 2015, HEFCE commissioned RAND Europe (McGrath et al 2015) to evaluate different methods of learning gains measurement which is reported by Haverгал (2015b) in the Times Higher Education. This has resulted in a current mixed methods project to measuring learning gains worth £4 million of funding. Some of these studies are currently reporting initial findings. At Warwick in a Futuretrack survey (2017), there is evidence to say that self-reporting learning gains are showing an inverse relationship between degree class and perceived skills. However, this may be due to students with higher degree class being more self-critical. There are examples in other countries of using standardised learning gains tests in Brazil (Haverгал 2016h).

4.4 Academic Constructs and Definitions of Student Engagement

Student engagement as a concept is not new and has always been central to the success of students but some of the context has changed. Recent developments in terms of quality assurance, substantially increased numbers, consumerism and

internationalisation have affected the relationship between the student and university. Students have also been co-opted into taking teaching and assessment roles for some time in self and peer assessment, peer tutoring or peer mentoring. This may have been previously called student centred learning and now has developed into problem and practice based learning terminology that can encompass elements of student engagement. Student engagement is one of the 'most ubiquitous buzzwords' (Gibbs 2014) within the higher education environment given its link in predicting learning gains. It is a much better indicator of quality than satisfaction (Gibbs 2014). There are various definitions of student engagement, many from organisations that have a role in higher education, in addition to individual institutions or consortiums that have conducted work in the area. Literature on student engagement often does not contain an explicit definition of engagement and it might be assumed that its meaning is clear and shared. However this is not the case and there are various categorisations and foci of engagement. Sometimes terms such as engagement, partnership, participation, involvement, commitment and collaboration are used interchangeably. Strategies for engagement depend on the understanding and definition of engagement being used. The danger being that if people within and between institutions do not have a clear definition then they may well be talking at cross-purposes. There has been a great deal of academic interest in student engagement; the main contributions will now be examined.

The volume of literature on student engagement is vast, much of it from North America and Australasia and can cover concepts such as student feedback, pedagogy and student representation. Literature on student engagement differ in the unit of analysis (individual, group or institution) and in terms of the scale of studies, small, national and international. Usually the literature concentrates on positive aspects of engagement rather than any negative aspects. Literature includes studies of individual student learning, the structure and process of engagement and student identity and sense of belonging. Some authors have taken the viewpoint that engagement supports retention by encouraging academic and

social integration (Tinto 1992). Others such as Astin (1984), concentrate on engagement based pedagogical practices that improve learning gains, such as close contact with tutors, prompt feedback, clear and high expectations, collaborative learning and time on task. Osterman (2000) said that a need for belonging was significantly associated with a student's academic engagement. These examples are focusing on engagement in teaching and learning although others such as the NUS and QAA concentrate more on student engagement in the quality processes and governance. Kuh (2009) however, proposes that students who are more engaged in their studies are more engaged with the institution's governance, volunteering and student activities outside the curriculum. These can also be linked to learning gains, *'participation in educationally effective practices, both inside and outside the classroom, which leads to a range of measurable outcomes'*. (Kuh et al 2007) and from Krause and Coates, *'the extent to which students are engaging in activities that higher education research has shown to be linked with high-quality learning outcomes'*(2008, p493). It has been said that engagement is related to effective learning, deep rather than surface learning (Ramsden 2003) and that it extends beyond the curriculum (Krause 2011). The social engagement at university, involvement in clubs and societies can foster a sense of belonging. However anecdotally there is conflicting evidence of this and some students who spend a great deal of time on student's activities and governance may not be putting in the required effort into their course. Some however believe that engaging students outside the curriculum will cause engagement with their studies rather than competing for student's time (Kuh 2009).

Trowler (2010) has provided an evaluation of the extant literature in the area of student engagement covering individual, group and institutional engagement. She has also developed a useful definition, saying, *'Student engagement is concerned with the interaction between the time, effort and other relevant resources invested by both students and their institutions intended to optimise the student experience and enhance the learning outcomes and development of students and the performance, and reputation of the institution'* (Trowler 2010 p3). Many authors

though have decided against one overarching definition. Coates (2007) said it was *'a broad construct intended to encompass salient academic as well as certain non-academic aspects of the student experience'* (p122), and then described the principles behind the construct. Other authors have followed suit and some of these are highlighted in table 4.3 below. Coates' constructs are the basis of many student engagement surveys including AUSSE, NSSE and UKES that will be introduced later in this chapter. Gibbs (TESTA 2010) proposes that student engagement again has broad applications and should be supported by institutions by attaching engagement activities to academic credit, certification, role recognition and employment or experience opportunities. This type of approach he says can also improve the experience and satisfaction of students.

Table 4-3 Perspectives of Engagement

Author(s) Dimensions and Principles:	
<p>Coates (2007)</p> <ol style="list-style-type: none"> 1. Active and collaborative learning 2. Participation in challenging academic activities 3. Formative communication with academic staff 4. Involvement in enriching educational experiences 5. Feeling legitimised and supported by university learning communities 	<p>Gibbs (TESTA 2010) Engagement as:</p> <ol style="list-style-type: none"> 1) academic and social integration that affects retention 2) a performance indicator: for example NSSE/ UKES <p>Engagement with:</p> <ol style="list-style-type: none"> 3) studying that affects learning including close contact with teachers, time on task, deep approach, clear and high expectations, and collaborative learning 4) extra curricula activities (Kuh 2009) 5) the academic democratic community 6) quality assurance: for example, student reps, feedback questionnaires 7) quality enhancement and educational development: for example, change agents and curriculum design 8) teaching roles and functions: for example, peer tutoring, self and peer assessment, learning materials production 9) research
<p>Krause (2005)</p> <ol style="list-style-type: none"> 1) Create and maintain a stimulating intellectual environment 2) Value academic work and high standards 3) Monitor and respond to demographic subgroup differences and their impact on engagement 4) Ensure expectations are explicit and responsive 5) Foster social connections 6) Acknowledge the challenges 7) Provide targeted self-management strategies 8) Use assessment to shape the student experience and encourage engagement 9) Manage online learning experiences with care 10) Recognise the complex nature of engagement in your policy and practice 	<p>Pittaway and Moss in Dunne and Owen (2013) 4 principles</p> <ol style="list-style-type: none"> 1. Staff engagement is a prerequisite for student engagement 2. Respectful and supportive relationships are essential for learning and teaching 3. Students must be given and actively take responsibility for their own learning. 4. Scaffolding, communicating expectations and setting high standards lead to the continuous development of knowledge, understanding and skills <p>5 Dimensions – vary in importance during period of study</p> <ol style="list-style-type: none"> 1. Personal engagement 2. Academic engagement 3. Intellectual engagement 4. Social engagement 5. Professional engagement

Some authors have sought to understand engagement by looking at non-engagement. Mann (2001) evaluated students' relationship with their learning and the spectrum of engagement to alienation. Krause (2005) proposed the alternatives to engagement as being 'inertia, apathy, disillusionment or engagement in other pursuits'. Engagement can be seen as more than simple involvement or participation and should engage feelings (Harper and Quaye 2009) which aligns with the previous chapter on business co-production concepts. It can include behavioural, emotional and cognitive engagement (Fredricks et al 2004) categorised in a positive- negative continuum as illustrated in table 4-4 below from Trowler (2010)

Table 4-4 Examples of Positive, Negative and Non-Engagement (Trowler 2010)

	Positive Engagement	Non- Engagement	Negative Engagement
Behavioural	Attends lectures, participates with enthusiasm	Skips lectures without excuse	Boycotts, pickets or disrupts lectures
Emotional	Interest	Boredom	Rejection
Cognitive	Meets or exceeds assignment requirements	Assignments late, rushed or absent	Redefines parameters for assignments

The responsibility for student engagement could be argued to lie with the institution, individual student, student union or a combination (Trowler 2010). The HEFCE approach is that it is the institution's responsibility *'the process whereby institutions and sector bodies make deliberate attempts to involve and empower students in the process of shaping the learning experience'* (HEFCE, 2008) whereas the NUS concentrates on student representation and the collective group student experience. The individual student is emphasised by Hu and Kuh *'the quality of effort students themselves devote to educationally purposeful activities that*

contribute directly to desired outcome' (2002 p3). Although a later definition from Kuh combines these two perspectives *'the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to induce students to participate in these activities'*(2009 p683). This joint approach is reinforced by Coates (2005); *'the concept of student engagement is based on the constructivist assumption that learning is influenced by how an individual participates in educationally purposeful activities. Learning is seen as a 'joint proposition'... However, individual learners are ultimately the agents in discussions of engagement'*(p26).

In addition to the unit of study being the individual, collective or institution, the target of engagement can be specific learning processes, design and tools at course level or at institutional level, extra-curricular activities, governance and beneficiaries of engagement (Coates 2005). Studies have also evaluated the reasons to engage. Much of the literature is concerned with improving learning gains (Pascarella et al 2010, Astin 1984, Pace 1990, Chickering and Gamson 1987, Trowler and Trowler 2010) although can also include recruitment and retention. One of the reported effects of engagement (in addition to learning gains) is a feeling of connectedness, affiliation and belonging to an institution, peers and tutors (Bensimon 2009) where engagement develops relationships and connectedness with universities.

For successful student engagement, there are certain critical success factors that have to be in place. These include students' attitudes as they *'must invest time and effort into academic activities and practices ... that correlate highly with positive educational outcomes'* (Bensimon 2009), and staff attitudes especially in making themselves available outside class time (Coates 2005) emphasised by Markwell (2007) who emphasised that student engagement required staff engagement. Other success factors include discipline relevance, pedagogical (educational ideology) aspects and institution's policies, resources and practices. Some aspects

of educational ideology and the implications for student engagement is presented in table 4-5 below.

Table 4-5 Conceptions of teaching as ideological and implications for engagement. Trowler (2010)

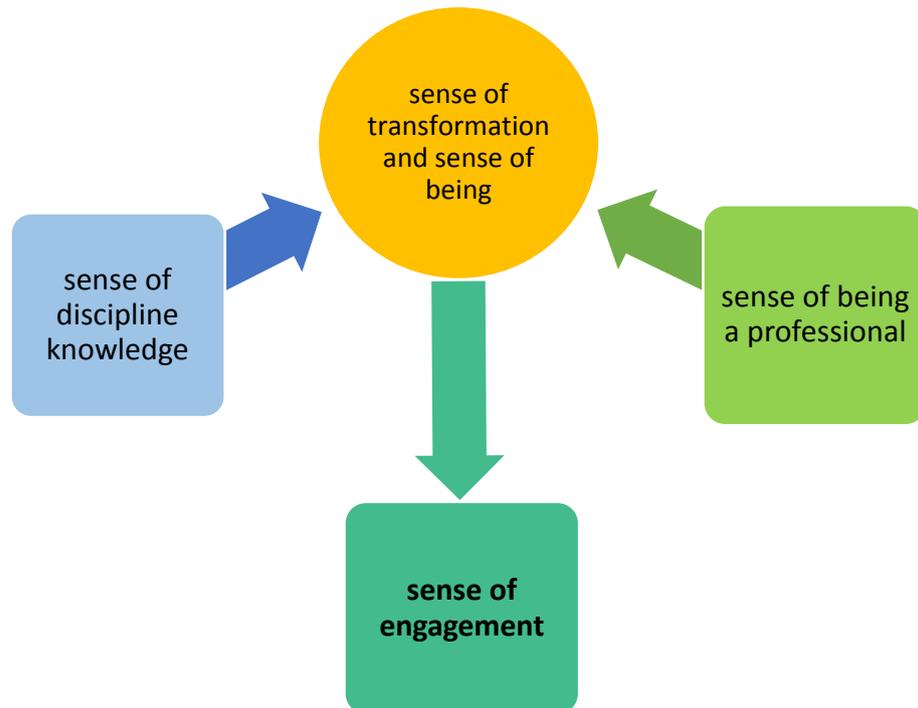
Ideological perspective	Educational ideology in relation to teaching	Role of students	Implications for engagement
Traditionalism	Teaching is about transmitting information, induction into the discipline. Information transfer/ teacher-focused approach	Learning through absorbing information provided to them.	Students need to be interested in the content. Students participate through attending lectures and complying with behavioural norms.
Progressivism	Teaching is about developing students' minds so they can better appreciate the world, about making them autonomous. Conceptual change/ student-focused approach	Learning through co-construction of knowledge	Students need to be engaged in, and with, learning – both in and out of the classroom.
Social reconstructionism	Teaching is about empowering students to see the inequities and structured nature of advantage and disadvantage in the world, and to change it.	Learning through questioning, challenging and 'speaking truth to power', and effecting change.	Students need to be engaged with the world beyond the classroom, challenging and changing structural inequity.
Enterprise	Teaching is about giving students the skills to thrive in their careers and to contribute to the economy.	Learning through application of knowledge across disciplinary boundaries to real-life practical problems	Students need to be engaged in work-based/ vocational learning

Recently a handbook to bring together current thinking in student engagement has been published (Dunne and Owen 2013). They also report on the work of a

consortium of universities called the RAISE network (researching, advancing and inspiring student engagement). The approach of RAISE is the 'whole person' view in that *'student engagement is about what a student brings to higher education in terms of goals, aspirations, value and beliefs and how these are shaped and mediated by their experience whilst a student.'* Student engagement is viewed as a social construct where the meaning depends upon student perceptions and understanding. Recent changes in higher education have meant that students' expectations and perceptions are more complex than previously held. They argue that initiatives around the student voice and satisfaction are rather passive and one sided and the current interest in student engagement can be considered as a movement against the consumerist approach.

Most of the current models of student engagement, such as the NSSE, are behavioural and cognitive but Solomonides writing in Dunne and Owen (2013) has developed an affective model of engagement. This places a 'sense of being' and a 'sense of transformation' at the heart of student engagement that can be shown in figure 4.1 below. This is also interesting as it also takes account of feelings of discipline knowledge and being a professional.

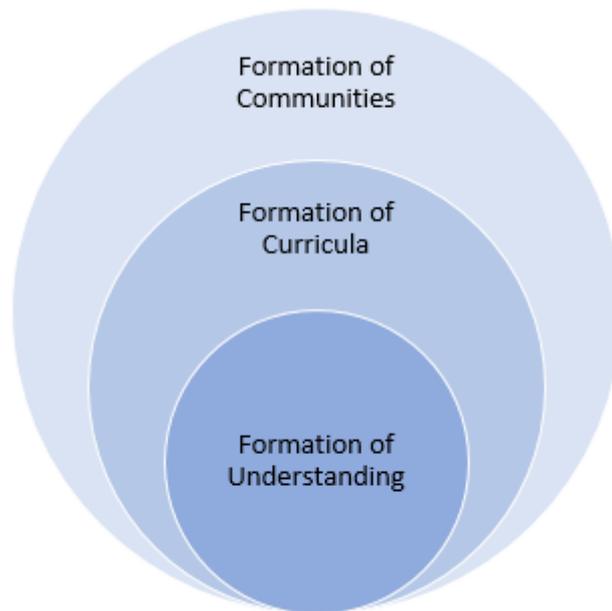
Figure 4-1 Solomonides Affective Model of Student Engagement



Solomonides (2013) in Dunne and Owen 2013

Ashwin and McVitty (2015) suggest that student engagement, as a concept is still quite vague although it is difficult for institutions and individuals to not support engagement initiatives in theory. They point out a wide range of engagement constructs and the way in which they are configured in different models. For example, Trowler (2010) includes curriculum design in learning design whereas Healey et al (2014) includes it within quality enhancement processes. This overlap is partly due to what is meant by teaching and learning (Ashwin 2012). Is it the student's engagement with learning processes and activities or the knowledge they are gaining? Ashwin and McVitty (2015) evaluated what is being formed by the engagement and distinguish three broad categories. These are engagement to form individual understanding, curricula and communities in a proposed nested approach as in Figure 4-2.

Figure 4-2 Ashwin and McVitty Nested hierarchy of the objects of student engagement



Ashwin and McVitty (2015)

In this framework, engagement in community and curricula follow from engagement in understanding in a learning context. Their alternative viewpoint examines the ways in which the object of student engagement is affected by students' engagement with it, highlighting three degrees or levels of engagement; consultation, partnership and leadership.

- *Consultation* is engaging with an object that is not changed through their engagement;
- *Partnership* is participating in the transformation of an object of engagement. There is an emphasis on relational reciprocity and a shared responsibility for learning and power (Cook-Sather et al. 2014)
- *Leadership* is the creation of new objects of engagement.

The model has no value hierarchy to propose that institutions or individuals should strive for partnership or leadership. Each of these objects of engagement and the themes of consultation, partnership and leadership are applied below.

1) Formation of understanding.

At the level of consultation, students engage with a pre-defined curriculum and learning outcomes and are 'consulted' in terms of their understanding. At partnership level, the focus is on the co-construction of knowledge and in turn student transformation (Ashwin 2012). In leadership, the focus is on creating new objects of understanding, which may not be usual at undergraduate level but more common during postgraduate research.

2) Formation of curricula

Although the curricula is central to educational experiences, what is meant by the term is debatable. It can be thought of as the body of knowledge in an academic discipline, the creation of a course, creation of a module or student's learning activities. An added complication is the 'hidden' curriculum, which are norms, behaviours and practices that are expected. At the consultation level, students are simply consulted about the content of their modules or course, often in practice done in surveys on student satisfaction; although Sabri (2011) questions their real influence. Within partnership, students take an active role in developing the curricula alongside academics. This supports the view of students being transformed by the higher education experience. At the level of leadership, students would take the lead in designing their own curricula.

3) Formation of Communities

This involves forming communities through student representation, for example in student unions. At the consultation level, this is usually within the quality assurance of an organisation, and reinforced by the QAA Quality Code indicator for collective representation. It may include student charters, feedback, committee representation and in periodic review (Van der Velden et al 2013). Within partnership, this is illustrated by the recent developments on 'students as partners' work within The Student Engagement Partnership, the NUS, HEA and individual universities. At leadership level, it may include national level student organisations or direct action.

According to Ashwin and McVitty (2015) the two questions that need to be addressed when evaluating student engagement are 'what it is they are engaged in forming' and 'what degree of engagement is being sought'? It also highlights that 'more' engagement is not necessarily better and engagement as leadership appears most likely to occur when students feel that existing systems prevent them from having a significant influence. The second implication for policy makers is that higher education is fundamentally about knowledge, which is where curricula is formed and communities developed.

There are though significant challenges in introducing student engagement initiatives. In promoting belonging there will undoubtedly be some students who do not want to or cannot fit into the university community. There are also a number of stakeholders in higher education and although most work has looked at the key players of university and students, the nature of the higher education community is more complex and includes employers, parents, local community and professional bodies. The relationship between tutors and students are often based initially on 'deference dynamics' as in teacher and pupil at school. The occurrence of a university with a single location campus with students living locally is not now often the case as more universities have diversified into other ways of working using academic partnerships, distance learning and work based learning. Higher education communities are inherently transient; students move on after three years and may only be active between September and May. Staff also move institutions and so there are challenges in developing feedback loops that take account of this. There are variable practices within an institution on different courses, departments, faculties, campuses and partner institutions. Students and staff come from diverse backgrounds, where the culture and access needs or expectations will be different. The challenge is to create student engagement strategies that are inclusive enough to cope with the diversity of students, staff and institutions.

4.5 Sectorial Constructs and Definitions of Student Engagement

There are a number of organisations that have formal relationships with the university sector that have specific definitions of student engagement. These are often coloured by the remit of the organisation and students.

4.5.1 Higher Education Academy

The Higher Education Academy (HEA) has significantly contributed to the growing research and literature on student engagement. The 'What Works' project, led by Yorke, reported in Thomas (2012) is an ongoing longitudinal research project to develop student engagement and the sense of belonging and interventions that encourage student retention and engagement. It is building on the work of Tinto's (1993) student integration model and Astin's theory of student involvement (1984). 'What Works' was originally a joint venture between the HEA and the Paul Hamlyn Foundation incorporating research into academic and peer support, university life, relationships with staff, transition to higher education, student tracking, the first year experience and the impact of interventions. Currently there is a second phase being undertaken. The concept of belonging runs through the 'What Works' project, which complements the research in this thesis as belonging is also key in co-creation and co-production. Belonging in this sense is related to 'connectedness' to the institution (Vallerand 1997) where interpersonal relationships are key to a sense of belonging. The project indicated that the retention and success factors that increased a sense of belonging are:

- Supportive peer relations
- Meaningful interaction between staff and students
- Developing knowledge, confidence and identity as successful higher education learners
- A higher education experience that is relevant to interests and future goals (Thomas 2012)

A related concept to belonging is cultural capital (Meadmore 1999) which is being embedded within university life and having learned ways of behaving in the

university setting (habitus). Educational institutions have a certain habitus (Reay, David and Ball 2001) and if a student does not feel they fit in to this then they may be more likely to leave (Thomas 2012). They concluded that initiatives to foster early engagement were particularly important in addition to academic engagement, having a partnership approach and creating a culture of belonging. Students need to have clear expectations and that students behaviour is monitored in terms of participation and performance. The current stage of this project is that it will collect data at four points of a students HE journey and reported 2017. In a parallel development within the HEA, is the work of Buckley (2013, 2014) on the development of a UK student engagement survey developed from the US NSSE survey. The UK survey has been undergoing pilot testing and refining over the past few years and fully launched in 2015. This is the basis for the primary research developed in this thesis and will be discussed further below.

Other projects from the HEA that are linked to engagement include the first year expectations and experience (Yorke and Vaughan 2012) survey. This differs from the NSS, which is implemented in the final stages of a course. The responses showed high variability in what students want from higher education but they are more likely to be satisfied when the institution provides them clear information on the experience. They also rated highly the opportunity to engage with the university prior to enrolment, good facilities, teaching quality, feedback, support, effective organisation and clear expectations, especially on assessments. Furthermore, the HEA have also developed a conceptual framework of student engagement in higher education at different levels with some examples as shown in table 4-6.

Table 4-6 Higher Education Academy – Examples to Support the Conceptual Framework on Engagement

Individual Learning	Curriculum design and delivery	Discipline level
<ul style="list-style-type: none"> • Students engaged in their own learning through formal academic study • Self-reflection on their own learning • Participation in extra curricula activities • Learning with and from their peers 	<ul style="list-style-type: none"> • Students involved in the design and delivery of their own learning • Evaluation during the course and rapid feedback and response • Students participating in research projects • Students generating materials for others to use • Postgraduate students who teach 	<ul style="list-style-type: none"> • Students membership of discipline focused student networks • Membership of a professional body or subject centre • Discipline specific pedagogic research • Membership of professional accreditation panels • Student surveys
School/ Department level	Institutional level	UK policy level
<ul style="list-style-type: none"> • Student rep membership on school committees or faculty boards • Staff- student liaison committees • Course evaluations • Student involvement in internal subject review 	<ul style="list-style-type: none"> • Student representation on institutional bodies • Students involvements in institutional quality processes • Student union activities • Institutionally relevant sections on the NSS? • Student involvement in university governing bodies 	<ul style="list-style-type: none"> • Student membership/consultation on cross sector working groups/ projects • National representation on NUS • Student involvement in HEA

Adapted from Healey et al 2014

In addition to the work that specifically focuses on engagement, there is an associated project on partnership in learning and teaching (Healey et al 2014) articulating the relationship between engagement and partnership. Partnership in higher education is where students and tutors are actively involved in the process of learning and working together. This is about a way of doing things rather than an outcome in itself that aims to foster engaged student learning and enhanced teaching. Moreover, the authors of this suggest report that partnership is a process of student engagement but that the terms are not interchangeable (Healey et al 2014).

All partnership is student engagement but not all student engagement is partnership. The focus of this work is engagement through partnership of pedagogy. They propose a conceptual model with partnership learning

communities at the centre and student's engagement as the umbrella. There are four overlapping, interrelated areas of partnership as can be shown in figure 4-3.

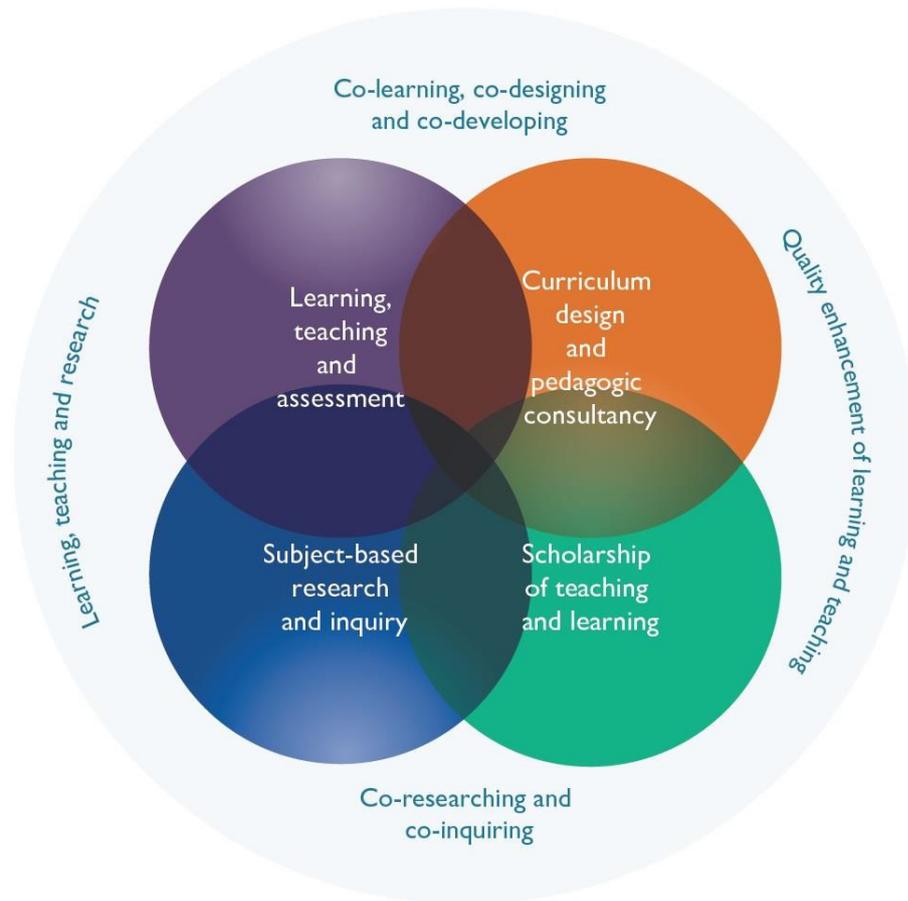
- Learning, teaching and assessment
- Subject based research and inquiry
- Scholarship of teaching and learning
- Curriculum design and pedagogic consultancy

Embedded is the emphasis on students and staff as co- learner, co-designers and co-developers, co researchers and co inquirers.

They proposed eight core values of learning and teaching listed below and then suggested how these can be used in policy and practice applications.

1. Authenticity - meaningfulness
2. Inclusivity- no cultural or structural barriers
3. Reciprocity – all parties have interest in the product
4. Empowerment – power is distributed appropriately
5. Trust – all parties are open and honest
6. Challenge – encourage to challenge practices, structures and approaches
7. Community – all parties feel a sense of belonging
8. Responsibility - all parties share collective responsibility

Figure 4-3 Ways of Engaging Students as Partners in Higher Education (Healey et al 2014)



Andrews J. et al 2012 produced a guide for the HEA on initiatives to improve the student experience. This presents the outputs from a number of projects that have been funded in the 'student retention and success' programme by HEFCE and the Paul Hamlyn foundation.

4.5.2 HEFCE and SFC

HEFCE defines student engagement as 'the process whereby institutions and sector bodies make deliberate attempts to involve and empower students in the process of shaping the learning experience.' (HEFCE 2008). In 2009, the Centre for Higher Education Research and information with the Open University was commissioned by HEFCE to undertake a study on student engagement (Little et al 2009). It was concerned with institutional and student union processes and practices of student

representation and student feedback. This is a narrower viewpoint than the learning gains approach. It seeks to inform and enhance the collective student learning experience as distinct from specific learning, teaching and assessment activities designed to enhance individual students' engagement with their own learning. They found (at the time) there was a focus on institutions viewing students as customers rather than partners in a learning community although in certain subjects for example, art and design there was a more partnership approach. The research concentrated on feedback mechanisms: questionnaires versus student representation system and staff-student liaison committees.

A student engagement framework for Scottish Funding Council (SPARQS) categorised five key elements of student engagement that include aspects of teaching and learning.

- 1) Students feel part of a supportive institution
- 2) Students engaging in their own learning
- 3) Students working with their institution in shaping the direction of learning
- 4) Formal mechanisms for quality and governance
- 5) Influencing the student experience at national level

In the HEFCE consultation document on the future of quality assurance circulated in 2015 (HEFCE 2015), they advocated more autonomy of higher education providers along with peer review and external scrutiny. They suggested a move from quality assessment processes to student outcomes and a risk based model. There was also proposals to have the university's governing body to provide quality assurance although there has been criticisms that they would lack the expertise on the metrics, frameworks and benchmarks.

4.5.3 Quality Assurance Agency

According to the QAA (2012b), student engagement is about giving all students the opportunity and encouragement to get involved in quality assurance and the enhancement of higher education. It should improve the motivation of students to engage in learning and to learn independently and participate in quality processes, resulting in the improvement of educational experience. The QAA and the

University of Bath collaborated together to produce a good practice guide for higher education and student unions (van der Velden, et al 2013)

The QAA first published the Quality Code in 2012. The code has various chapters on aspects of university work. Chapter B5 concerns student engagement and proposes seven indicators that concentrates on governance and quality assurance rather than learning and teaching.

Table 4-7 QAA Quality Code on Student Engagement

QAA Chapter B5 Indicators	
Indicator 1 – <i>higher education providers, in partnership with their student body, define and promote the range of opportunities for any student to engage in educational enhancement and quality assurance</i>	Indicator 5- <i>Students and staff engage in evidence-based discussions based on the mutual sharing of information.</i>
Indicator 2 – <i>Higher Education providers create and maintain an environment within which students and staff engage in discussions that aim to bring about demonstrable enhancement of the educational experience</i>	Indicator 6 – <i>Staff and students to disseminate and jointly recognise the enhancements made to the student educational experience and the efforts of students in achieving these successes.</i>
Indicator 3 – <i>Arrangements exist for the effective representation of the collective student voice at all organisational levels and these arrangements provide opportunities for all students to be heard.</i>	Indicator 7 – <i>The effectiveness of student engagement is monitored and reviewed at least annually, using pre-defined key performance indicators, and policies and processes’</i>
Indicator 4 – <i>Higher education providers ensure that student representatives and staff have access to training and on-going support to equip them to fulfil their roles in educational enhancement and quality assurance effectively.</i>	

The QAA also commissioned van der Velden, et al in 2013, for a further project report into student engagement practices in higher education institutions. They used desk research and online surveys of UK HEIs followed by telephone interviews. Most universities have formal mechanisms for engaging students into the university quality management such as student feedback questionnaires, staff-student liaison committees and student representation on committees, reviews and recruitment panels. Student charters are sometimes used to communicate expectations of student engagement and behaviour. They found some students are less likely to be

involved in these ways include, part time, working, work based, placement, postgraduate, distance learning, mature, international, off campus students and students in partner institutions . They concluded that the Government views students as customers and the sector, students as partners but some respondents said they preferred the view of student as stakeholders, *'...in interviews it became clear that the student as stakeholder concept presents institutions with a realistic compromise between consumerist interests and partnership values'* (p7 research report). This was of interest, as it was not noted in the literature but fits with the research proposition developed in this study.

In a joint NUS and QAA report (2012b) on understanding the barriers to student engagement, the NUS Vice President emphasised the role of students as partners to enhance student experiences. This report is the outcome of three QAA funded projects delivered by the NUS during 2011/12 and was developed into the toolkit and later into TSEP described below. These included a review of student expectations and satisfaction and quality processes and the development of a web based support tool for institutional review called 'Quality Matters'.

4.5.4 The Student Engagement Partnership

The student engagement partnership (TSEP) is a joint initiative between HEFCE, NUS and the higher education sector in England. They developed a set of principles of student engagement in 2014 that includes teaching and learning. This developed from a 'conversation' to investigate and disseminate aspects of engagement and good practice through a website, blog and national workshops.

They did not wish to confine their work by a fixed definition but rather decided to work on principles of engagement. The aim was to develop iterative principles rather that would be under constant review where partnership is viewed by more than a sum of its parts promoting a sense of belonging and connectedness where partnership is the process of engagement rather than a product of it. Belonging is essentially a result of engagement that in turn enhances retention and student

success (Thomas 2012). The principles of student engagement used in the TSEP project are:

- 1) Learning and Teaching
 - a. Students are active members of a learning community
 - b. Students engage in setting their own learning – empowering students
 - c. Students engage in curricula content, design, delivery and organisation
 - d. Students engage in the enhancement of teaching, feedback and assessment practices
 - e. Students engage in and with their learning
- 2) Quality Assurance and Enhancement Processes
 - a. Students are supported to fully engage in internal quality processes (training etc.)
 - b. Students effect the change in a continual process of enhancement (identifying enhancement opportunities)
- 3) Decision Making, Governance and Strategy
 - a. Students engage in the process of making decisions that affect them
 - b. Students engagement is given strategic leadership
 - a. Students engage through effective student leaders and governors

4.5.5 GuildHE and Student Engagement

The Student Engagement Partnership has recently joined forces with GuildHE, one of the two representative bodies of the university sector, the other being Universities UK to produce further work on engagement (2015). The aim of this report was to bring together the various strands of engagement into sharper focus and give some practical advice to institutions and bring together cases studies. It develops the work of the TSEP principles, which have been refined from those published above to a number of ‘principles of student engagement’:

Teaching and Learning

- 1) Students are active members of a learning cohort. This concerns the partnership approach to learning and developing relationships between students and their peers and with tutors and support staff.

- 2) Students engage in scholarly activity. Students taking ownership of their learning and becoming co-producers of their knowledge. (Streeting and Wise 2009)
- 3) Students engage individually in and with their learning. Institutions can use various tools and opportunities to ensure interest and engagement.
- 4) Students engage in a variety of learning spaces and opportunities. To practice and apply in real world applications

Development

- 5) Students engage in curricular content and design. Co-ownership to design and develop courses.
- 6) Students make independent judgement about the quality of learning and teaching. This is an expectation of the QAA Quality Code and goes further than simple student feedback mechanisms.
- 7) Students effect change in a continual process of enhancement. Creating and environment for improving student experience.

Community

- 8) Students' engagement is given strategic leadership. Developing a culture of engagement throughout an organisation.
- 9) Students engage through effective student leaders and governors. Student representation is integral to the institution.
- 10) Students engage in activities that support their wellbeing and encourage their sense of belonging. Co and extra-curricular developed in the overall student experience.

Cross Cutting Themes

- 11) Engaging students from all backgrounds.
- 12) Student engagement with digital technology

Although these principles are valid, they are of limited practical use as they are so broad that they detract from the central message of engagement and the subsequent benefits.

4.6 Institutional Initiatives in Engagement

Many universities have now developed student charters and partnership statements and universities such as Coventry use their students to administer the course module evaluation questionnaires. These often use engagement terminology such as partnership, co-production and co-ownership (Van der Velden in Dunne and Owen 2013). The REACT programme is a HEFCE funded project running out of the Universities of Winchester, Exeter and London Metropolitan is an initiative to collect good practice across the sector especially focusing on 'hard to reach' students. They are working with another ten universities to develop the expertise developing a community of practice around student engagement.

There are a number of individual universities who are pioneering work with student engagement. Lincoln have developed the 'students as producer' approach (Neary 2010) working with students as partners developing solutions rather than raising problems. The aim was to develop one holistic community of students and lecturers empowering students and moving away from passive consumption. A consumerist mind-set to higher education is encouraged in many respects by institutions quality assurance systems and modularisation. The ethos of students as producer at Lincoln is that students should not just be an input to the system but they should be an active part of the system because students are experts in their experience. They state that their engagement strategy should have measurable indicators of success, which includes improved NSS scores. Lincoln have three strands of engagement

1. to have engagement ready students and staff,
2. embedding student engagement e.g. student led committees,
3. changing the conversations – e.g. student led enhancement projects and engaging in solutions

More recently Lincoln (Havergal 2015a) launched an initiative called 'designing a first year' to jointly develop curricula between students and tutors. Bath Spa University have been instrumental in adding to the literature in student engagement (van der Velden et al 2013). There are three QAA commissioned

publications from the Bath Spa research, a full report, a good practice guide and a project report. Since the introduction of B5, institutions have sought to benchmark themselves against the chapter. This research report was commissioned to support the benchmarking and the wider context of introducing student engagement strategies. They say that student engagement in higher education varies as to the socio cultural context, so in the UK students have a strong role in enhancing teaching and learning quality management. Student engagement in the UK takes many forms such as teaching and learning processes, student feedback, evaluation of teaching, representation, participation in governance and quality assurance and enhancement mechanisms. Van der Velden et al (2013) use the definition by Trowler 2010 ' *Student engagement is concerned with the interaction between the time, effort and other relevant resources invested by both students and their institutions intended to optimise the student experience and enhance the learning outcomes and development of students and the performance and reputation of the institution*' (p3). Bath Spa reports on engagement studies in Scotland and Wales that centre on student representation and engagement in quality management rather than teaching and learning. They produced an on line survey that was sent to institutional staff concerned with quality management and their student union officers.

At the University of Winchester, one student per programme is given a bursary to undertake an educational evaluation that feeds into annual course review. They also run a student fellows scheme, where students work alongside academics and professional support staff on projects relevant to enhancing the student learning experience to empower students. At Winchester, students were hired as researchers on projects to feed into annual review (Dunne and Owen 2013)

At the University of Exeter (Ratcliffe and Dimmock 2013), there has been substantial work in student engagement. They categorise engagement into five groups:

- 1) Bystanders - students who attend the university but do not engage in the academic or wider community

- 2) Participants – students who participate in guild societies, clubs, volunteering, providing feedback etc.
- 3) Organisers- students who sit on organising committees of guild societies and clubs, support events are employed by the university
- 4) Leaders -students in leadership positions in guild societies, clubs, SSLCs etc.
- 5) Change Agents – students actively leading change, guild elected officers, external political engagement

The expectation is that not all students will be engaged in the higher levels and I would argue, cannot. Exeter say they want all as a minimum to be participants. The difference between a bystander and participant is the willingness to get involved and voice their opinion. Their strategy does not directly link with classroom but is linked to the organisational structure. The student representatives co-wrote the strategy although there can be a problem in using Student Union officers in developing an engagement strategy as there is a tendency to look at governance and involvement in the university community and union themselves. They are less like to consider engagement in learning and teaching. The research (Ratcliffe and Dimmock 2013) conducted interviews and found that student engagement is a term that is not used by students but has more meaning to administrators than teaching staff and students. In my pilot study, I found a similar lack of understanding and so in the header and body of my invitation to join I introduced my survey as an experience rather than an engagement survey. Also at Exeter, students were hired and trained to teach their lecturers how to use Moodle, which was extended to employ students as 'change agents'. Ratcliffe and Dimmock 2013 developed a model of student behaviour at Exeter where level one was the evaluator, level two observer, level three expert and level four partner.

In a compendium of effective practices for retention and success, Andrews et al (2012) reported on a number of case studies on engagement. At Newcastle University, there was an initiative to enhance the student experience in a multi-disciplinary degree where there were challenges to student engagement. This was extra-curricular, as students did not share modules but the staff – student committee co-designed modules. They reinforced the feeling of community and identity in enhanced induction, student awards, a student magazine and specific

career events. The University of Worcester illustrated another academic and social intervention to run lunchtime staff- student seminars. At Loughborough University, it was described how a relationship management system was introduced to track student engagement in learning. Birmingham City University developed a student as academic partners approach to develop a sense of course ownership and institutional pride. In 2011/12 there were fifty SAP (Student as Partner) projects, some developing learning resources or assessment and others were focused on consultation and networking. In a major cross university initiative at Birmingham City University their Centre for Enhancement of Learning and Teaching developed a collaborative project and writing between tutors and students that started with a symposium and culminated in the publication of a book (Nygaard et al 2013) where all the chapters are co-authored with students showcasing some element of student engagement. The projects are clustered around three themes of identity, motivation and community.

Other universities that have case studies in the GuildHE report (2015) were a learning partnership agreement at Buckinghamshire New University, the Universities of Winchester and Chichester student fellows and student voice programmes.

4.7 Student Surveys Linked to Engagement and Quality

There are a number of student surveys linked to the perceptions of quality, the overall experience, satisfaction and engagement. At present, there is no sector wide teaching quality survey although the AEHLO project (Morgan 2015) has been proposed it is unlikely to gain full acceptance. These range from satisfaction, experience and more recently engagement. This section will cover the main cross institution surveys that are widely published.

4.8 Student Experience Surveys

Market research company, Youthsight using their student panel with around 15,000 responses conducts the HEPI- HEA Student Academic Experience survey, launched in 2006, annually. The survey asks for example, whether students feel that they are getting value for money, how much contact time they had, class sizes, whether they valued being taught by tutors who are research active, have relevant industry expertise or trained in how to teach, general satisfaction, spending cuts, wellbeing and workload. In the 2015 survey (HEPI/HEA 2015), a high percentage (87%) were fairly satisfied, or very satisfied with the quality of their course, which is similar to the National Student Survey findings. Nearly half said their higher education experience was in some ways better and in some ways worse than expected. Many of those who had said their experience was not as good as expected admitted they had not put enough effort into it themselves. This supports this research focus on student engagement. As reported in by Jack Grove in the Times Higher (2015b) this survey puts teaching high on agenda, *'lecturers with formal teaching qualifications are valued by students far more highly than those who are active researchers'* p6. An interesting result was that students who had a higher workload had a higher level of wellbeing. However, students are less satisfied and less happy with their lives than the general population and particularly in their age group. Many students said they would benefit from smaller class sizes, which backs up the reported research in Gibbs (2012). Students also rated tutors who had relevant industry or professional experience more than training in teaching or research. A significant number of respondents (36%) said that on reflection they would have chosen a different course. When asked about their preference for spending cuts, least favourable were concerning learning facilities, contact hours and support for academics to improve teaching.

The Student Experience Survey published by Times Higher Education is a wider survey looking at total experience of being a student and not of just the academic experience. The output is a league table of student life. Again administered by

'Youthsight' a student panel considers twenty-one indicators chosen by students. In 2015, there were almost 15,000 responses from full time undergraduate students coming from 113 institutions. In addition to facilities, course and tutor assessment this survey also asks questions about the social life, community atmosphere, extra-curricular activities, amenities, accommodation and security. Each attribute is assigned a weighting according to its importance in the overall student experience. The same wording and weightings have been used for the past 6 years. The greatest weightings are those correlating with recommending to a friend. There are quite diverse types of institutions at the top of the table. In 2015, these included The Universities of Bath, Oxford, Cambridge, Loughborough, Dundee, Imperial College, Sheffield, Surrey, East Anglia, and Exeter. In the subsequent survey in 2016, Loughborough came first from its second place in 2015 and Harper Adams came second, when it was the first time it was included. In 2017, Harper Adams was first, only four years after gaining university status. It is a small university specialising in agriculture and is campus based, all of which helps to foster a good experience for its students (Times Higher Education 2017).

I-graduate is a commercial company that run student experience barometer surveys for Universities. These include part time, distance and the most popular international student surveys. They will also run bespoke surveys for specific stakeholders such as alumni, agents and transnational education students. The international student barometer tracks and compares decision-making, expectations, perceptions and intentions of a specific university's international students throughout their time at an institution.

4.9 National Student Survey

This is a widely recognised, and used survey, it can perhaps be described as the sector norm. The National Student Survey (NSS) was a response to abolishing the expensive subject reviews of the Quality Assurance Agency (QAA) by HEFCE in 2000 (Richardson et al 2007). Initially this was proposed as the initiative to produce key data on quality that would inform prospective students and the QAA. The first

instance it was proposed to use existing data as far as possible but this proved to be difficult. Institutions argued that they collected feedback for internal quality enhancement and not for prospective students. A pilot study was commissioned by HEFCE to explore the feasibility and value of a national survey and Richardson et al (2007) at the Open University carried out the research in 2003 that concluded that the survey would be feasible

The NSS was launched in 2005 and conducted annually by market research company Ipsos MORI. The NSS surveys final year undergraduate students (full time, part time, home and overseas) studying at UK higher education institutions. Results are published on the Unistats website along with the key information sets (KIS). Key information sets covers other data such as entry qualifications, proportion of degree classifications, progression and graduate employment. The survey shows consistently high levels of student satisfaction. A detailed analysis of the survey data can be found in Surridge (2008) and in a report by the Centre of Higher Education Studies at the Institute of Education (HEFCE 2010). This concluded that the three NSS objectives of student information, quality assurance and quality enhancement should continue and that the QAA should make use of the NSS results. This study warned that the NSS is limited for its use in comparing institutions, subject areas and courses, although in practice this is how it is often used. They also proposed that it should be extended to include postgraduates. At present postgraduate students can be surveyed by the Postgraduate Taught Experience Survey (PTES) and the Postgraduate Research Experience Survey (PRES) run by the Higher Education Academy. A preliminary quantitative analysis evaluated the reliability and variability of the survey (Cheng and Marsh 2010). This supported the design of the NSS but did indicate that it was not a good differentiator between universities, although there was more variance between disciplines. A study by Dean (2011) investigated responses from comparative types of Business Schools using the data set from 2008 to 2012 and correlated overall satisfaction, gender and ethnicity with the responses on the variables, using regression analysis. He concluded that a major flaw in the NSS is that 'importance' is not measured and

therefore HEIs may well be directing their efforts into areas that students do not really find important. There is currently a great deal of effort in the area of 'feedback' by universities, although Dean's research indicated it was not of very high importance to students. Grove (2015a) reporting on a study by Lancaster at Oxford, found that there was no relationship between student satisfaction scores and exam performance, and so should not be used to measure teaching quality. Flint et al (2009) did a study into their own University to evaluate the scores it received and on the development of a task force for quality enhancement directly linked to the NSS to illustrate the esteem that the NSS is held within university management. In another paper, Brown (2011) describes the changes brought about after a poor NSS result within her own institution. The first year students who had paid the £9k fees graduated in 2015. There was analysis as to whether this affected satisfaction (HEFCE 2016c, Vigurs et al 2016). The overall satisfaction figures were the same as the previous year (86%) although HEFCE (2016c) warned that care was needed, as the NSS measures satisfaction and not value for money. In the HEPI/HEA academic student experience survey in 2015 discussed earlier in this chapter 87% of students reported being satisfied but 34% felt they received poor or very poor value for money (HEPI/HEA 2015)

There was a recent review of the NSS (Callender et al 2014), commissioned by the UK funding bodies, undertaken by NatCen Social Research in partnership with the Institute for Education and the Institute for Employment Studies. This arose from earlier recommendations from the HEFCE 2010 review of the NSS from the Institute of Education. The aims of the 2014 review were to investigate the purpose and effectiveness of the NSS. They concluded that there was 'limited appetite' to make widespread changes to the NSS amongst stakeholders although they would welcome some questions on student engagement. At the time, they concluded that as student engagement did not have a definitive definition they recommended that the focus of the NSS should be retained but a future version should include some engagement questions. They recommended three question areas to be included on engagement, subject to further testing:

- Academic Challenge/ reflective and integrative learning
- The learning community/ collaborative learning
- Student voice

They also recommended some rewording of the existing NSS questions and the deletion of some, where there is duplication of themes. The recommendations were taken on board and revisions to the NSS questions in 2017 introduced engagement. There was disappointment from the Student Engagement Partnership, a sector think tank that commented the new questions did not go far enough though.

4.9.1 NSS Design and Methodology

In 2017, a newly designed NSS was launched. The survey is longer, with 27 questions rather than 22 and includes new sections on learning opportunities, learning community and student voice. Personal development has been taken out and new engagement questions included. The NSS questionnaire asks respondents to indicate on a five-item Likert scale to various statements around the experience of Higher Education. The measurement of importance is lacking in the NSS (Dean, 2011). The design of the questionnaire has an unequal number of questions in the various sections. Therefore, assessment and feedback is weighted more than some other factors and elements on this section are included separately within some league tables. The sections and number of questions in the 2017 survey are:

1. The Teaching on my Course (four questions)
2. Learning Opportunities (three questions – new section)
3. Assessment and Feedback (four questions)
4. Academic Support (three questions)
5. Organisation and Management (three questions)
6. Learning Resources (three questions)
7. Learning Community (two questions - new section)
8. Student voice (four questions - new section)

There are some question amendments from previous versions and new sections that have some elements of engagement factors such as course challenge, belonging and peer learning. There follows a question on overall satisfaction and

then free text comments on positive and negative experiences, a question on satisfaction with the student union and finally any institutional questions from a question bank. In addition to the problem of the NSS not assessing 'importance', there are some additional problems in the design and sample of the survey. The survey relies on accurate inputting of course groups and omits a high number of higher education student audiences that are important in the diverse nature of modern universities. The survey is only open to final year undergraduate students and so progressing students, corporate clients, some accelerated, top up, short course students and some partnership activities are omitted. The sample that is used is therefore quite small in comparison to many universities' student base. The NSS only registers the students on the entry point of their higher education experience. This means that if a student transfers courses or institution their responses are allocated with the original course or institution. The student when filling in the questionnaire will not be aware of this and may indeed have only limited experience of the course to which their responses are allocated. Students can only fill in the NSS once, so a HND student will fill it in in their final year but then cannot fill in another if they go on to a top up honours degree. There are problems in registering students who have done a placement year if they were not originally registered for this. Also of interest is what students understand by the questions and a possible misalignment of what a question means to those analysing the responses. Feedback, for example is quite complex, which may be misunderstood by students and university management, when developing strategic interventions. University management may develop initiatives that are not really valued by students. Feedback policies include, encouraging students to have a wider view of what construes feedback and having strict deadlines for tutors to give grades to students.

4.9.2 Use of NSS

The National Student Survey also has critics in terms of the subsequent use by commentators, management and within league tables. The interchangeable use of 'satisfaction' and 'quality' is problematic as they are clearly not the same and the

relationship between these two concepts is particularly complex in higher education. A student could well be satisfied to gain a good grade even if the 'quality' in some way is impaired. Gibbs (2010b) criticised a number of quality measurement instruments that incorporate the NSS. He said the move towards branding and reputational initiatives were at the expense of using experienced staff, good feedback and reasonable class sizes. His critique continued with the use of league tables by universities and that indicators that are used for quality such as funding data, research performance, graduate earnings and employment reputation and student entry grades, are poor indicators of 'quality'.

Buckley (2012) gives a useful overview of ways in which the NSS can be used for enhancement of the student experience illustrating aspects using institutional case studies. Although not designed for enhancement the NSS can be used for enhancement if used to raise the debates and discussions. Van der Velden et al (2013) has provided an overview of institutional enhancement activities based on the NSS. Alexander McCormick the director of NSSE, warned against using engagement data in league tables as the NSS stands, as they are designed as an internal enhancement tool and not for ranking, saying, *'if students feel this is a high stakes measure, it will corrupt the data which is already happening a bit to the National Student Survey data'* (McCormick 2015 p35).

Achieving good NSS scores is regarded as being of high importance to university management (Flint et al 2009, Brown 2011). However, there are criticisms of using this simplistically as a strategic indicator and basing policy on NSS outcomes (Child, 2011, Baker 2011, Gibbs 2012). Overall satisfaction scores have clustered around a narrow band but universities are comparing the very slight differences between institutions and annual changes within their institutional departments and basing policy decisions on this analysis. Universities compare results in detail, year on year with previous scores for each element, between departments and with other HEIs. Child (2011) stated that the NSS is not generally accepted amongst academics and the move from an information source to a quality enhancement mechanism is incompatible. Management and academics are under pressure to improve raw

scores and not to think about underlying causes of poor performance or the survey's theoretical underpinning. Grove (2015a) quoted Graham Gibbs criticising the use of the NSS saying, *'There is currently no evidence concerning whether NSS overall satisfaction ratings are a valid indicator of educational quality'* (p35). He also pointed out the problems in using overall course satisfaction scores in a modular framework. The plans to use surveys to trigger reviews by the QAA is criticised by Baker (2011) because the concentration of most scores in a narrow band questions the meaningfulness of determining strategy on this measure. Peter Williams, former Chief Executive of the QAA was quoted in Baker (2011) saying, *'student satisfaction is not a criterion for good quality and is certainly not a criterion for assessing academic standards'* (p8). Grove (2011), reporting proceedings at a Society for Research into Higher Education conference also said that universities should be wary about going down the line of using satisfaction scores to improve 'student experience' and that the NSS had a disproportionate influence on university policy.

As stated earlier, there has been a particular interest in 'feedback' NSS questions where typically students often do not score their institutions highly. Dean's (2011) research concludes that the NSS results are being used too simplistically and that assessment and feedback had a minimal impact on overall student satisfaction. In addition to whether feedback is of particularly high importance to students, it is also debatable as to what students understand by the term. Gibbs (2012) confirmed that there is no simple relationship between the volume of feedback and its usefulness to the student. The question remains whether effort is being directed into the areas that students particularly value.

4.10 National Surveys of Student Engagement

In the US, 'The Goals 2000: Educate America Act' emphasised the role of higher education in developing graduates with skills in critical thinking, problem solving and communication. This led to the development of indicators around these

themes and subsequently the National Survey of Student Engagement (NSSE) developed by the University of Indiana. It is a voluntary survey, payable by a fee, open to institutions in the US and Canada. Over 1500 colleges and institutions have used NSSE since its launch in 2000 and around 370,000 students have responded. The focus of the survey is enhancement of learning and student experience. Institutions are encouraged to use the data publically to increase understanding of institutional quality and benchmarking but they are not used in league tables. The NSSE survey covers a wide area of student behaviours and attitudes reporting on for example how long they spend on certain activities. There has been a great deal of research into the NSSE where it has been found to be a good measure of learning gain, which in turn has been found to be a good measure of educational quality. It has been tested substantially for robustness and has had a number of developments over the past decade.

There have been various reiterations of the survey since its launch based on extensive research². It currently covers the following:

- Higher order learning
- Reflective and integrative learning
- Learning strategies
- Quantitative reasoning
- Collaborative learning
- Discussions with diverse others
- Student – faculty interaction
- Effective teaching practices
- Quality of interactions
- Supportive environment

Empirical studies have suggested a strong link between NSSE scores and student learning (Pascarella et al 2010, Kuh et al 2007). These support the use of this type of study into quality and learning, *'Our findings suggest that increases in institutional NSSE scores can be considered as reasonable proxies for student growth and*

² http://nsse.indiana.edu/html/publications_presentations.cfm

learning across a range of important educational outcomes' (Pascarella et al 2010 p21).

Institutions doing the NSSE get benchmark data from similar institutions to themselves and internally data from the NSSE is used by individual institutions, to tailor initiatives to encourage student engagement. There has been strong advocates for the NSSE in the UK including Gibbs (2012) where he says that it *'provides a more valid predictor of learning gains than does the NSS, as well as a clearer indication of the nature of provision that students experience.'* (p45). There are some criticisms of the NSSE concerning the psychometric properties of the benchmarks and doubts between the link between benchmarks and student outcomes (Gordon et al 2008, Bowman 2009). There are some concerns as to whether students are able to answer the questions accurately (Porter 2011). However, it is accepted as a powerful tool and has led to its development outside the US. For example in Australia, the Australasian Survey of Student Engagement (AUSSE) was first administered in 2007 (Coates 2010) and adapted versions have also been launched in China (Ross et al 2011, Zhang 2013) South Africa (Strydom and Mentz 2010) and Ireland.

Some UK higher education institutions have conducted an adapted NSSE, for example Reading University (Creighton et al 2008) Warwick University (Taylor et al 2011) Worcester University (Scott 2011) Sheffield Hallam University, the University of Oxford and York St John University (Buckley 2013). A problem in launching surveys here for student engagement is that there is no universal agreement as to what the term means. The phrase used by some institutions, authors, student unions and QAA is used to also cover students participation in the institutional infrastructure and decision making (Trowler 2010, QAA 2012b), rather than concentrating on teaching and learning aspects. Recently, the Higher Education Academy have taken this further and adapted NSSE into the United Kingdom Engagement Survey launched fully in 2015.

4.11 United Kingdom Engagement Survey

In a parallel development to the 'What Works' project, the HEA developed an initiative around a full UK survey of student engagement similar to AUSSIE and NSSE. Developed by Alex Buckley (2013, 2014) this was partly a response to the criticisms of the NSS in the UK. Many internal surveys along with the NSS focus on student satisfaction. Student satisfaction may be important but institutions and the media have used the NSS incorrectly by aligning it as a measure of quality as discussed above. However, engagement is aligned to learning gains and therefore quality so it is more important to measure engagement rather than satisfaction.

The pilot project in 2013 by Buckley investigated the applicability and usefulness of a student engagement survey in the UK. In the first stage, nine institutions piloted 14 questions adapted from the NSSE in 2013 and over 8500 responses were analysed. The 2013 pilot only used 14 questions because most institutions incorporated these into their own surveys. The purpose of this pilot was to assess the validity and reliability of the adapted NSSE elements, to improve the level of understanding of engagement, to support institutions in using engagement surveys for enhancement and to raise awareness of using engagement surveys for enhancement.

The initial questions were classified into four sections of:

- Critical thinking
- Course challenge
- Collaborative learning
- Academic integration

The items were found to be broadly valid and reliable indicators of engagement, although some minor changes were made for the next study in spring 2014. The report (Buckley 2013) gave detailed analysis of how the items and scales performed in the UK using qualitative and quantitative methods. The full qualitative testing of the pilot (Kandiko and Matos 2013), using cognitive interviewing provided an

evaluation of the student understanding and validity of the UKES pilot. Students found the survey questions rigorous and meaningful. Correlations were calculated and factor analysis was applied to the scales, which indicated that the four elements did measure the four distinct measures of student engagement (construct validity). When the reliability of the scales were tested, there was some further modifications in the next pilot in 2014 to improve the reliability and validity of the scales. Following the final pilot in 2014, some changes were made to the questions in light of further qualitative and quantitative testing. The questions and layout were tested, utilising a mixed methods approach of literature review, individual student interviews and focus groups. This second pilot used the NSSE as its base and extended the items to 50; there were 32 participant institutions and over 25,000 responses. The final survey was launched in 2015 and this research utilised the survey to design and develop the primary research used in this thesis.

The UKES from 2015 was essentially an undergraduate part time, full time or distance learners student survey to explore the levels of engagement in activities linked to high quality learning outcomes. It is administered by individual universities, supported by the HEA and uses the BOS 2.0 survey platform hosted by the University of Bristol. It was available between 2nd Feb and 18th June for institutions in 2015. It was up to the individual university as to whom they invited to complete the survey. Some decided to use it on levels four and five only so as not to compete with the NSS, 24 institutions participated in the survey in 2015 leading to 24,000 responses. How UKES 2015 was incorporated into this research is described in detail in the methodology chapter.

The final UKES 2015 survey had 22 core items and 26 optional items focusing on educational activities that are central to higher education including critical thinking, collaborative learning, interacting with staff. It asked students to rate their skills development and the amount of time they spend on different activities. The overall survey results were published later in 2015 (Buckley 2015) by the HEA, although not broken down by institution, some benchmarking data was available after the survey closed. A special supplement from the Times Higher Education in November 2015

also reported on the survey and findings (Briggs 2015). The UKES 2015 showed little significant improvement in 'soft skills' such as creativity and citizenship over student's study time. They did report though, that their 'hard skills' improved over the course of their studies, where 83% indicated a high or reasonable amount of development in critical or analytical thinking skills. Conversely, only a quarter reported a high level of benefit in developing skills such as citizenship and personal values. The skills concerning numeracy were not as developed as other hard skills although this was quite dependent on the subject studied.

4.12 Chapter Conclusions

This chapter has investigated and reported the concept of quality in higher education and initiatives that have attempted to measure this. It was recognised that dimensions of quality from a purely business perspective was missing a large body of research and opinion within education. It was then decided to evaluate quality through an interdisciplinary lens. Service quality relating to satisfaction, although useful in some contexts of education, lacks the appreciation of student partnership and value co-creation necessary. It has been shown in this chapter that higher educational quality is very complex and is better to be thought of in terms of learning gains. That is the difference between the knowledge and skills students come in with versus what they leave with. One of the main influences of learning gains is student engagement. The previous chapter explained how engagement was akin to partnership and value co-creation. The importance of student engagement has been recognised throughout the sector. However, it is a concept that is difficult to define and this chapter has highlighted some of the differing positions on engagement from academics and sector organisations. There are a number of highly respected and tested surveys of engagement, recently developed into the full launch of the UK Engagement Survey. This survey was used as a base for this study that will now be examined in the methodology although the overall research design was informed by the literature in this and the previous chapter. This chapter

has explored aspects of quality in higher education and has considered the extant literature that has addressed them.

5 Research Methodology

5.1 The Research Context

The previous chapters have brought together the interdisciplinary strands of this research, from the sector organisations, from academic areas of co-production, marketing and education and from practitioners. This chapter will specify the higher education context, the philosophical underpinnings and the research method undertaken to support the aim and objectives of this thesis. The aim of this thesis is to:

Evaluate student engagement through an interdisciplinary lens of co-production, education, and marketing to develop an extended transaction model of symbiotic behaviour.

This developed into specific objectives, addressed within the research as shown in the table below.

Table 5-1 Objectives and Associated Research Approach

Objectives:	How addressed in the research approach:
Apply and adapt theories of co- production, services marketing and consumer behaviour to higher education	Evaluated by secondary research and developed into the research design and instruments
Evaluate the relationships between student engagement, educational gain and educational quality.	Secondary research and literature review, informing the research design and additional components in the amended questionnaire
Assess measures of co-production, student attitudes and behaviour for incorporation into an amended UK Engagement Survey	Evaluation of the UKES Survey and development into an amended version incorporating secondary research and focus group analysis.
Test the effectiveness of the amended UK Engagement Survey as an instrument to assess student engagement	Analysis of the survey outcomes and specifically an evaluation of the adapted UK Engagement Survey questions are a reliable and valid measure for student engagement.
Develop a conceptual framework for a symbiotic model of student engagement incorporating university input and student behaviour	Developing a model of Student Engagement using data reduction techniques of Exploratory Factor Analysis and Confirmatory Factor Analysis
Establish tutor and student roles, expectations and implications for university interventions	Analysis of research results alongside literature to develop the discussion and the contribution to the research area and to practice

5.1.1 Research Traditions

A wide variety of research traditions exist in the area of student engagement and its associated links with quality. Service quality research in the marketing discipline is often based on testing perceptions and expectations of the service from the point of view of the customer, for example in Servqual research. Other research traditions in the marketing or business area concerns evaluating quality in total quality management research and critical incident technique that has been applied to higher education by Douglas (2009). Both qualitative methods, in critical incident research and interviews and quantitative methods as in Servqual are used frequently. In the educational policy arena for engagement and quality both qualitative and quantitative research are used extensively. Teaching quality specifically has been the subject of many studies, with the Marsh (1987) teaching quality survey often thought of as a very useful tool in the school sector. The focus of this research study though is wider than specific teaching quality and so the decision was made to incorporate the sectoral studies from the HEA, NSSE and AUSSE into the research survey instrument. The survey from the HEA (UKES) is based upon activities from tutors and the design of curricula and pedagogy and from the analysis of the literature on co-production, it omitted aspects of behaviour and attitudes thought to be of importance.

5.1.2 The Significance of Engagement in Educational Quality

It has been evidenced in earlier sections that educational quality is equated to learning gains that is strongly influenced by student engagement. The work of Graham Gibbs (2010, 2012) the NSSE, AUSSE and the Higher Education Academy has been central to the development of the research strategy and design. Both the well-established American NSSE and the newer UKES surveys have been tested extensively for their robustness (Buckley, 2013b, 2014, Kandiko and Matos 2013). Empirical studies have suggested a strong link between NSSE scores and student learning (Pascarella et al 2010, Kuh et al 2007). A basic premise of the research is that educational learning gains can be equated to educational quality. One of the core elements of the educational process shown to have a positive effect on

learning gains is student engagement (Pascarella and Terenzini 2005 Carini 2006). National student engagement surveys all have certain similarities in what they propose as dimensions of engagement and test these within the surveys. Some of the actual questions and terminology may vary but they all have sections on critical thinking, working with others, time spent on learning, interaction, challenge and reflection. Satisfaction, as used in the National Student Survey is a poor indicator of quality and student engagement is a much better indicator (Gibbs 2014). However, there is still some debate as to what student engagement encompasses and this research aims to add to this debate and propose a specific measurable model. The final survey instrument used in this research was based on the HEA UK engagement survey.

5.1.3 Higher Education Academy on Student Engagement

Chapter four of this thesis discussed in detail the development of the HEA work on student engagement and the various designs and pilots of the UK Engagement Survey. The basis of the survey conducted in this research was an adapted UKES. Some questions were compulsory for any institution conducting the survey but institutions could amend some sections and add their own questions. It was decided then to use UKES as a base and add sections that would assess certain aspects of co-production such as belonging, output variables of learning gains, an input variable of entry qualifications and perceived quality.

5.2 Research Philosophy and Design

5.2.1 Research Philosophy

Research philosophy guides the choice of research design (Easterby-Smith 2008, Blaikie 2010, Alvesson and Deetz 2000, Bryman and Bell 2011). Ontology shapes the questions that the research seeks to answer and how those questions are addressed in terms of epistemology depends on the philosophical stance taken (Benton and Craib 2001). According to Cohen et al (2007), there are three approaches to reasoning, inductive, deductive and a combination of the two stances. Inductive is associated with interpretivism and deductive with positivism

although Buchanan and Bryman (2009) suggested that they are not mutually exclusive as will be shown in this research design. This epistemology lies towards the deductive approach although it has elements of induction in the construction of the questions and qualitative comments on the questionnaire. This research design has added to the contribution in research methodological approaches in this area.

The justification of the mainly deductive approach for the primary research is that the research questions centre on the reported behaviours of respondents and their educational outcomes. Elements of perceptions are gathered but this is influenced by the expectations and experience of individuals so generalisation can be difficult (Chalmers 1999). Students in a classroom will all have previous experiences and expectations and so perceptions will vary significantly. The research is essentially more positivist rather than social constructionist but because of the concepts behind the respondents perceptions there are socially constructed elements. A positivist epistemology is a natural science model that is more aligned to quantitative, falsifiable and statistical methods as opposed to social constructivism where reality is given meaning by people (Blaikie 2007).

A thorough analysis of the possible philosophical stances was made in the initial development of this study. It was realised that different research philosophies would result in quite different epistemological approaches. I accepted the value of these approaches but my concern returned repeatedly to creating and addressing the objectives of the study. Therefore, the driving research philosophy for this research is pragmatism. The pragmatic approach can still propose that the concept of engagement is intrinsically socially constructed and use a questionnaire that is based around constructs where perceptions are central to respondent's answers. During the development of the study the meaning of terms associated with quality were considered as they would have different meanings to different people. An individual's definition of quality will be affected by their upbringing, culture and social interactions. The nature of language is important to background of this research project as is the *use* of language (Higginbotham 2002, Rudolph 2006, Ralston 2011, Koopman 2011) whereas Grace (1987) adopted the phrase 'linguistic

construction of reality' that encompasses the different meaning of a shared experience. The definition of a subject (quality) and the way in which it is viewed (what it is perceived to be like) is a product of social construction in a linguistic framework. However, as previously discussed it was felt that evaluating individual definitions of quality would not give the type of research output that was useful. For this reason, rather than asking direct questions on 'quality' as such, most of the questions are designed to measure engagement, which is used as a proxy for quality. This means that although the concept of quality is socially constructed engagement is a much easier to investigate in a positivist manner, therefore conforming to the pragmatic research philosophy.

An analysis of where this research sits within the context of positivism and social constructionist is presented in table 5-2. As can be seen then that the pragmatic research philosophy does not lie completely in either of these philosophical camps.

Table 5-2 Positivism and Social Constructionism within this Research (adapted from Easterby Smith et al 2008)

	Positivism	Social Constructionism	This research – pragmatic approach
The Observer	<i>Must be independent</i>	<i>Is part of what is being observed</i>	<i>The researcher works within the sector but the research itself is independent</i>
Human Interests	<i>Should be irrelevant</i>	<i>Are the main drivers of science</i>	<i>The concept of engagement is intrinsically one of human interest. The open comments sections in the questionnaire and pre survey focus groups.</i>
Explanations	<i>Must demonstrate causality</i>	<i>Aim to increase general understanding of the situation</i>	<i>The aim was to build a model that could be used in increasing engagement so does demonstrate causality</i>
Research progresses through	<i>Hypotheses and deductions</i>	<i>Gathering rich data from which ideas are induced</i>	<i>Deductions were made through the use of statistical methods but augmented by extensive open comments – the driver was the research objectives</i>
Concepts	<i>Need to be defined so that they can be measured</i>	<i>Should incorporate stakeholder perspectives</i>	<i>Concepts were developed prior to the data collection stage but were testing stakeholder (student) perspectives.</i>
Units of analysis	<i>Should be reduced to simplest terms</i>	<i>May include the complexity of ‘whole’ situations</i>	<i>Concepts were reduced down to specific areas of investigation and testing but did encompass complexity</i>
Generalisation through	<i>Statistical probability</i>	<i>Theoretical abstraction</i>	<i>Statistical methods used with qualitative comments for illustration and added depth of analysis</i>
Sampling requires	<i>Large numbers selected randomly</i>	<i>Small numbers of cases chosen for specific reasons</i>	<i>The population was all undergraduate students at the university. Sample was self-selecting so not random.</i>

An alternative philosophy that was also considered was critical realism (Bhaskar 1989, Byrne 2002) which can be defined as “the world exists separate from our consciousness of it” (Byrne 2002 p15). So rather than positivism where there is no

'context or character of the measurement process' realism takes into account the social construction of meaning. External reality is affected by social structures and can change over time, so the study of student engagement is something that could be affected by external and internal factors. The social structures concerning university education are complex and dynamic and concepts of engagement are subject to social conditioning such as our expectations. Pragmatism, therefore has some similarities to critical realism. Pragmatism as a philosophy has longstanding roots (Dewey, 1932. Rorty 1982) and is now often used to support a mixed methods approach (Johnson and Onwuegbuzie, 2004). The driver for pragmatism is the research question, what is suitable at the time for the objectives. Whatever approach, whether positivist or interpretivist, is most suitable would be used or indeed a mixture of approaches (Tashakkori and Teddlie, 1998). Taking this approach leaves the researcher to have the freedom to choose complementary methods and techniques that are most suited to the research question (Hammond 2013). The research conducted took the pragmatic approach, as there was a combination of deductive and inductive. Although the main method of data gathering was quantitative, there were elements of qualitative data that have been incorporated in the results and final discussions that enrich the overall research outcomes.

5.2.2 Research Design

The driving force of the research design was the research objectives (compatible with the pragmatic approach). The study needed to both *descriptive*, describing and defining the elements of the construct of engagement; and *explanatory*, investigating the relationships between constructs and developing a model of engagement. A cross-sectional study was decided upon to give an in depth picture at a certain time. A survey strategy was therefore the most appropriate approach, as it would generate enough quantitative data for statistical analysis, along with qualitative elements in the form of pre-survey focus groups and free comments under each section of the questionnaire. This approach of mixed methods can add

richness to a research study (Bryman and Bell 2011, Saunders et al, 2007) although in this case the main method is quantitative.

In terms of the design of the data collection instrument itself, the UKES survey was about to be launched nationally at the time of the study. Following conversations with the Higher Education Academy and senior management at Staffordshire University, it was decided to run the UKES survey but amend the questionnaire to incorporate some aspects of co-production and belonging that was identified in the literature. Cognitive testing of the questionnaire was conducted with three focus groups to enhance validity of the research design. The draft questionnaire was also distributed amongst colleagues and a few changes were made through these processes. Each of the engagement sections on the questionnaire had a comments section so qualitative data on opinions, experience and attitudes could be captured. During the research, I also attended three HEA conferences and workshops on UKES, met with the directors of NSSE visiting from Indiana and interviewed colleagues with a strong institutional engagement strategy at the Universities of Exeter and Winchester to inform this research.

5.2.3 Ethical considerations

When designing the research, ethical considerations were integral to the development. As the focus groups and survey involved students at Staffordshire University, the research had to be presented to the university ethics committee for approval. There was only one stipulation, which was on the consent form for students involved in the focus group to be edited to say they could ask for feedback. An email was sent to students on certain core modules to ask for voluntary participation in the focus groups. Participants could opt out at any time and they were given written information on the research prior to the meeting. At the beginning of the meeting, participants signed a consent form, were given the handout and told they could leave the interview at any time and that they would not be identified by name.

The ethics committee also approved the survey and questionnaire design. As this was not distributed to vulnerable groups, was voluntary and confidential there was no changes to be made. Extreme care was taken regarding the use of the university information system as all student personal details and HESA records were downloaded into an Excel spreadsheet and then uploaded into a new spreadsheet recoded for use by Bristol online Surveys (BOS). This is the system all universities use for the Postgraduate Taught Experience Survey (PTES) so all parties are used to dealing with this sensitive information. As I was handling this data personally for the UKES survey I took advice from the university information systems services, only worked on the spreadsheets from the university server, and did not download to any computer. The email inviting students to respond to the questionnaire was generated so that it went individually to each student and they could not see any other contact details.

5.3 The Research Instruments

5.3.1 Focus Group Research

Focus group interviews were used because students were more likely to interact, have a group dynamic and provided a rich data source. The focus group technique allows more themes to emerge rather than individual issues.

Sample: Three focus groups were conducted in March and April 2015 with students from Law, Forensics, Business and Education subject areas, a total of 14 respondents. Initially I planned to host more but there was a very limited window of opportunity to conduct these before the launch of the survey.

Instrument development: An interview guide was developed (appendix one). This was developed from the literature and comprised cognitive testing of engagement as a whole and the individual questions. Consent forms and attendance sheets were distributed and I had a planned format to follow (appendix one).

Implementation: Core module students were emailed from two courses from each Faculty. Rooms were booked with refreshments, the education group was held at a local school as they were in placement, name cards were supplied. Information on

the research was given in the email and the University gave ethical approval the research. I organised for a colleague to be there for the interviews to help with the organisation. I introduced the research and the reasons behind it. I said I was investigating their views of student engagement, belonging, course quality and their experience. I explained I was conducting a survey and would like their opinion on and the focus group was part of a pilot and a sense check of the questions. There was a general icebreaker question as to what student engagement meant to them. A paper copy of the draft questionnaire was distributed to the group and we discussed each section in turn asking if it was easy to answer and seemed relevant. When this exercise was completed I then asked whether there was anything they felt was missing. During the sessions non-verbal cues were noted, laddering techniques and probing were used to get more detail from questions, (Bryman and Bell 2011) and special care was used to avoid bias.

Data management and analysis: The meetings lasted around an hour, were recorded and later transcribed, although I also took notes during the sessions.

Qualitative Analysis: The focus group research was used to inform the design of the research instrument. The qualitative comments from the questionnaire were downloaded into an Excel spreadsheet and filtered to allow analysis of the demographics and academic subject department with the comments. Any respondent who did not make any comment was deleted. I decided not to use NVIVO and instead comments were coded initially positive or negative and then again into more detailed categories such as feedback or understanding. This analysis was completed for each section separately to allow for identification of the context of the themes.

The analysis from the focus groups will be summarised here as they informed the final development of the questionnaire. In general, the questions were well received and easy to answer. The concept of engagement was sometimes confused with experience although this may be that students wished initially to talk about their experiences. The challenge throughout the focus groups was to bring back discussion on the structure and meaning of the questions rather than their answers

to the questions but it was still enlightening to hear their reasoning behind the responses. There was some discussion on the first section on critical thinking as this was perhaps the most difficult section conceptually and it was felt it would be better later in the survey or worded slightly differently . It was not possible to change this in the final questionnaire, as it was a section that was fixed by the HEA although this was reported to contacts in the HEA to consider for the future. The concept of critical thinking was explored around the use of academic sources such as journals and there seemed some confusion as to what was available and how to use them. The part time group were however happy with the section on critical thinking as *'it is the same terminology as we use in the course'*. Interacting with staff elicited an interesting debate on the use of social media between staff and students for academic purposes. Email was not used as much as Facebook groups or WhatsApp to communicate with the university. There was general confusion with the full time groups on the section 'reflecting and connecting' where the 'rules' around using material from one module to another was discussed and worries over plagiarism was highlighted in 'working with others'. These concerns and confusion though were not shared by the part time group and may be attributed to course design and pedagogy. The section on whether the course encouraged you to do your best work elicited an emotional response highlighting perceived unfairness of marking or other students putting very little work in and gaining a good mark. There was a distinction on the type of engagement wanted by students as to whether they were full time or part time, as one part time education student said, *'I've got all the engagement that I personally want. I am here for the education. I've already got things I do outside the Uni'*. The sense of belonging was an interesting area to explore. The full timers did feel a strong sense of belonging to the course and the university but not necessarily to the Faculty some saying they were proud being there and loved it. The part timers felt a strong bond with the course tutor, their peers and the course itself but not to the university *'it feels almost like it is just a website you log on to'*.

Thus the focus groups gave a reassurance that there were no major issues with the concepts the questionnaire was testing and it gave me an insight into how students might answer the questions and feelings behind this. There were some minor changes on some of the questions such as entry grades where a 'not known' was added. Alumni was a term not universally understood so the question was reworded and a question on placement activity was added.

5.3.2 Survey Research

5.3.2.1 Data Collection Instrument – Adapted UK Engagement Survey

The questionnaire was based on the HEA UKES 2015 survey, which had been piloted for the previous two years, and this was the first year of a full launch. Qualitative cognitive testing of the questionnaire was undertaken by the HEA (Kandiko and Matos 2013) as had some analysis of the questions and scales (Buckley 2013). To conduct the survey I had to become a registered user and gain approval from Staffordshire University executive, registry, deans and the student union. The questionnaire was delivered through the Bristol Online Survey (BOS) platform, which was the same system as the postgraduate taught experience survey (PTES). Institutional sections could be added to the questionnaire although others were fixed by the HEA, to ensure comparability across institutions. When designing the questionnaire some of the HEA sections were compulsory and others were voluntary. I only took out a section on research engagement as it was not particularly relevant to the undergraduates at my institution and I was adding some of my own sections. The qualitative phase informed this section also, and this is described at the end of section 5.3.1

I was in contact with staff at BOS and attended workshops to set up the questionnaire on the platform. I also enlisted the help of staff in university corporate information, information services and those who had previously set up PTES. The platform allowed a draft Staffordshire University UKES questionnaire to be worked on and different iterations saved. It was tested as many times as appropriate before going live in April 2015. I added sections to investigate my proposition that a sense of belonging and a perception of quality was important to

engagement. I was also interested in any link between the qualifications they came in with and the grades they were getting at university with engagement items so included these questions. A question was inserted that was similar to Q22 of the NSS about overall satisfaction. I was also interested in any link between engagement and industrial placement and clearing students following from the focus groups and discussions with colleagues. Many definitions of engagement encompass the governance aspects of universities and so I asked about involvement in clubs, societies, student union and course representation.

A copy of the final questionnaire is in appendix three; all the questions were positively worded to allow for later factor analysis and many were using Likert scales. Each of the HEA sections on engagement had open comments boxes at the end; the questions were answered either with a click on a button or a drop down box. The questionnaire started with a short introduction of the research and used the logos of both the HEA and Staffordshire University. It was an on line survey with buttons that respondents clicked on, it was possible to go back on each page if they wished and save it for later. The data protection button had to be clicked before respondents could proceed. An outline of the sections of the questionnaire is in table 5-3 below.

Table 5-3 Questionnaire sections

Section – bold were additional	Number of Questions
2. Critical Thinking	4 plus comments
4. Learning with Others	4 plus comments
6. Interacting with Staff	6 plus comments
8. Reflecting and Connecting	6 plus comments
10 and 11 Course Challenge	2 plus comments
13. Skills development section	12 plus comments
15. How you spend your time section	7 plus comments
17. Experience at Staffordshire University	12
18 and 19. Entry Qualifications	2
20. Whether enter through clearing	1
21. Placement, internship or work experience on course	1
22. Perceived Quality	1
23. Grades achieved so far	1
24. Student rep, student union or society active member	3
25. Age*	1
26. Gender*	1
27. Disability*	1
28. Place of residence for fees purposes*	1
29. Place of residence*	1
30. Ethnicity*	1
31. Discipline*	1
32. Type of qualification studying for*	1
33. full time or part time*	1
34. Year of course	1
35. Final year of course?	1
36. Face to face or Distance learners	1
37. HESA identifier not displayed	0
38. username not displayed	0
39. Course*	1
40. Department*	1
Thank you	0

*When students enrolled, this was usually included in their records and so it was preloaded so the question was not visible. If this information was not included in their record then the question would show and they could answer from a drop-down box.

5.3.2.2 Implementation

There was a considerable amount of work before the launch on the administration of the questionnaire. A spreadsheet of all undergraduate students who were studying on campus or on distance learning, but not at partner colleges, was

obtained. This consisted of 8873 students and included all their personal data and HESA record. Bristol Online Surveys (BOS) required a spreadsheet to be uploaded to their site with different requirements to the internal records. I edited the university spreadsheet so it would fit exactly to the BOS requirements, which meant for example recoding gender, study mode and age into different groupings. The BOS system did not run with any missing data so a code had to be included to cover these. BOS supplied a testing site so I could see if there were any problems with the spreadsheet before launch. I could also include some 'dummy' student records at the end of the spreadsheet to be used for piloting the questionnaire and system that were deleted after testing. The questionnaire was piloted during the focus group stage with students and academic colleagues and changes made as outlined earlier. Another pilot at this stage involved 10 colleagues using the dummy student identifiers to assess how it would look on screen, navigation and length of time to complete piloted it on the BOS system. The output from these 10 responses were viewed to see what it would look like following the survey launch.

Preparation of the distribution involved working with the university information services to provide a system that generated an individual email to all students from the spreadsheet with a survey link and individual unique password. The email that went to students is in appendix 2 and a prize draw of £100 was offered as an incentive. The survey was launched on the 16th April 2015, which was a little later than preferred, but the registrar requested that it be kept back until the NSS was near closing at the end of April. Reminder emails were sent four times with slightly different messages, only to those students who had not responded; as the system automatically deleted any who responded from receiving further mails and they could not do it twice. The survey closed on the 18th June 2015 as this was the deadline for the HEA so they could generate some sector wide and benchmarking information.

5.3.3 Sampling

All undergraduate students at Staffordshire University were invited to complete the questionnaire. This was to ensure a large enough sample for the survey and adequate coverage of subject groups and student demographics to allow for analysis of the data to develop significant conclusions. The total population of undergraduate students at Staffordshire was therefore a sample of the population of UK universities and there may be certain characteristics of Staffordshire University students that may not be completely generalizable to the overall population of UK students. The University is at the lower end of the league tables with relatively low entry criteria, 'good' degrees and employability statistics. It has a high proportion of local and ethnic minority students. The survey was sent then to all undergraduate students so included full time, part time, distance learning and face to face learners.

There were 891 usable responses out of 8873 potential respondents and so the response rate was 10%. The potential respondents would have included those students who were not active in the university at that time and also those who had just completed their course at Christmas. The population (8873) consisted of 4268 women and 4595 men, with 10 preferred not to say. The number of UK and EU students was 8532 with 341 overseas. The Faculty Breakdown was:

- Arts and Creative Technologies – 2630
- Business, Education and Law – 1784
- Computing Engineering and Sciences – 2240
- Health Sciences - 2219

Although all the undergraduate students were invited to complete the survey the students who responded were self-selecting. It could be argued that they were more likely to be engaged simply because they took part in the survey and had read their university email messages. However, it is difficult to mitigate against this and the final response of 891 was a high response rate given the timing of the questionnaire.

5.3.4 Validity and Reliability

Reliability and replicability concerns the degree to which a research instrument produces consistent results if replicated. When assessing reliability of this study there were two factors to consider. A measure should be relatively stable over time and there should be internal reliability of scales. Cronbach's alpha was used to test internal reliability throughout this analysis. Various aspects of validity have been taken account of in the design of this study. The first is construct validity, that is are the constructs of the questionnaire measuring what they are meant to. A key theme for this research has been to identify engagement factors and measure their effect in a proposed model. External validity concerns whether the study could be extended beyond the specific university under consideration, this would be the case as many of the findings, and subsequent implications could be generalised to the sector.

An objective of this research was to test the validity of UKES and to assess whether my additional questions added to the understanding of measures of engagement. Reliability and validity was tested throughout the analysis of the questionnaire results.

5.4 Methods of Analysis

5.4.1 Data Management

The BOS system generates output with basic descriptive analysis and at a later date the HEA publish benchmarking data to those institutions who participated. There are restrictions on the use and publication of the benchmarking data so this was not used in this thesis. The data behind the BOS output can be downloaded into SPSS and Excel. I downloaded the qualitative comments to an Excel spreadsheet and organised this so filters could be applied on the demographics to cross-reference quotes. These were then coded for themes. The complete data file was downloaded to SPSS 23 for in-depth analysis and edited for compatibility. Missing data was replaced by '9's and because 891the survey was set up by BOS to load 1 for example as 'very often' and 4 as 'never' I recoded these to be the other ways

round to be more intuitive. Variable labels were added and the type of data, for example whether string or ordinal was edited and the decimal places were made to be meaningful. Respondents were removed who had not completed any of the questions other than the data protection one. Where there was two options, yes and no, for example whether respondents had been a student representative I recoded these as 1 being 'no' and 5 being 'yes' to show the direction for positive engagement and it may have had an adverse impact on scale creation. The age groups that were set up by BOS were not useful as they were too many so larger groups were created into a new variable.

As one of the objectives of the research was to test the components of engagement initial composite scales were created from variable means. The existing HEA sections were put into separate scales and with the skills section calculated both as one scale and then divided into two, learning skills and creative and social skills. The time spent on activities section was divided into 'time spent studying' and 'time on other' as it did not really have much meaning as a whole. The engagement sections I added were grouped into a scale for question 17 as a whole on 'experience at Staffordshire University' and then separating elements of this and adding other questions to create scales on 'belonging' and 'perceived quality'

Scales created

- Critical Thinking - section 2
- Learning with Others - section 4
- Interacting with Staff – section 6
- Reflecting and Connecting – section 8
- Skills Development – section 13
- Learning Skills – subset of section 13
- Creative and Social Skills- subset of section 13
- Study Time – section 15
- Other Time - subset of section 15
- Belonging - subset of section 17 and 24

- Perceived Quality - subset of section 17 and 22

The values of the composite variables were re-coded so they had meaningful discrete values corresponding to labels such as 'good' rather than a number such as 1.49. Syntax files were used and saved rather than large output files, which also helped when running similar tests for different variables, as macros could be copied, edited and run.

5.4.2 Analysis Procedures

5.4.2.1 Descriptive Statistics

Univariate data analysis was undertaken on all the results, including mean, median, standard deviation and frequencies. Bar charts were requested in the output to visualise patterns of distribution. An analysis of the respondents' demographics and characteristics was undertaken. Composite scales were created as outlined above and again descriptives were produced and measured for reliability using Cronbach's alpha checking for those above and below .6. Bivariate data using contingency tables were produced to analyse relationships in SPSS and evaluated using the Pearson chi-squared statistics (χ^2), Phi and Cramer's V.

5.5 Factor Analysis

Factor analysis is a data reduction technique that uses correlations to create a model which explains variance and covariance between observed variables, the items in the questionnaire. It reduces the amount of data into a simpler structure condensed down to shared factors that still explain the relationships between and amongst the variables. Essentially the hypothesis I tested by Factor Analysis in this study was:

Ho– there is no relationship between and amongst engagement variables

Ha – there is a relationship between and amongst engagement variables

Factor Analysis can be either exploratory or confirmatory. These are quite different in approach and technique, using separate but related software. In the case of exploratory factor analysis (EFA) SPSS was used and with confirmatory factor analysis (CFA) AMOS was used. During EFA the factors, or latent variables emerge but during CFA the latent variables are specified and tested. Latent variables are those that cannot directly measured but are a combination of items in the questionnaire. Engagement is a concept that cannot be directly measured, as it is a combination of different factors. This study utilised both EFA to develop the factors and test the concept and then these were further refined in CFA to develop the theory into a model of student engagement.

5.5.1 Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) is a data reduction technique to group or correlate variables to make a few factors that explain the variance and identify latent variables. To understand the steps in running EFA in SPSS and the various options a series of on line videos (Field (2013), Gaskin (2016), Anglim (2015) Grande (2015, 2016), Waller (2013)) were viewed in addition to websites, print and electronic sources on the concepts and measures. There are some assumptions that need to addressed for meaningful EFA that are outlined in Pallant (2013) and in more detail in Tabachnick and Fidell (2013). The first one is sample size. There is no overwhelming consensus as to how many should be in an EFA sample but it is a large sample technique although smaller samples are adequate if larger factor loadings are generated, Field (2009) recommends that samples above 150 factor loadings of .4 are reliable. Pallant (2013) advises that at least 5 cases for each variable is necessary, Grande (2016) a minimum of 200, whereas Field (2009) says a common rule of 10-15 participants per variable. However, he also says that parameters tend to be stable after 300. Although this survey had a high number of engagement variables (57 initially) there were a high number of respondents, 891. Thus, on all measures the sample size was good. As EFA depends upon correlations there has to be some initial evidence of relationships between variables so the correlation matrix (from the SPSS output) can be scanned for at least some above

.3. However, there should not be very high multicollinearity, so they are not measuring the same construct exactly, again the correlation matrix should be checked for scores of .9 or above. This was not the case for this survey and there were some evidence of correlation on all items so it was accepted that EFA was appropriate. There should also be no outliers, so if there is an exceptionally large or small number in a response that this should be removed or recoded. As the basis of the responses in this study were from Likert scales then this was constrained anyway. The final assumption is that data should be interval. It can be argued that Likert scales are not truly interval as one person's score for excellent might not correspond to another person's interpretation and are usually classed as ordinal. However, most authors in the social sciences accept that Likert scales can be used very usefully in factor analysis although using them tends to overestimate the number of factors (Field 2009).

In addition to the above there are two elements of SPSS output that shows whether it is appropriate to use factor analysis. The Bartlett's test of sphericity for normality (Bartlett 1954), that should be significant ($p < .05$); if it is significant then the null hypothesis that there is no relationship can be rejected. The Kaiser –Meyer- Olkin (KMO) measure of sampling adequacy (Kaiser 1970) that should be at least .6 (Tabachnick and Fidell 2013). The initial model and the final EFA model below both show very good results for KMO and Bartlett's test of sphericity so EFA was an acceptable method to use.

Table 5-4 EFA KMO and Bartlett's Test

	Initial Model	Final EFA Model
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.941	.947
Bartlett's Test of Sphericity Approx. Chi-Square	19110.549	17757.907
Degrees of freedom sig	1485 .000	990 .000

It was decided when running the EFA within SPSS that principal axis factoring rather than principal components analysis should be used. Principal factor analysis is a popular method for social sciences and psychology (Field 2013). Principal components analysis (PCA) is not strictly factor analysis as outlined in Pallant (2013) and the merits of using both are explained in Tabachnick and Fidell (2013). They do say however to use factor analysis if, '*you have designed your study on the basis of underlying constructs that are expected to produce scores on your observed variables*' (p688). The design and development of the questionnaire in this study did just that.

Maximising factor loadings is aided by rotation methods; if assumed to be unrelated then orthogonal rotation is used but where they are thought to be related an oblique rotation is used. When deciding on whether to rotate and the type of rotation to use, Tabachnick and Fidell (2013) provide a detailed explanation. Oblique rotation (Direct Oblimin) was used as recommended by Field (2009, 2013) as it allows the interrelation and correlation between the factors.

To decide on the number of factors to maintain the scree plot and Kaiser's criterion are used. Kaiser's criterion is that eigenvalues should be 1 or more and this is the default in SPSS, where eigenvalues represent the size of a factor. It can though result in too many factors being maintained Pallant (2013). The scree test is a graphical depiction of eigenvalues against components where the point of inflexion can be identified (Cattell 1966). The number of factors extracted can be left open or it can be constrained by the researcher. As I was looking at what factors came together naturally and was planning to take the analysis further into CFA where the factors are prescribed I didn't constrain the number of factors maintained. Factor loadings less than .3 were suppressed to clarify the analysis.

The initial factor analysis that was run included all the items in the questionnaire that were deemed to be possibly measuring engagement, this included the items on the table below.

Table 5-5 Initial EFA model

Question number	Section	Number of Items
Q2	Critical Thinking	4
Q4	Learning with Others	4
Q6	Interacting with Staff	6
Q8	Reflecting and Connecting	6
Q10 and 11	Course Challenge	2
Q13	Skills Development	12
Q15	How You Spend Your Time	7
Q17	Your Experience with Staffordshire University	12
Q22	How would you rate the quality of your course at Staffordshire University?	1
Q23	On your current course, what have most of your grades been up to now?	1
Q24	Have you been: A student representative Active member of university society/ club	2

A question within 24 on whether respondents were actively involved in running the student union had so few responses that it was deleted from the start. So the initial EFA ran with 57 items and had 11 factors. This was refined a number of times as the factor loadings were evaluated in the pattern matrix and items were deleted. It was decided to delete individual items rather than complete factors at this stage. In order to get a simple structure that could be run in CFA any items that were cross loading on more than one factor was also deleted (Thurstone 1947).

Items deleted in iterations included:

- Analysing numerical information
- All items on time spent on 'other'
- Working with others (skills)
- Time spent studying

The rationale of the deletion of items is given in more depth in the next chapter discussion the results. The final EFA ran with 7 factors with 44 items as below in table 5.6.

Table 5-6 Final EFA model

Question number	Section	Number of Items
Q2	Critical Thinking	4
Q4	Learning with Others	4
Q6	Interacting with Staff	6
Q8	Reflecting and Connecting	6
Q11	Course Challenge	1
Q13	Skills Development	10
Q17 and Q22	Your Experience with Staffordshire University and quality of course	12 +1

Reliability tests (Cronbach's Alpha) were run on each of the 7 new factors in turn. Doing further analysis on factor scores was considered but the initial analysis on group differences on for example gender or subject was not very significant. It was decided though to extend the work into Confirmatory Factor Analysis to test the factors and to investigate if it could be refined further.

5.5.2 Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) starts with having a concept of what the latent variables are and what items are to be included. It was run with the SPSS data set from the EFA in AMOS. CFA produces a visual representation of the measurement model, with constructs or factors, items and interrelationships. Here we specify the model structure to test and it provides the measures of validity and reliability and assumptions of the model as below:

- Are indicator variables measuring the same construct/ factor?
- Are the factors different from each other?
- Are the factors reliable/ internally consistent?
- Is the model consistent with the theory?
- There are no significant cross loadings

A new data file was created that only drew on the factors under investigation so allow easier loading. A factor model was drawn using the latent variables tool and loading to the seven factors that emerged from the exploratory factor analysis using the pattern matrix. Websites and on line videos from Gaskin (2016) and Anglim (2015) were utilised to ensure the correct steps were followed. Using the

drawing tool, residuals (errors) were automatically inserted, as was a standardised regression weight and factors and items were labelled. The factor loadings in AMOS are the standardised regression weights from the factor to the items. The items (observed variables) are essentially the questions that make up the factor and the initial latent variables (unobserved variables) are the factors produced in the EFA. The SPSS data file was then loaded into the AMOS model. The model was then run to check it worked, initially it didn't as there was missing data and data had to be inserted into the file. Covariances between all the factors were added to the model.

The output requested included, standardized estimates (factor loadings), residual moments, modification indices and squared multiple correlations to calculate R^2 (how much variance is associated with that factor). Covariance was inserted for all the factors with each other. During the process face validity was assessed to ensure that the changes were sensible. Then output was evaluated looking in turn at model fit indicators, modification indices, covariance and standardised regression weights. Indicators of a good model fit were:

- CF Min should be less than 5
- PCLOS should be above .05
- RSMA should be less than .1 and preferably less than .05.

In CFA various changes are made in turn with a re-evaluation at each change to ensure a good model, in this case there were 24 iterations. Each one was saved, as I needed to return to previous versions to easily change any items or covariances. Standardised regression weights were evaluated to eliminate any that were loading low, initially lower than .6. If this meant that the standardised regression weight was deleted then it had to be added to another item. Covariances can be added to residuals on the same latent variable and I added a number of these but then realised that this was falsely fixing a problem and that if items were measuring similar constructs then one should be deleted. The results at the various stages is detailed in the next chapter. When there was a model with a reasonable fit and good factor loadings then validity and reliability was assessed in more detail. A

useful source at this time was a website and statistics wiki from James Gaskin at the Case Western Reserve University who provided a statistical tools package to assess the validity and reliability from CFA output (Gaskin 2016). Tables from the CFA output were loaded into an Excel package that assessed composite reliability, convergent validity, average variance extracted, and discriminant validity. Convergent validity is where the factor is explained well by the items and they correlate well together. Discriminate validity is where items correlate better in the factor than with items from another factor. After these were evaluated the model had some problems so was further refined in more iterations until there were no validity or reliability issues.

5.6 Methodological limitations

Although the sample size was adequate it may have been improved if the timing had been different, perhaps in the autumn term. Students who responded to the survey may well have been predisposed to being engaged. This study was only at one university and another university may have some different results.

In some ways, the concept of student engagement has an intrinsic issue in that it is difficult to separate out the effects of engagement on the measure itself, the cause and effect. So for example, if a student gets positive grades on their early modules it may spur them on to become more engaged on their course or it could be that if they are engaged, they are more likely to get good grades.

6 Research Results

6.1 Introduction

This chapter will analyse the main results from the primary research undertaken and then further discussed and consolidated in the following chapter to bring all the strands of this thesis together. The table below shows the analysis undertaken in the thesis and where it is located.

Table 6-1 Analysis Procedures and Rationale

Analysis procedures	Rationale for analysis	Section
Analysis of the extant literature	Application of theory to assess planned contribution and to inform the research design and instruments	Chapters 2,3,4
Respondent Analysis and Descriptive Statistics	To identify the demographic characteristics of respondents and analysis of the individual engagement items	6.2 and 6.3
Scale Reliability - Cronbach's Alpha	To establish initial scale reliability of questionnaire	6.4
Cross tabulations - chi-square	To establish differences between gender, discipline, entry qualification, satisfaction, perceived quality, belonging, time spent studying and time on other activities	6.5
Exploratory factor analysis	Identify the structure of the concepts and specify in a pattern matrix	6.6
Confirmatory factor analysis	Refine to confirm the model and test for reliability and validity	6.7
Thematic analysis of qualitative data	To illustrate and explain qualitative outcomes	6.8

6.2 Respondent Analysis

The sample of 891 was 10% of the population 8873 and the characteristics of the respondents are outlined in table 6-2. More females responded than males although there were slightly more males in the population. As expected, the age distribution was skewed to the younger group and many more full time than part time students responded probably due to their lower use of university email. UK students predominantly responded who were studying for bachelors and who were white British. 74% said that they thought their course was of good or excellent quality.

Table 6-2 Survey Responses

n= 891		% in bracket	
Registered as; Full-time 815 (91.5) Part-time 76 (8.5)		Gender Male 361 (40.5) Female 530 (59.5)	
		Age Group 18 - 21 433 (48.6) 22-30 286 (32.1) 31-40 93 (10.4) 41 plus 79 (8.9)	
		Year of Course: 1 293 (32.9) 2 249 (28.0) 3 251 (28.2) 4 52 (5.8) 5 23 (2.6) 6 or > 22 (2.5)	
Entry Qualifications More than 400 UCAS points 57 (7.1) 300-390 UCAS points 172 (21.3) 200-290 UCAS points 262 (32.4) 100-190 UCAS points 54 (6.7) Less than 100 UCAS points 6 (0.7) Diploma/ HND 80 (9.9) non-standard qualification (e.g. experience) 43 (5.3) Don't know 134 (16.6)		Work placement/ experience on course Yes: 447 (51.1) No: 427 (48.9)	
		Course rep? Yes: 142 (16.0) No: 743 (84.0)	
		Clearing entrant? Yes 157 (18.0) No 713 (82.0)	
Active student club member Yes: 176 (19.9) No: 709 (80.1)		Active student union member Yes: 30 (3.4) No: 852 (96.6)	
		Residence (for fees) UK 851 (95.5) Other EU 14 (1.6) Non-EU 26 (2.9)	
		Disability Yes 215 (24.2) No 647 (72.7)	
Grades on course: 70% + 242 (27.3) 60-69% 402 (45.3) 50-59% 172 (19.4) 40-49% 42 (4.7) < 40% 5 (0.6) No grades available yet 24 (2.7)		Type of qualification BA or BSc 861 (96.6) Foundation degree 19 (2.1) CertHE or DipHE 11 (1.2)	
Academic Schools/Subject: Art and Design 124 (13.9) Film, Sound & Vision 76 (8.5) Journalism, Humanities and Social Sciences 64 (7.2) Business 67 (7.5) Education 32 (3.6) Law 47 (5.3) Computing 112 (12.6) Engineering 48 (5.4) Sciences 85 (9.5) Nursing & Midwifery 87 (9.8) Psychology, Sport & Exercise 95 (10.7) Social Work, Allied and Public Health 54 (6.1)		Ethnic Group White or White British 720 (81.0) Black or Black British: Caribbean 10 (1.1) Black or Black British: African 55 (6.2) Any other Black background 4 (0.4) Asian or Asian British: Indian 19 (2.1) Asian or Asian British: Pakistani 20 (2.3) Asian or Asian British: Bangladeshi 4 (0.4) Any other Asian background 12 (1.4) Chinese 15 (1.7) Mixed: White and Black Caribbean 8 (0.9) Mixed: White and Black African 4 (0.4)	
Quality Rating: Mean = 3.91 N=887 SD=.966 Excellent 249 (28.1) Good 411 (46.3) Average 153 (17.2) Poor 47 (5.3) Very Poor 27 (3.0)			

Those who self-declared a disability seemed high at nearly 25%. On further investigation, 84% of these were learning difficulties such as dyslexia or mental health issues. This obviously has implications on the support of students at

university. Entry qualifications were towards the higher end but 16.6% not knowing was surprising although students may know their A level or BTEC grades rather than UCAS points. All the University Schools were represented and over 70% were getting grades so far at 60% or above. It is accepted that respondents to a voluntary survey such as this one may in themselves have characteristics that intrinsically make them more engaged, involved and likely to have higher application grades and current performance. It would be of further interest to conduct studies into these characteristics and whether certain groups of students are 'hard to reach' and what could make them more engaged. There is a current debate within higher education for instance as to the lower performance of BAME (Black, Asian and Minority Ethnic) and this could be linked usefully to work around student engagement. This could also include further studies around gender and mode of study.

6.3 Descriptive Statistics

Initially all frequencies were run and bar charts produced to give an overview of the data to see what looked particularly interesting and the key emerging themes. The analysis of respondent's demographics and characteristics were covered above and then each of the engagement sections were studied in detail.

6.3.1 Critical Thinking

There was a strong agreement that respondents thought that their course had emphasised activities designed for critical thinking. As the development of critical thinking skills is often purported as a particular skill for university study this is very reassuring. Almost 80% agreed their course emphasised the application of theory and none of the other factors were rated less than 70% agreeing that their course developed these skills at least 'quite a bit'.

Table 6-3 Critical Thinking

Critical Thinking: During the current academic year, how much has your course emphasised the following activities:						
Very little	Some	Quite a bit	Very Much	Mean	SD	n
n %	n %	n %	n %			
Applying facts, theories or methods (for example to practical problems or new situations)						
39 (4.4)	140 (15.7)	311 (35)	399 (44.9)	3.2	.861	889
Analysing ideas or theories in depth						
54 (6.1)	195 (21.9)	316 (35.5)	324 (36.4)	3.02	.861	889
Evaluating or judging a point of view, decision or information source						
76 (8.5)	191 (21.4)	310 (34.8)	312 (35)	2.97	.953	889
Forming a new understanding from various pieces of information						
43 (4.8)	156 (17.5)	326 (36.6)	362 (40.6)	3.14	.872	887
n=891						

6.3.2 Learning with others

Table 6-4 Learning with others

Learning with others: During the current academic year, about how often have you done each of the following:						
Never	Sometimes	Often	Very Often	Mean	SD	n
n %	n %	n %	n %			
Worked with other students on course projects or assignments						
70 (7.9)	316 (35.5)	267 (30.0)	237 (26.6)	2.75	.936	890
Explained course material to one or more students						
45 (5.1)	306 (34.4)	333 (37.5)	205 (23.1)	2.79	.856	889
Asked another student to help you understand course material						
105 (11.8)	436 (49.1)	236 (26.6)	111 (12.5)	2.40	.853	888
Prepared for exams or assessments by discussing or working through course material with other students						
122 (13.8)	280 (31.6)	294 (33.2)	190 (21.4)	2.62	.970	886
n=891						

The questions around learning with others, or peer learning was not as positive as the critical thinking section. Working closely with other students around preparing for assessments and the understanding of material were less frequent activities than working with other students on projects and explaining course material to others. This finding was backed up at a later stage of this research when this aspect was excluded from the proposed model. The peer learning section was also was

commented on in the design phase of the research during the focus groups as being problematic. Students were unsure as to how much peer learning was appropriate without veering into allegations of academic misconduct and plagiarism and they were concerned with other students being able to benefit from their hard work.

6.3.3 Interacting with Staff

Table 6-5 Interacting with staff

Interacting with Staff: During the current academic year, about how often have you done each of the following:						
Never	Sometimes	Often	Very Often	Mean	SD	n
n %	n %	n %	n %			
Asked questions in taught sessions or contributed to discussions about course material in other ways						
58 (6.5)	313 (35.2)	281 (31.6)	236 (26.6)	2.78	.913	888
Discussed your academic performance and/or feedback with teaching staff						
102 (11.5)	337 (38.0)	292 (32.9)	156 (17.6)	2.57	.910	887
Talked about your career plans with teaching staff or advisors						
314 (35.4)	351 (39.6)	150 (16.9)	72 (8.1)	1.98	.921	887
Discussed ideas from your course with teaching staff outside taught sessions, including by email/online						
227 (25.6)	369 (41.6)	181 (20.4)	110 (12.4)	2.20	.958	887
Worked with teaching staff on activities other than coursework						
479 (54.3)	245 (27.8)	106 (12.0)	52 (5.9)	1.70	.898	882
Made significant changes to your work based on feedback						
97 (11.0)	336 (38.0)	277 (31.3)	174 (19.7)	2.60	.924	884
n=891						

The interactions between staff and students in this section were surprisingly low. Although the most positive aspect here was contributing to taught sessions there was still quite a substantial proportion who only did this sometimes or never (41.7%). It might be thought that this was a key part of university learning. Given the importance of feedback, it is disappointing that 11.5% had never done this and student focus on assessment is illustrated by the 54.3% who had never worked with staff on anything unrelated to coursework. Like most post 1992 universities

employability is high on the agenda and so it is disappointing that 35.4% had not talked to teaching staff or advisors about their career plans.

6.3.4 Reflecting and Connecting

The section on reflecting and connecting was reasonably positive although there were some areas of concern. A good proportion used their prior experience in their course and had changed the way they thought of issues from their learning. There was not much evidence of combining ideas from different modules, which is a problem with modular structured degrees (as most are) and is something that course designers need to bear in mind. Again, with a focus on employability it was disappointing to see that 37.6% had only sometimes or never connected learning to real life issues.

Table 6-6 Reflecting and connecting

Reflecting and connecting: During the current academic year, about how often have you done each of the following:						
Never	Sometimes	Often	Very Often	Mean	SD	n
n %	n %	n %	n %			
Combined ideas from different modules when completing assignments						
55 (6.2)	295 (33.2)	325 (36.6)	213 (24.0)	2.78	.880	888
Connected your learning to real-world problems or issues						
64 (7.2)	270 (30.4)	322 (36.2)	233 (26.2)	2.81	.906	889
Examined the strengths and weaknesses of your own views on a topic or issue						
38 (4.3)	281 (31.6)	342 (38.5)	227 (25.6)	2.85	.850	888
Tried to better understand someone else's views by imagining how an issue looks from his or her perspective						
59 (6.7)	277 (31.2)	338 (38.1)	213 (24.0)	2.79	.882	887
Changed the way you thought about a concept or issue as a result of what you learned						
27 (3.0)	299 (33.6)	371 (41.7)	192 (21.6)	2.82	.801	889
Connected ideas from your course to your prior experience and knowledge						
20 (2.2)	199 (22.4)	365 (41.0)	306 (34.4)	3.08	.808	890
n=891						

6.3.5 Course Challenge

The majority of respondents said that they took responsibility for their own learning with almost 64% saying their course emphasised this very much. There were slightly less who said that their course had challenged them to do their best work but still 86.5% said that their course had done this at least quite a bit.

Table 6-7 Course challenge

Course Challenge:						
Very little		Some		Quite a bit		Very Much
n	%	n	%	n	%	
During the current academic year, how much has your course emphasised taking responsibility for your own learning?						
12 (1.3)		46 (5.2)		263 (29.6)		568 (63.9)
						Mean
						SD
						n
During the current academic year, how much has your course challenged you to do your best work?						
32 (3.6)		88 (9.9)		293 (32.9)		478 (53.6)
						3.56
						.657
						889
n=891						

6.3.6 Skills Development

The section on skills development was quite a long one and highlighted different aspects of skills that were later separated into learning skills and creative and social skills. There was quite a discrepancy on the skills recognised as being developed by their experience on their course. Critical thinking and becoming an independent learner were quite positive, supporting the findings in the sections above. Writing skills development was positive although the findings were disappointing in terms of clear and effective speaking and numeracy. Only 21.1% of respondents said that their course had developed their statistical and numerical analysis skills 'very much' whereas 22.4% said that this was developed 'very little'. Building employability skills could have been higher given the university focus and alignment to vocational courses. Innovation and creativity, working with others, exploring complex ideas and developing personal values were developed to some degree but could be improved. Understanding people from other backgrounds and citizenship skills were not particularly strongly developed.

Table 6-8 Skills development

How much has your overall student experience contributed to your knowledge, skills and personal development in the following areas						
Very Little	Some	Quite a bit	Very much	Mean	SD	n
n %	n %	n %	n %			
Writing clearly and effectively						
76 (8.5)	183 (20.5)	350 (39.3)	282 (31.6)	2.94	.928	891
Speaking clearly and effectively						
96 (10.8)	204 (22.9)	342 (38.4)	249 (27.9)	2.84	.956	891
Thinking critically and analytically						
32 (3.6)	134 (15.1)	332 (37.3)	391 (44.0)	3.22	.830	889
Analysing numerical and statistical information						
199 (22.4)	273 (30.7)	230 (25.8)	188 (21.1)	2.46	1.058	890
Acquiring employability skills						
95 (10.7)	244 (27.4)	291 (32.7)	259 (29.1)	2.80	.978	889
Becoming an independent learner						
36 (4.0)	106 (11.9)	327 (36.8)	420 (47.2)	3.27	.825	889
Being innovative and creative						
74 (8.3)	222 (24.9)	310 (34.8)	285 (32.0)	2.90	.945	891
Working effectively with others						
71 (8.0)	172 (19.4)	333 (37.5)	312 (35.1)	3.00	.931	888
Developing or clarifying personal values or ethics						
100 (11.3)	246 (27.7)	290 (32.7)	251 (28.3)	2.78	.982	887
Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)						
152 (17.1)	210 (23.6)	252 (28.3)	277 (31.1)	2.73	1.077	891
Exploring complex real-world problems						
105 (11.8)	225 (25.3)	311 (35.0)	248 (27.9)	2.79	.980	889
Being an informed and active citizen						
142 (15.9)	272 (30.5)	278 (31.2)	199 (22.3)	2.60	1.003	891
n=891						

6.3.7 How you spend your time

Table 6-9 How spend time

About how many hours do you spend in a typical 7-day week during term time doing the following?										
0 hours	1-5 hours	6-10 hours	11-15 hours	16-20 hours	21-25 hours	26-30 hours	> 30 hours	Mean*	SD	n
n	n	n	n	n	n	n	n			
%	%	%	%	%	%	%	%			
Time spent in taught sessions										
29 (3.3)	143 (16.1)	286 (32.2)	202 (22.7)	115 (13.0)	42 (4.7)	39 (4.4)	32 (3.6)	3.76	1.580	888
Time spent in independent study										
4 (0.5)	134 (15.1)	196 (22.1)	149 (16.8)	157 (17.7)	96 (10.8)	63 (7.1)	89 (10.0)	4.47	1.870	888
Participating in extra-curricular or co-curricular activities (societies, sports, etc., via the institution or the students' union)										
513 (57.8)	238 (26.8)	75 (8.4)	36 (4.1)	10 (1.1)	7 (0.8)	3 (0.3)	6 (0.7)	1.71	1.139	888
Working for pay										
428 (48.1)	71 (8.0)	90 (10.1)	71 (8.0)	106 (11.9)	29 (3.3)	26 (2.9)	68 (7.6)	2.87	2.286	889
Doing volunteer work										
644 (73.5)	150 (17.1)	53 (6.1)	13 (1.5)	5 (0.6)	5 (0.6)	3 (0.3)	3 (0.3)	1.43	.941	876
Providing care for dependants (children, parents, etc.)										
647 (73.1)	65 (7.3)	29 (3.3)	10 (1.1)	13 (1.5)	9 (1.0)	9 (1.0)	103 (11.6)	2.16	2.351	885
Commuting to campus (driving, walking, etc.)										
208 (23.3)	443 (49.8)	146 (16.4)	54 (6.1)	13 (1.5)	6 (0.7)	3 (0.3)	17 (1.9)	2.25	1.261	890
n=891 * mean relates to the category so 3=6-10 hours										

There may be some confusion on the time students reported to being in taught sessions; some saying over 30 hours and others saying none. Some students were on distance learning courses and so would not be in physical classes but would still be in taught sessions and a couple were on a work placement and did not answer on a typical taught week. Some students may have been in workshops with technicians available who answered the high number of taught sessions. The terminology when considering the teaching with a virtual learning environment platform could be misunderstood. Few students though seem to be putting the required hours in to independent study, which is usually specified as being around three times the taught hours. The question on extra curricula activities was

constrained to those within the institution as this is what the HEAR (Higher Education Achievement Record) stipulates and was a question on the UKES that could not be edited. It would on reflection, have been more interesting to ask a wider question on extra curricula activities. A surprising finding here was that nearly 50% of respondents were not doing any work for pay when anecdotally it is often accepted that student's attendance and engagement is affected by working. Many respondents did not do volunteer work or care for dependents and were living locally to attend the university so not spending a great deal of time travelling.

In further analysis, this section was divided into time spent studying (taught and independent) and time spent on other activities.

6.3.8 Your experience at Staffordshire University

This section was concentrating on the specific experience of students at Staffordshire University investigating their attitudes to the university, their feelings of belonging and perceived quality.

There was a reasonable sense of belonging and positive experiences towards the university although some ambivalence as high numbers neither agreeing nor disagreeing to statements. Almost 60% would recommend the university to others and almost 70% rate it as being at the appropriate standard. Most are clear as to what they need to do to be successful in their studies (73%) and are satisfied with their course (69.3%), although course communication could be improved. Those interested in joining the alumni association is low and should be investigated further especially as more said they would join another course here.

Table 6-10 Experience at Staffordshire University

How much do you agree or disagree with the following statements							
Definitely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Definitely agree	Mean	SD	n
n %	n %	n %	n %	n %			
I feel a strong sense of belonging to Staffordshire University							
72 (8.1)	105 (12.9)	258 (31.7)	238 (29.3)	140 (17.2)	3.33	1.165	813
My experience at Staffordshire University is what I hoped it would be							
75 (8.6)	121 (13.9)	209 (24.0)	301 (34.6)	164 (18.9)	3.41	1.190	870
I tell others of my experience at Staffordshire University							
43 (4.9)	64 (7.4)	140 (16.1)	354 (40.7)	268 (30.8)	3.85	1.090	869
Too much of my career/ study aspirations would be disrupted if I left Staffordshire University early							
63 (7.2)	67 (7.7)	159 (18.2)	270 (31.0)	313 (35.9)	3.81	1.210	872
I have worked with staff to make improvements on my course							
69 (7.9)	109 (12.5)	271 (31.0)	281 (32.2)	144 (16.5)	3.37	1.134	874
I would recommend Staffordshire University to others							
77 (8.8)	79 (9.0)	197 (22.4)	299 (34.1)	226 (25.7)	3.59	1.210	878
The University communicates well with me on course matters							
78 (8.9)	135 (15.4)	192 (21.9)	308 (35.2)	163 (18.6)	3.39	1.206	876
I would rate my course to be at an appropriate standard							
62 (7.1)	92 (10.5)	123 (14.0)	343 (39.1)	258 (29.4)	3.73	1.191	878
I am clear as to what I need to do to be successful in my studies							
50 (5.6)	63 (7.1)	126 (14.2)	351 (39.7)	295 (33.3)	3.88	1.121	885
I plan to join the Staffordshire University alumni association							
166 (19.1)	112 (12.9)	393 (45.5)	109 (12.6)	86 (9.9)	2.81	1.176	868
I would study another course at Staffordshire University							
131 (14.9)	124 (14.1)	252 (28.8)	206 (23.5)	164 (18.7)	3.17	1.301	878
Overall, I am satisfied with the course I am currently studying							
72 (8.2)	75 (8.5)	124 (14.1)	319 (36.2)	292 (33.1)	3.78	1.224	882
n=891							

6.4 Scale Reliability - Cronbach's Alpha

The sections of the questionnaire were based on previous research by the HEA (Buckley 2013) and piloting of the UKES survey by the HEA. The specific section on respondent's experience of Staffordshire University (section 17) was developed in line with research into partnership and co-production. In addition bespoke questions were included on quality and feelings of belonging (Q22 and 24). These sections were computed into new scale variables using the mean of the relevant section. The face validity of these were assessed, evaluated and then tested for reliability.

The scale variables created and the section of the questionnaire were:

- Critical Thinking - section 2
- Learning with Others - section 4
- Interacting with Staff – section 6
- Reflecting and Connecting – section 8
- Skills Development – section 13
- Learning Skills – subset of section 13
- Creative and Social Skills- subset of section 13
- Study Time – section 15
- Other Time - subset of section 15
- Belonging - subset of section 17 and 24
- Perceived Quality - subset of section 17 and 22

New variables were created from the means of the groupings of engagement factors and then frequencies were run and the validity and reliability of the scales were assessed. Validity is assessing whether the variables are measuring what they are intended to measure. Cronbach's alpha (α) is used to measure internal consistency or reliability (Cronbach 1951); that is how much the items are measuring a latent variable, that they are measuring the same thing and therefore correlated. Alpha ranges can be between 0 and 1 and those at .7 or above are considered adequate (Nunnally and Bernstein 1994). It is noted though that α is affected by the number of items in a scale so if there are a high number of items α can be high and if there are few it can be low (Tavakol and Dennick, 2011). Streiner

(2003) suggested that where α was $>.9$ the number of items may be too many or measuring the same factor. In question 17 below the α is high and may be affected by the number of items and this is one of the reasons why this was divided into two latent variables, perceived quality and belonging as it was thought that the scale was measuring two attributes. Course challenge was considered as a scale but having only two items this was not enough and as the Cronbach's Alpha was very low (.581) it was discounted in this analysis, but was included in the factor analysis to evaluate whether these items could be put with other variables. Scales can also be affected by item redundancy, which is where items are asking very similar questions. This was tested and developed further in the Confirmatory Factor Analysis. Running Exploratory Factor Analysis on each of the scales was considered but it was decided instead to run EFA with all the possible engagement variables and then refine the model further using Confirmatory Factor Analysis.

Table 6-11 Scale Reliability CT and LWO

Critical Thinking Scale Items	Learning with Others Scale Items
Applying facts, theories and methods	Worked with other students on course projects or assignments
Analysing ideas or theories in depth	Explained course material to one or more students
Evaluating or judging a point of view decision or information source	Asked another student to help you understand course material
Forming a new understanding from various pieces of information	Prepared for exams or assessments by discussing or working through course material with other students
<i>Cronbach's Alpha = .852</i>	<i>Cronbach's Alpha = .700</i>

The critical thinking scale indicated high reliability although the learning with others scale was still reliable but was on the borderline of acceptability.

Table 6-12 Scale reliability IWS and RC

Interacting with staff	Reflecting and connecting
Asked questions in taught sessions or contributed to discussions about course material in other ways	Combined ideas from different modules when completing assignments
Discussed your academic performance and/or feedback with teaching staff	Connected your learning to real-world problems or issues
Talked about your career plans with teaching staff or advisors	Examined the strengths and weaknesses of your own views on a topic or issue
Discussed ideas from your course with teaching staff outside taught sessions,	Tried to better understand someone else's views by imagining how an issue looks from his or her perspective
Worked with teaching staff on activities other than coursework	Changed the way you thought about a concept or issue as a result of what you learned
Made significant changes to your work based on feedback	Connected ideas from your course to your prior experience and knowledge
<i>Cronbach's Alpha =.820</i>	<i>Cronbach's Alpha =.845</i>

Both scales for interacting with staff and reflection and connecting were acceptable on reliability.

Table 6-13 Scale reliability skills

Skills Development	Learning Skills Development
Writing clearly and effectively	Writing clearly and effectively
Speaking clearly and effectively	Speaking clearly and effectively
Thinking critically and analytically	Thinking critically and analytically
Analysing numerical and statistical information	Analysing numerical and statistical information
Acquiring employability skills	Acquiring employability skills
Becoming an independent learner	Becoming an independent learner
Being innovative and creative	<i>Cronbach's Alpha =.814</i>
Working effectively with others	Creative and Social Skills Development
Developing or clarifying personal values or ethics	Being innovative and creative
Understanding people of other backgrounds	Working effectively with others
Exploring complex real-world problems	Developing or clarifying personal values or ethics
Being an informed and active citizen	Understanding people of other backgrounds
<i>Cronbach's Alpha =.905</i>	Exploring complex real-world problems
	Being an informed and active citizen
	<i>Cronbach's Alpha =.899</i>

The scale for skills development α was above .9 and so was thought to be too long and was giving an artificially high score. It was decided then to separate this into two scales, learning skills and creative and social skills development. These were both acceptable being $\alpha=.814$ and $\alpha=.899$ respectively.

Table 6-14 Scale reliability ‘time’

Time spent studying	Time spent ‘other’
Time spent in taught sessions	Participating in extra-curricular or co-curricular activities
Time spent in independent study	Working for pay
<i>Cronbach's Alpha =.187</i>	Doing volunteer work
	Providing care for dependants
	Commuting to campus
	<i>Cronbach's Alpha =.284</i>

When the section on how students spend their time was analysed it was not valid to look at this as a scale as there were two distinct areas; time spent studying and time on other activities. These could be conflicting demands on time. So for example if a student was doing many hours on other activities such as working they may well not have as much time for studying. The α scores for these two scales are low and when the items are looked at there is validity issues on considering them as scales as there is no real correlation between items such as doing volunteer work and commuting to campus. There are only two items on the time spent studying scale and so the α score was low. It is accepted though that the time that students spend studying is an important factor in the success and engagement of students and so the items of these were included in the Exploratory Factor Analysis.

Table 6-15 Scale reliability experience at Staffordshire

Experience at Staffordshire	Perceived Quality
I feel a strong sense of belonging to Staffordshire University	The University communicates well with me on course matters
My experience at Staffordshire University is what I hoped it would be	I would rate my course to be at an appropriate standard
I tell others of my experience at Staffordshire University	I am clear as to what I need to do to be successful in my studies
Too much of my career/ study aspirations would be disrupted if I left Staffordshire University early	I plan to join the Staffordshire University alumni association
I have worked with staff to make improvements on my course	I would study another course at Staffordshire University
I would recommend Staffordshire University to others	Overall, I am satisfied with the course I am currently studying
The University communicates well with me on course matters	Q22 Rating quality
I would rate my course to be at an appropriate standard	Cronbach's Alpha = .887
I am clear as to what I need to do to be successful in my studies	Belonging
I plan to join the Staffordshire University alumni association	I feel a strong sense of belonging to Staffordshire University
I would study another course at Staffordshire University	My experience at Staffordshire University is what I hoped it would be
Overall, I am satisfied with the course I am currently studying	I tell others of my experience at Staffordshire University
Cronbach's Alpha= .926	Too much of my career/ study aspirations would be disrupted if I left Staffordshire University early
	I have worked with staff to make improvements on my course
	I would recommend Staffordshire University to others
	I plan to join the Staffordshire University alumni association
	I would study another course at Staffordshire University
	Q24 student rep? Member of club? Active in student union?
	Cronbach's Alpha .770

The section on students' experience at Staffordshire University (Q17) taken as a scale was very high and this was probably due to the number of items. It was decided then to separate items into perceived quality and belonging. There were two other questions that concerned these variables and so along with items from question 17 items on rating of quality and activities were also included. Items on

alumni and future study were thought of as being applicable to both scales of belonging and perceived quality and so these were included in both.

Most of the initial engagement scales related to the sections of the questionnaire were reliable. Especially strong were critical thinking, reflecting and connecting, creative and social skills and perceived quality. This was a good initial result but it was decided to look further into the factors to see if these were grouped into the correct latent variables and whether there were redundant items. To reduce the large number of items in the original analysis, Exploratory Factor Analysis was used and then developed into Confirmatory Factor Analysis. Firstly though some of the relationships between variables were investigated

6.5 Cross tabulations - chi-squared

The initial engagement scales were cross-tabulated with the following variables:

- Entry qualifications Q18
- Quality Rating Q22
- Department Q40
- Grades so far Q23
- Gender Q26
- Age Group Q25_a
- Work placement students Q21
- Ethnicity Q30

Contingency tables were produced and evaluated along with the Pearson chi-squared statistics (χ^2). The chi-squared test is a test of association between two categorical variables that can be nominal or ordinal (<https://statistics.laerd.com>). The above list of questions are nominal and the scales of engagement being for example, 'very much' or 'very little' are ordinal. Phi and Cramer's V are both tests of the strength of association and were analysed in the SPSS output along with the probability of the null hypothesis being accepted or rejected; that is there is not an association or there is. The assumptions reported within the SPSS output (a) were also checked as this reported the number of cells with minimum count less than five where it is appropriate to evaluate χ^2 . There should be a frequency of at least

five in each cell (80%) so if it is higher than 20% the test is not as reliable. In the analysis below the confidence interval was set at 95% significance so $p < 0.05$. The chi-square table requires the table's degrees of freedom (df) in order to determine the significance level of the statistic which are calculated by the number of $(\text{rows}-1) \times (\text{columns}-1)$.

The sample size was large enough but as there were a high number of categories, this reduced the number in each cell. Watson et al 2006 recommends a sample of at least 50, where samples need to be reasonably evenly distributed across categories. If there are a large number of cells (greater than 20) it can make it difficult to meet the assumption to have 5 in each cell (McHugh, 2013). As there were a high number of cells in many of the contingency tables calculated it meant that there was often a high number of cells with fewer than 5 in each cell. This could have been resolved in the data by reducing the number of categories or using other tests. Fishers exact test could not have been used as this is only for 2x2 tables but the likelihood ratio can be looked at to see if significant (McHugh, 2013).

A number of the variables above did not have any strong associations with the computed engagement scales. These included; age group, ethnicity and work placement. There was no association with entry qualifications and engagement scales except for 'belonging' where; $\chi^2(28)=55.246$, $p=.002$. However, the assumption for minimum frequencies in cells was violated as this was 40% and the acceptable level is less than 20%. Although the Likelihood ratio was significant ($p=.000$) it was not a particularly interesting finding. The variables of more interest that showed some association are examined below.

6.5.1 Academic Subject or Department

Critical thinking and academic subject are associated with $\chi^2(33)=94.612$, $p=.000$. There were 13 cells (27.1%) with an expected count less than five as there were a high number of cells but the likelihood ration was significant $P < 0.001$ as was the strength of association. Health (Psychology Sports and Exercise) students were

particularly positive on the critical thinking development on their course. In reflecting and connecting Arts, Design and Computing students noted their development as being higher than other departments. The association with course challenge is not so strong $\chi^2(33)=63.407$, $p=.001$, likelihood ratio $p=.005$ and this is affected by the number of cells with less than 5 responses.

Table 6-16 Summary of Chi-squared Scores by Academic Subject

Factor	χ^2 score	df	% cells expected <5	Phi	Cramer's V	sig	n
Critical thinking	94.612	33	27.1%	.326	.188	.000	890
Reflecting and Connecting	77.808	33	25.0%	.296	.154	.000	891
Course Challenge	63.709	33	47.9%	.267	.154	.001	891
Learning Skills	75.196	33	25.0%	.291	.168	.000	891

6.5.2 Grades so Far

Although a high number of students who were getting high grades scored highly on the critical thinking scale 83.4% who had 70% or higher said their course critical thinking quite a bit or very much, it was not statistically significant $\chi^2(15)=19.399$, $p=.196$. Looking at grades so far and the time students spend studying ($\chi^2(35)=82.783$, $p=.000$) initially looked significant but because there were a high number of cells with low frequency (23, 47.9%) and the Likelihood ratio was not significant ($p=.071$). The perceived quality scale was associated with grades so far ($\chi^2(25)=110.742$, $p=.000$) but there was again a high number of cells with a low frequency (17, 47.2%).

Table 6-17 Summary of Chi-squared Scores by Grades so Far

Factor	χ^2 score	df	% cells expected <5	Phi	Cramer's V	sig	n
Critical thinking	19.399	15	33.3%	.148	.085	.196	886
Time Spent Studying	82.783	35	47.9%	.306	.137	.000	886
Perceived Quality	110.706	25	47.2%	.353	.158	.000	887

6.5.3 Gender

Of the students who said that they had very little critical thinking development, 69.6% were male and of those who said they had very much 64.2% were female. However, this was not statistically significant to $p=.005$, ($\chi^2(3)=12.046$, $p=.007$). The time students reported to be spending studying was higher for males than females and was significant ($\chi^2(7)=20.327$, $p=.005$). The time that students reported to be spent on other activities was interesting ($\chi^2(6)=18.854$, $p=.004$) as 37.2% of males as opposed to 27.7% of females said they did zero hours of time spent on this. This included working for pay, volunteering, university clubs, commuting and caring for dependents.

Table 6-18 Summary of Chi-squared Scores by Gender

Factor	χ^2 score	df	% cells expected <5	Phi	Cramer's V	sig	n
Time Spent Studying	20.327	7	12.5%	.151	.151	.005	890
Time Spent Other	18.954	6	42.9%	.146	.146	.004	890

6.5.4 Quality Rating

Most of the engagement scales were associated positively with respondents rating of the quality of their course, so essentially if they were highly engaged they thought the quality was high. Of the students who thought their course developed critical thinking only very little 43.5% also thought that the quality of the course was very poor. 45.8% of students who thought their course developed critical thinking very much also thought that the quality of the course was excellent. This finding was significant ($\chi^2(12)=299.687$, $p=.000$). The association with learning with others was also significant, ($\chi^2(12)=29.820$, $p=.003$). Reflection and connection associated with quality rating was significant, ($\chi^2(12)=277.945$, $p=.000$). For example, 72.7% of students who said their course had never reflected or connected rated their course as very poor; 48% of students who said their course had very often reflected or connected rated their course as excellent. 91.2% of students who rated their course excellent also said their course challenged them very much ($\chi^2(12)=329.706$,

p=.000). 45.5% of students who said their course developed their learning skills very little also said that their course was very poor. Conversely 60.9% of students who said their course developed their learning skills very much said that their course was excellent ($\chi^2(12)=318.768$, p=.000).

Table 6-19 Summary of Chi-squared Scores by Quality Rating

Factor	χ^2 score	df	% cells expected <5	Phi	Cramer's V	sig	n
Critical thinking	299.687	12	20.0%	.582	.336	.000	886
Learning with Others	29.820	12	20.0%	.183	.106	.003	886
Course Challenge	329.706	12	35.0%	.610	.352	.000	887
Learning Skills	318.768	12	15.0%	.599	.346	.000	887
Reflecting and Connecting	277.945	12	20.0%	.560	.323	.000	887
Department/ Subject	102.726	44	36.7%	.340	.170	.000	887

As there seemed to be an association between quality rating and engagement scales it was decided to also compute cross tabulations of quality with the academic subject, gender and ethnicity. Gender and ethnicity were not significant but department was, where Computing and Engineering had low quality ratings but Arts and Design and Health (Psychology, Sports and Exercise) were good.

6.6 Exploratory factor analysis

Initially all the engagement factors were entered into exploratory factor analysis (EFA) so included:

1. The HEA item Scales
 - a. Critical Thinking (Section 2 – 4 Qs)
 - b. Learning with Others (Section 4 4 Qs)
 - c. Interacting with staff (Section 6 6 Qs)
 - d. Reflecting and Connecting (Section 8 6 Qs)
 - e. Course Challenge (Section 10 and 11 2Qs)
 - f. Learning Skills Section 13 – Qs 1-6

- g. Creative and Social Skills Section 13 – Qs 9-12
 - h. Time - spent studying Section 15 Qs 1 and 2
 - i. Time – spent other Section 15 Qs 3-7
2. Perceived Quality and Belonging – Q17 – 1,2,3,4,5,6,7,8,9,10, 11,12 and Q22, Q24 -1,2,3

It was decided to use PAF extraction with oblimin rotation suppressing values lower than .3 for clarity. Therefore, the initial model had 57 items and 11 factors. There were various iteration of the EFA model where the scree plot, pattern matrix, the Kaiser-Meyer-Olkin measure of sampling adequacy and the significance associated with the Bartlett's test of sphericity were analysed. Some items that had low scoring eigenvalues and low positive responses were removed, these included Q24 on whether the student was an active member of the union, society or student representative . The items on time spent on other was removed as on reflection it did not really make sense that there would be a coherent reason for time spending on commuting as adding to engagement but these items were looked at in cross tabulations in the previous section. The two items on time spent studying, taught sessions and independent study, loaded onto one distinct factor. It was then also removed as it was low scoring (just above .3 factor loading), had a 10 point interval scale where responses concentrated on a narrow band and it was thought there may be some confusion as to the terminology used. Three items were also loading on more than one factor which suggests that they were asking very similar questions so these were also removed. The final version of the model from EFA then was reduced to 7 factors with a total of 44 items.

6.6.1 The Final EFA model

The final seven factors are listed below with the labels that were then used in the Confirmatory Factor Analysis model. The reliability of each of the factors was tested. All factors are at least .7 on the Cronbach's alpha reliability test so show internal consistency. The Peer learning factor was the lowest but as it was still acceptable it was decided to keep this factor in for the present.

Factor One – Academic skills development and course challenge (ASkill) α .859

Factor Two – Belonging and Perceived Quality (BPQ) α .930

Factor Three – Interacting with Tutors (IWT) α .820

Factor Four – Critical Thinking (CT) α .852

Factor Five – Learning with Others - Peer Learning (PL) α .700

Factor Six – Reflecting and Connecting (R and C) α .845

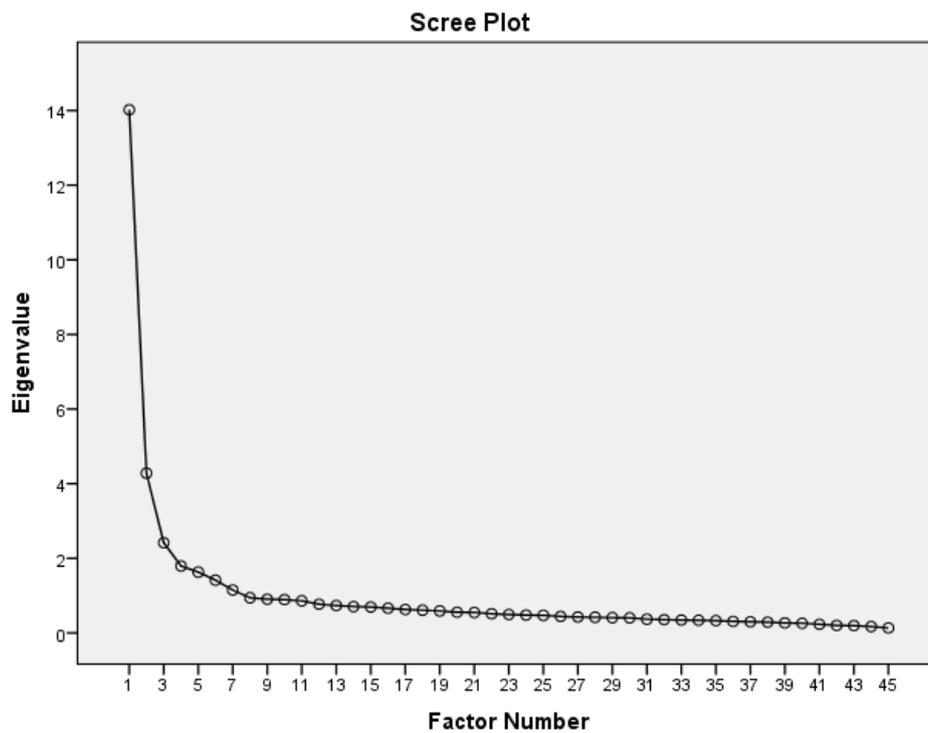
Factor Seven – Personal skills development (PSkill) α .873

Each of the items in the Factors are listed in the pattern matrix below along with the associated eigenvalue. These in the main corresponded with the sections on the questionnaire but skills development included an element of course challenge and belonging and quality included the question on rating quality, which corresponded to the initial scale construction. Two items were cross loading on more than one factor and so these were removed to allow for Confirmatory Factor Analysis.

Table 6-20 Latent Factors in Student Engagement: Exploratory Factor Analysis

Pattern Matrix ^a							
	Factor Loadings						
	1	2	3	4	5	6	7
Factor One – Academic skills development and course challenge α .859							
Becoming an independent learner SD 13_6	.582						
Thinking critically and analytically SD 13_3	.576						
Being innovative and creative SD 13_7	.564						
Speaking clearly and effectively SD 13_2	.529						
Writing clearly and effectively SD 13_1	.499						
During the current academic year, how much has your course challenged you to do your best work? CC 11	.412						
Acquiring employability skills SD 13_5	.312						
Factor Two - Belonging and Perceived Quality α .930							
I would recommend Staffordshire University to others B AND Q 17_6		-.876					
Overall, I am satisfied with the course I am currently studying B AND Q 17_12		-.866					
I would rate my course to be at an appropriate standard B AND Q 17_8		-.841					
My experience at Staffordshire University is what I hoped it would be B AND Q 17_2		-.830					
I am clear as to what I need to do to be successful in my studies B AND Q 17_9		-.748					

Figure 6-1 Scree Plot of Final EFA Model



6.7 Confirmatory factor analysis

The stages of developing confirmatory factor analysis and the use of AMOS was outlined in the methodology chapter. When there was a model that ran successfully the following were evaluated in turn:

- Face Validity
- Model fit indicators
- Modification indices
- Covariance
- Standardised regression weights
- Validity and Reliability

So initially, the way in which items had been grouped into latent variables was formed from the exploratory factor analysis and face validity. Then the output table was evaluated, firstly looking at model fit indicators. Chi-Square is termed CMIN in AMOS output. The Relative Chi Square (CMIN/DF) has an upper threshold of 5 and

should be less than 3. The PCFI (Parsimony Adjustment Comparative Fit Index) should be above .8, CFI should be above .95, PCLOSE (probability of close fit) should be above .05 (so not significant) and the RMSEA (root mean square error of approximation) should be less than .1 but preferably less than .05. The table below of the final model shows a good fit.

Table 6-21 Final CFI Model Fit

CMIN/DF	PCFI	CFI	PCLOSE	RMSEA
2.503	.834	.973	.999	.041

Modification indices were then evaluated, this was mainly looking at covariances, where they were high, a decision was made whether to take out one of the items as this was showing similarity to another. A covariance also can be added between residuals on the same latent variable. Then under 'estimates' and 'scales' of the AMOS output the standardised regression weights were evaluated. If these initially were less than .58 the item was removed. Later anything less than .6 were removed and in the last iteration of the model there was nothing remaining less than .64 and this item was thought to be important to be left in (thinking critically and analytically as this was considered to be a key skill in higher education). The standardised residual matrix was then evaluated to see if there were any particularly high scores.

Looking at these indicators a number of iterations of the model was run. When these looked good then the statistical tests for reliability and validity were calculated. This utilised a macro enabled Excel package where covariance and regression weights were loaded to see if there were any problems in reliability and validity.

Table 6-22 Iterations of the model

1	All items from final EFA – seven factors with 44 items run
2	Take out items 17-10, 17-5 and 6-1
3	Take out items 4-1, 4-2, 4-3 and 17-4 – this left only 4-4 in Peer Learning so it was put with other factors but then scored poorly on standardised regression and so the factor ‘Peer Learning’ was removed so model reduced to 6 factors
4	Take out items 17-3 and 6-5
5-7	Added covariances between residuals on the same factor
7-8	Ran reliability and validity tests, problems on the Academic Skills section so took out 13-5 and 13-7
9	Still problems with validity due to high correlation between 8-2 and 13-11 (.76) – both relating to ‘real world issues’ so took out 8-2
10-11	Took out 8-1 and 11 (course challenge) in academic skills
12	Took out 6-6 and 13-6 but still some validity problems
13	Still some problems on validity – academic skills and personal skills highly correlated .769 so put together as ‘skills’ in model 13 and this worked well with no validity problems. So model reduced to 5 Factors
14-15	Q22 on satisfaction causing problems due to high covariance (some standardised residual covariances were over 6); there was another Q on perceived quality in Q17 so left this one in. No validity problems.
16-21	It was considered to leave the model at iteration 15 but there were 12 covariances between residuals and this was considered to be a weakness of the model. All the covariances were taken out. Covariances were added again sequentially and the model re-run throughout to check for model fit.
22	Take out 17_11 - covaried highly with 17_6 as similar Q
23	There was high covariance in the academic skills factor between 13-9 and 13-10 and again between 13-3 and 13-10. Although 13-10 had a slightly lower score than 13-3, 13-10 was taken out as this concerned understanding people and 13-3 was on critical thinking skills. The model fit was borderline but no validity issues.
24	Covariance added to 17-1 and 17-2 to improve model fit to a good level and no validity issues.

At each iteration of the model the model fit, modification indices and reliability and validity was checked. Below is a summary of the different iterations and outcomes.

Table 6-23 Examples of Indicators throughout Iterations of the CFA Model

	Initial Model	7 th model	15 th model	24 th model
CMIN/DF	3.469	3.117	2.256	2.503
Chi Squared	3059.455	1564.960	624.834	495.626
RMSEA	.053	.049	.038	.041
FMIN	3.438	1.758	.702	.557
RFI	.848	.904	.947	.950
CFI	.895	.940	.974	.973
PCFI	.834	.841	.830	.834
PCLOSE	.016	.765	1.000	.999
Degrees of freedom	882	502	277	198
Probability	.000	.000	.000	.000
Validity	Not tested	Validity issues	No Validity issues	No Validity issues
Other issues			12 covariances were added	One covariance added
Conclusions	Not a good fit	Better fit but validity problem	Good fit but problem with covariance	A good fit and only one covariance – final model

Reliability and Validity

The validity and reliability of the iterations of the model were tested. Reliability was retested using composite reliability (CR) that should be $>.7$. Convergent validity, average variance extracted (AVE) should be $>.5$ and Discriminant validity $MSV < AVE$, $ASV < AVE$ and the square root of AVE should be greater than inter-construct correlations (Hair et al 2010). MSV is maximum shared variance and ASV is average shared variance. If there are convergent validity issues the latent factor is not well explained by the items so they do not correlate very well with each other. If there are discriminate validity issues then the items correlate more with items outside the factor than within it. Early iterations of the model had validity concerns. An example is on iteration model 7 where violations are in red and listed below.

Table 6-24 Model 7 Reliability and Validity

	CR	AVE	MSV	MaxR(H)	IWTut	CritT	ASkill	PSkill	BPQ	RandC
IWTut	0.797	0.495	0.419	0.798	0.704					
CritT	0.845	0.578	0.397	0.906	0.398	0.760				
ASkill	0.857	0.463	0.638	0.941	0.614	0.630	0.681			
PSkill	0.865	0.617	0.638	0.958	0.479	0.582	0.799	0.786		
BPQ	0.936	0.624	0.270	0.977	0.387	0.440	0.520	0.437	0.790	
RandC	0.843	0.473	0.472	0.979	0.647	0.596	0.687	0.670	0.346	0.688

Validity concerns on model 7

Discriminant Validity: the square root of the AVE for ASkill is less than one the absolute value of the correlations with another factor.

Discriminant Validity: the square root of the AVE for PSkill is less than one the absolute value of the correlations with another factor.

Convergent Validity: the AVE for IWTut is less than 0.50.

Convergent Validity: the AVE for ASkill is less than 0.50.

Discriminant Validity: the AVE for ASkill is less than the MSV.

Discriminant Validity: the AVE for PSkill is less than the MSV.

Convergent Validity: the AVE for RandC is less than 0.50.

The model was run with some items taken out and with covariances added between the residuals. Covariances can be added to the error terms on the same latent variable. However it was realised that although at model 15 there was a very good fit and it held for reliability and validity there were a high number of covariances added. This causes problems as it means that the model is not really measuring what it should. It was then decided to remove all covariances, take out some of the problematic items that seemed to be measuring the same as another item or were low scoring and only adding the minimum covariances. The model variant 24 was reduced to 22 items, loaded onto 5 factors but had a good fit, displayed reliability and validity and only one covariance.

Table 6-25 The final model reliability and validity (model 24)

	CR	AVE	MSV	MaxR(H)	IWTut	CritT	Skills	BPQ	RandC
IWTut	0.776	0.536	0.338	0.778	0.732				
CritT	0.854	0.594	0.381	0.904	0.347	0.771			
Skills	0.841	0.572	0.450	0.938	0.470	0.617	0.756		
BPQ	0.937	0.680	0.192	0.971	0.323	0.408	0.438	0.825	
RandC	0.813	0.522	0.450	0.974	0.581	0.553	0.671	0.305	0.722

No Validity Concerns

Final 5 factors from CFA

Factor One – Skills (Items 13 –3,9,11,12)

Factor Two – Belonging and Perceived Quality BPQ (Items 17- 1,2,6,7,8,9,12)

Factor Three – Interacting with Tutors IWT (Q6 – 2,3,4)

Factor Four – Critical Thinking CT (Q2 - 1,2,3,4)

Factor Five – Reflecting and Connecting R and C (Q8- 3,4,5,6)

The model was refined from the EFA seven factors and 44 items to five factors and 22 items. The final model standardised regression weights below shows good scores on all items, the lowest being .64 which was the skill of thinking critically and analytically. As this is an essential skill for university study it was decided to retain this. Some of the highest regression weights were on the factor ‘belonging and perceived quality’ which was the factor that was introduced to the HEA study for this research. It did therefore show that the research has made an important contribution to understanding the factors of student engagement. These items centre around behaviour and attitudes of students rather than the course design or tutor input.

Table 6-26 Standardised Regression Weights

Item	Factor	Estimate	Item	Factor	Estimate
Q8_4	R and C	.745	Q17_2	BPQ	.797
Q8_3	R and C	.738	Q17_1	BPQ	.734
Q8_5	R and C	.747	Q17_6	BPQ	.864
Q8_6	R and C	.655	Q17_7	BPQ	.790
Q2_4	CritT	.775	Q17_8	BPQ	.907
Q2_3	CritT	.788	Q17_9	BPQ	.756
Q2_2	CritT	.796	Q17_12	BPQ	.907
Q2_1	CritT	.722	Q6_3	IWTut	.761
Q13_3	Skills	.644	Q6_2	IWTut	.709
Q13_9	Skills	.757	Q6_4	IWTut	.725
Q13_11	Skills	.819			
Q13_12	Skills	.793			

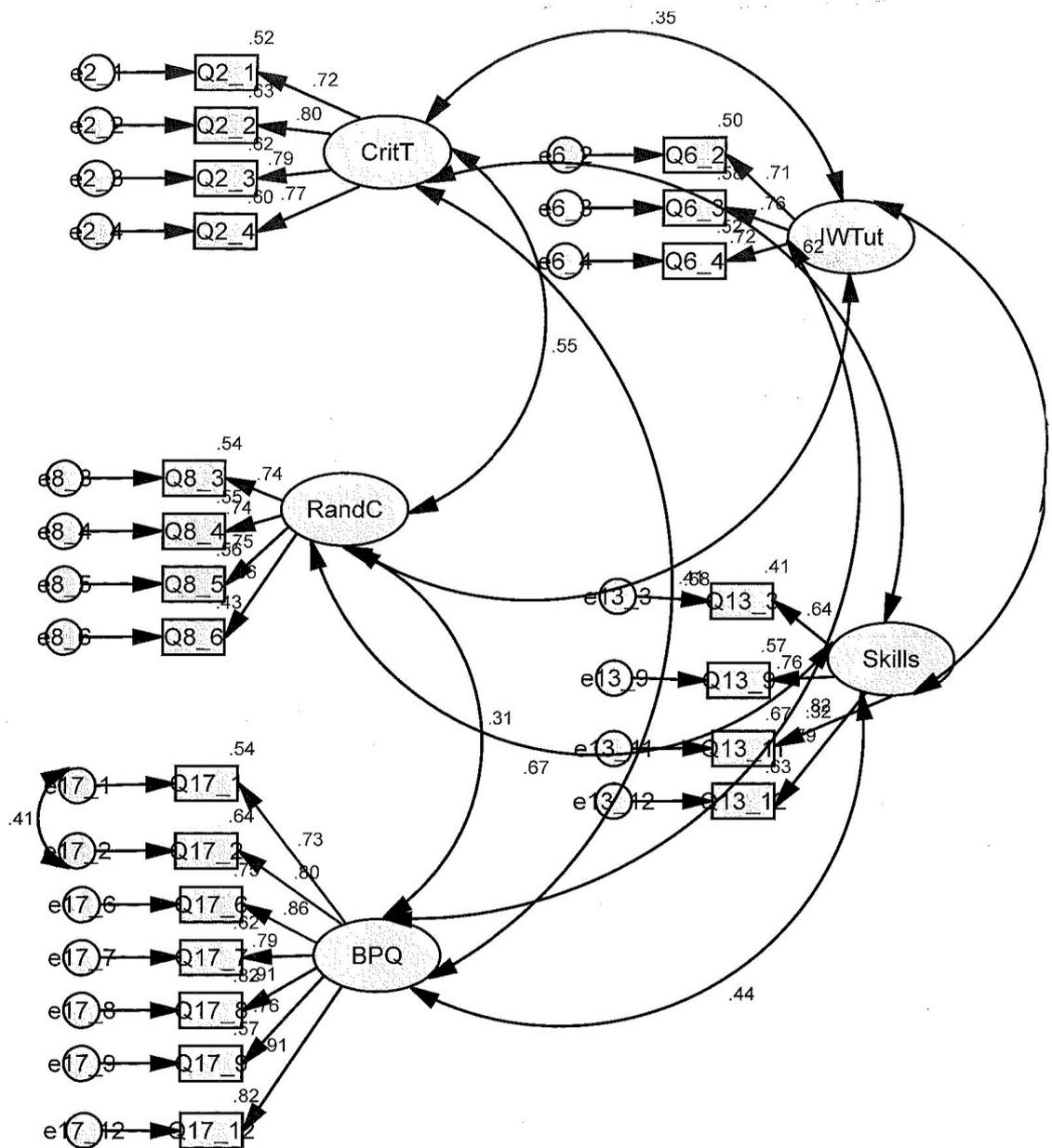
The associated correlations between factors and the error variable that was added are shown below, these should not be more than .8 and none are so this is a good result.

Table 6-27 Correlations of final model

IWTut	<-->	CritT	.347	BPQ	<-->	Skills	.438
CritT	<-->	Skills	.617	RandC	<-->	Skills	.671
BPQ	<-->	CritT	.408	RandC	<-->	BPQ	.305
RandC	<-->	CritT	.553	IWTut	<-->	Skills	.470
IWTut	<-->	BPQ	.323	e17_2	<-->	e17_1	.410
IWTut	<-->	RandC	.581				

The path diagram in figure 6-2 visually illustrates the final model and the five factors of critical thinking, interacting with tutors, skills, reflecting and connecting and belonging with perceived quality.

Figure 6-2 Path Diagram of Final CFA Model



The items that were eliminated from the final EFA to the final CFA are listed below in table 6-28. It was surprising that skills of writing and speaking had to be removed for good model fit and this was resisted until very late iterations. The skill of thinking clearly and analytically to students is probably quite similar to writing and speaking and the items in the critical thinking scale. Some of the items that remained in skills development of the final CFA were surprising, for example, it was thought that acquiring employability skills would be included more than developing personal values. It is of course a product of the design of courses at the university and if there were more of an overt curriculum development into employability then students may recognise this more in their courses. The item on combining ideas from different modules is a problem for modular courses where courses are a series of modules rather than a fully coherent course where staff and students see the connectedness. Some of the items on belonging and perceived quality were rather similar to each other. It was believed that the question of rating the quality of the course Q22 was related to the more detailed questions in Q17. This was one of the sections designed specifically for this research, so it was good to see its importance in the final CFA. 'Interacting with staff' was interesting; performance, ideas and careers were discussed. Students did not report making significant changes to assessments from feedback or asked questions in class. This may be due to tutors being unwilling to give specific feedback on draft assignments although it is disappointing that students are not contributing to discussions in class. All the original items from the critical thinking section were retained. It was disappointing that no items from learning with others could be kept and different items from this were tried with other factors but they did not fit the model. In some of the free comments, there was a nervousness around working with other students in case they could be accused of plagiarism or they were giving other students an advantage over themselves.

Table 6-28 Items removed and retained in CFA Model

Items taken out from final EFA to final CFA	Items retained in Final CFA
Skills Development	Skills Development
Writing clearly and effectively 13_1	Thinking critically and analytically 13_3
Becoming an independent learner 13_6	Being an informed and active citizen 13_12
Speaking clearly and effectively 13_2	Developing or clarifying personal values or ethics 13_9
Being innovative and creative 13_7	Exploring complex real-world problems 13_11
Acquiring employability skills 13_5	Reflecting and Connecting
Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.) 13_10	Tried to better understand someone else's views by imagining how an issue looks from his or her perspective 8_4
Course Challenge – included in skills development factor in EFA	Examined the strengths and weaknesses of your own views on a topic or issue 8_3
During the current academic year, how much has your course challenged you to do your best work? 11	Connected ideas from your course to your prior experience and knowledge 8_6
Reflecting and Connecting	Changed the way you thought about a concept or issue as a result of what you learned 8_5
Combined ideas from different modules when completing assignments 8_1	Belonging and Perceived Quality
Connected your learning to real-world problems or issues 8_2	I would recommend Staffordshire University to others 17_6
Belonging and Perceived Quality	Overall, I am satisfied with the course I am currently studying 17_12
I tell others of my experience at Staffordshire University 17_3	I would rate my course to be at an appropriate standard 17_8
Too much of my career/ study aspirations would be disrupted if I left Staffordshire University early 17_4	My experience at Staffordshire University is what I hoped it would be 17_2
I would study another course at Staffordshire University 17_11	I am clear as to what I need to do to be successful in my studies 17_9
How would you rate the quality of your current course at Staffordshire University? 22	I feel a strong sense of belonging to Staffordshire University 17_1
I have worked with staff to make improvements on my course 1-5	The University communicates well with me on course matters 17_7
I plan to join the Staffordshire University alumni association 17_10	Interacting with Staff
Interacting with Staff	Talked about your career plans with teaching staff or advisors 6_3
Worked with teaching staff on activities other than coursework 6_5	Discussed ideas from your course with teaching staff outside taught sessions, including by email/online 6_4
Made significant changes to your work based on feedback 6_6	Discussed your academic performance and/or feedback with teaching staff 6_2
Asked questions in taught sessions or contributed to discussions about course material in other ways 6_1	Critical Thinking
Learning with Others – all scale deleted	Analysing ideas or theories in depth 2_2
Prepared for exams or assessments by discussing or working through course material with other students 4_4	Applying facts, theories or methods (for example to practical problems or new situations) 2_1
Asked another student to help you understand course material 4_3	Evaluating or judging a point of view, decision or information source 2_3
Worked with other students on course projects or assignments 4_1	Forming a new understanding from various pieces of information 2_4
Explained course material to one or more students 4_2	

6.8 Thematic analysis of qualitative data

After each section of engagement constructs in the questionnaire there was a free text box for comments. This added significantly to the analysis and understanding of the constructs. Initially they were coded as being positive or negative and then further coded according thematic analysis. The main finding from these are discussed below and further quotes under each section are in appendix four.

In the section on critical thinking there were 71 free comments noted. There was an indication that there was some difficulty in understanding the concept of critical thinking, which supported the focus group research. Respondents here often did not comment particularly on the questions but rather general satisfaction or dissatisfaction especially around feedback. The positive and negative comments were noted and coded and then further broken down into variability in modules and suggested improvements. It was also noted in the themes the need for universities to communicate the concept of critical thinking clearly.

Table 6-29 Thematic Analysis on Critical Thinking

Themes	Examples
Understanding critical thinking	<i>'This is an important area and helps provide guidance for future tasks'</i>
Communicating criticality	<i>'My course didn't need critical thinking'</i> <i>'... I had little training or little time to research on how to do it correctly.'</i>
Variability in modules	<i>'some modules did a much better job than others'</i> <i>'Massive difference between lectures and seminars'</i>
Suggestions for improvement	<i>If theories are needed to improve grades, this should be outlined in the assignment brief along with the statement of a minimum of references to be used. I feel some of the briefs are misleading.'</i>

In the section of learning with others, there were 87 individual open comments. Students in general appreciated working with other student networks although at times this was used to supplement their learning where there was limited tutor

support. It was reported by some students that there was not enough opportunity to work with others although there were problems with group work if it was directly related to grades.

Table 6-30 Thematic Analysis on Learning with Others

Theme	Examples
Support from other students	<i>'discussed assessment requirements/understanding in small groups, both formally and informally'</i> <i>'Have good support network with other students on my course.'</i>
Replacing tutor support	<i>'I have had to ask students for help explaining things as lecturers often came up short when asked...'</i>
Problems with group work	<i>'Working within a group causes complications'</i> <i>'...being assessed as a group is always unfair as one person always ends up taking the majority of the workload while the others get a free ride.'</i>
Not enough	<i>'Group assignments were quite limited and I think students would benefit more from an increase in this area.'</i> <i>'Only one of modules actually had me working with others. If we could prepare presentations, teach each other, and work with each other, that'd be much better!'</i>

There were 88 individual open comments in the section of interacting with staff. Many comments concerned the variability of staff and this caused high emotions. Where positive staff-student relationships were reported, it was valued highly. Feedback on work was another particular concern where the quality of the feedback and timeliness was an issue. Again, communication was something that universities could work on.

Table 6-31 Thematic Analysis on Interacting with Staff

Theme	Examples
Positive relationships with staff	<i>'This part of life at Staffordshire University cannot be faulted as 99% of tutors will always spend time with students.'</i> <i>'I have worked with teaching staff to clarify my understanding and approach to assignments. I have also discussed my expectations and aims with my tutors so that they are best able to guide me towards meeting them.'</i>

<p>Problems with feedback</p>	<p><i>" A significant amount of the final year student populous had received entirely NO feedback all year"</i></p> <p><i>'The feedback I have been given, considering it is my first year at University, I think is inadequate, as it does not really give me any indication as to where I am failing what I need to focus on to improve.'</i></p> <p><i>'I feel that the feedback has been given to us too late to make a real difference in my work.'</i></p>
<p>Variability of tutors</p>	<p><i>'Feedback varies hugely from Module to Module. Sometimes none and other times excellent.'</i></p> <p><i>'Feedback from so many tutors was inconsistent in that some weighted things far heavier than others. You focus on that and lose marks because that's not what the next tutor wanted!'</i></p> <p><i>'This depended a lot on the module. International Relations was very engaging. Analysing Modern Societies might have as well have been a solo course due to almost no interaction with the tutor at all.'</i></p>
<p>Communication – importance or problems</p>	<p><i>'Would be good to have an update on what grade we are working at so that we could know whether we are on track or need to work harder to obtain a good grade.'</i></p> <p><i>'The relationship between tutor and student is all about communication, regularly explaining your current ideas and theories.'</i></p> <p><i>'On the ECS course a few students including myself have commented on how little time we get with the lecturers and how they're not accessible when we need them to be.'</i></p>

For reflecting and connecting, there were 39 individual open comments. This was reported as a valued aspect of a university experience, although there were roughly equal positive and negative comments noted. The implication for course designers is to ensure wherever possible to relate to real world or work scenarios.

Table 6-32 Thematic Analysis on Reflecting and Connecting

Theme	Examples
Positive	<p><i>'A positive of this course is that you are able to reflect in depth on various aspects of practice and there is a somewhat supportive environment to do this in.'</i></p> <p><i>'Assignments and exams are often based on real-life scenarios to emphasis the importance on learning information that can be applied after University.'</i></p>
Negative – not done or variable	<p><i>'There is a lot of potential with the course, but it all seems rather "messy" for want of a better term. More integration between modules would be beneficial.'</i></p> <p><i>'...The material is not presented in an engaging way and nor do the majority of lecturers do anything to make the module engaging.'</i></p>

In the section on course challenge, there were 71 open comments, there were more negative than positive comments. Students reported to want to be challenged and were disappointed if they perceived a low threshold of challenge. This was said to be a de-motivator.

Table 6-33 Thematic Analysis on Course Challenge

Theme	Examples
Positive	<p><i>'Entering higher education as a mature student has been extremely difficult. The course has pushed and challenged me to my best abilities!'</i></p> <p><i>'The course is fantastic, it's challenging and most certainly boosts your confidence to enhance the decisions you make.'</i></p> <p><i>'My lecturers have always pushed me further and given me sufficient critiques so that I can produce the best work possible.'</i></p> <p><i>'Being told "it's first year so you only have to pass" is not a great motivator to do well.'</i></p>
Negative – low threshold	<p><i>'I challenge myself to provide my best work but this is not hugely encouraged by the university'</i></p> <p><i>'I don't feel that my best work is required as the pass rate is set at 40%'</i></p>

There were only 37 comments on skills development, although this may have been because some of the questions in this area were touching on some earlier themes.

However, there were quite a few more negative than positive comments where either students reported that their course had not enhanced their skills or that they already had the necessary skills initially.

Table 6-34 Thematic Analysis on Skills Development

Theme	Examples
<p>Mature or post experience students</p> <p>Positive skills development</p> <p>Negative</p>	<p><i>'I don't feel that my course has helped me to develop many of the skills above as I am already in employment and have been for a while which I believe has helped me to develop the majority of my skills.'</i></p> <p><i>'My full time employment has taught me more about the above than education ever has.'</i></p> <p><i>'I am a mature student working full-time and studying part-time, so most of the above I already do in my work and external roles.'</i></p> <p><i>'Being introduced to some of the key concepts behind modern business really helped me to engage better at work, ultimately leading to me being promoted'</i></p> <p><i>'I have enjoyed my student experience very much, learnt a lot through both my studies and meeting new people'</i></p> <p><i>'I have a better understanding of the world around me after the three years I have spent here, in all aspects of life'</i></p> <p><i>'I am leaving university the way I came in 3 years ago. I have learnt nothing nor will I take anything from my university experience.'</i></p> <p><i>'Our modules, although some were very much accountancy related, did not relate anything to real world situations and did not contribute even an iota to improve our employability skills.'</i></p>

There were 62 open comment responses to how you spend your time. Many respondents, especially mature or working students reported that they really struggled with the time needed for studying. Some made suggestions as to how this could be improved but others were simply not interested in spending any more time at the campus.

7 Discussion and Conclusions

'So that's what I am supposed to do!' Level 4 Focus Group Law student

This chapter is going to bring together the various strands of the research process, synthesise the main findings and propose an innovative position on the concept and use of student engagement for the benefit of students and universities. It has been proposed that engagement is paralleled by value co-creation in marketing theory although educational theory does not acknowledge this. The outcomes from the primary research are evaluated and a model of engagement based on these findings presented. Implications for theoretical frameworks and practice are proposed. There will be a re-examination of the objectives first reported in the introduction to this thesis, driving the literature reviewed and research design. The contribution of this study to theory, method and practice is proposed followed finally with an acknowledgement of the limitations and indications for further research.

7.1 Discussion of the Research Outcomes

Although not without problems, the process of survey development, implementation and outcome was very positive and I learned a great deal during this time. I have evaluated the findings in the light of the literature reviewed in earlier sections.

The survey had 891 respondents and most agreed that their course developed the UKES engagement factors. Initial analysis within SPSS indicated that the UKES scales worked well with high Cronbach alpha scores for reliability. This supported the previous work from the HEA on the previous UKES pilots (Buckley 2013, 2014) and in the NSSE (Pascarella et al 2010, Kuh et al 2007). The initial scale for experience at Staffordshire University was refined to cover belonging and perceived quality using some additional items. The additional questions were supported by the work of, Vallerand (1997), Thomas (2012) Meadmore (1999) van der Velden (2013) and Gibbs (2010a, 2012). There were some significant differences between academic

subjects and engagement factors. For example, critical thinking was particularly strong for psychology, sports and exercise students and arts, design and computing students scored highly on reflecting and connecting. The grades students had received so far that were cross tabulated with the engagement factors were not statistically significant which was disappointing as it would have been useful to be able to see a direct link between achievement and engagement. However, there is evidence from the literature (Kuh 2009, Pascarella and Terenzini 2005, Carini 2006, Gibbs 2010a) that there is a relationship and the information here on grades was not complete as it was only up to that point in time. Where students considered the quality of their course was high then they were more likely to score highly on the engagement factors. This may of course be that if students are engaged, they think their course is high quality rather than if the quality is high then they are more engaged. There were some differences in the subjects studied and how they rated the quality of their course. Computing and engineering students rated their courses as lower than psychology, sports and exercise students. The psychology, sports and exercise students have classes in smaller groups than computing and engineering and more workshops that foster close working relationships. They have also been subject to a specific initiative around boosting NSS scores that emphasises frequent dialogue and feedback between staff and students. These subject differences will be proposed as areas for further research later in this chapter.

The initial UKES derived engagement scales worked well and there was indications that the quality and belonging items came together, although there were too many items. It was felt though that some of the items across the scales may have been similar, some had stronger influence and the belonging and quality items may naturally cluster together. For these reasons, exploratory factor analysis was conducted on all the engagement items, including the additional items on belonging and perceived quality. This was very successful and concluded with a 7-factor model with 44 items. This was still quite lengthy and some items still seemed quite similar, for example, some of the skills developed on the course with items on critical thinking and learning with others. More analysis was needed both to refine

the model and to test further, how the model performed. Therefore, confirmatory factor analysis was undertaken using AMOS. After numerous refinements, the final model resulted in 5-factors with 22 items with a good model fit that had acceptable reliability and validity.

As indicated by the initial cognitive analysis of the questions, some UKES questions were highly correlated with others so these were excluded from the final model. This included some items in most of the sections except for critical thinking. It was thought that the development of employability skills would have been retained before personal values, given the strategic direction of the university. However, it did seem from the responses on this and the open comments that there was still some work for the university to embed employability skills within course design. It was disappointing to note when there is evidence that peer learning is important in learning gains (Gibbs 2010a) that this section was removed for good model fit. This aspect of learning may not have been developed as overtly as perhaps it should. Scrutinising the actual questions though, I think these could have been more positively framed. They centred on aspects that students could construe as being open to risks of plagiarism as was supported from the open comments. If different items were included on peer learning they may have been retained. Working in groups on tasks in tutorials would probably have been a better area to investigate. These comments also indicated that they liked working with other students and found it a valuable support network although summative group work was unpopular due to problems of group management and imbalance of input. There were only two items on course challenge, initially one was retained in the EFA but subsequently deleted in the final CFA iteration. It could be that the phrasing of this section could be revised and extended as in the open comments respondents were frustrated when they did not feel their course stretched them. Some were disappointed when told that they only had to pass or that the pass mark was 40% and therefore did not encourage their best work. This is aligned to work on threshold effects where minimum standards can be applied to knowledge, skills and understanding. This can be positive whereby it can indicate graduate standards

(Bajada and Trayler 2016) or attributes but also negative where it can disincentivise as here. Pollitt (2013) also highlighted threshold concepts where a minimum target may encourage those below to reach the target it may also discourage and demotivate individuals performing above the target. Although it was not included in the final model, course challenge is important in the design of courses to encourage engagement and performance and to promote self-respect. A related frustration was when students did not know what the expectations of assessments were and needed guidance, especially as to what critical analysis actually is and how to demonstrate it in assessment. Sixth forms issue very detailed guidance on assessments and teaching is assessment focused. Post experience students may not have recent familiarity with education and lack confidence. Both of these groups need to have explicit guidance on how to learn and how to produce assessments in higher education. Other feedback on suggested improvements was that more flexibility in delivering learning opportunities would be welcomed, especially for students who had work and/ or family commitments. The analysis highlighted that student engagement is not the same for all students and for some would not include spending more time physically at university. Distance learner and part time students would need a different approach to encouraging engagement than full timers living on or near the campus.

Universities often assume students come in with certain skills levels and knowledge of the jargon we use every day. This was clear from many of the open comments in this study where one person who was getting good grades did not think critical thinking was necessary on their course. It would be very useful to specify with examples what critical thinking is and how it is demonstrated in each subject area and how it progresses through the levels. It has been claimed that students who come in with certain skills in many ways teach themselves but that these students are now in a minority (Biggs 1999). For value co-creation to be effective, there should be a clarity in roles (Saarijärvi 2012) and this would encompass the understanding of skills such as critical thinking. The importance of this shared understanding of student and tutor roles and engagement items and how this

contributes to both student learning and organisational learning is highlighted by Payne et al (2008). Auh et al (2007), who in addition to role clarity, said that effective co- production relied on customer, in this case student, competence and motivation, reinforce this. This perspective supports this study where instrumental student engagement items such as critical thinking and interacting with tutors were included with the factors on belonging and perceived quality. Universities then should develop engagement competencies in students and encourage motivation and belonging.

In essence, the survey and subsequent model was improved significantly by the inclusion of my additional items on belonging and perceived quality as demonstrated by the EFA and CFA. UKES questions are only concerned with what the course or university does for students and not what the students themselves are doing. As the quote from one of the students in the survey indicates, *'it should not be a case of a person's chosen course challenging them to do their best. It should be for the student to do their best on their own merit and initiative.'* From the analysis of the literature, (Vallerand 1997, Thomas 2012, van der Velden 2013, Bovill 2013, Osterman 2000) it was clear that there had to be some measures of student attitudes and behaviours for a more complete model of engagement to emerge. This is the main contribution of this study, to propose a comprehensive model of student engagement than currently available using data reduction techniques to ensure the most important items are included. The final model will now be defined with reflections on what this means conceptually, pedagogically and for university actions.

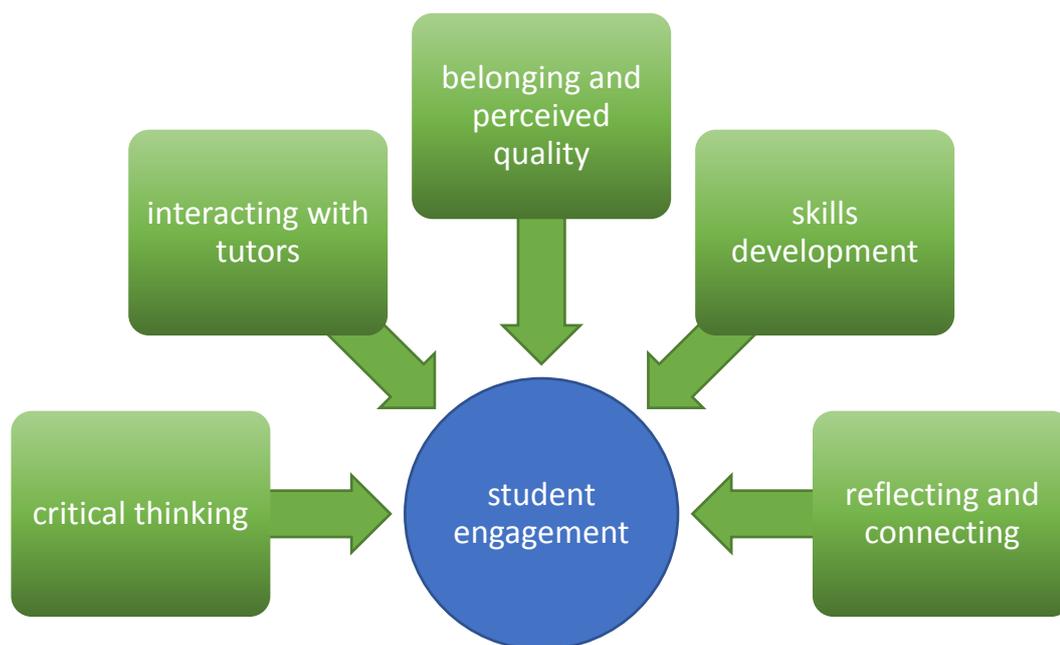
7.2 Model of Student Engagement

This thesis has established that student engagement is a good measure of quality as indicated by leaning gains and the transformational nature of education (Harvey and Green 1993, Van der Velden 2013, Lizzio and Wilson 2009, Gibbs 2010a, 2012, 2014). The questions from the UKES sections asked specifically how much the respondent's course had done on each item so taking a producer standpoint in

designing pedagogy. I considered this to be seriously lacking in the more affective components of engagement. This view was supported by the literature on student engagement and value co-creation. Kuh (2009) emphasises the effort and attitude students bring to their studies. Solomonides (2013) in Dunne and Owen (2013) proposed an affective model, that the student *felt* the transformation aspect of engagement through the *sense* of discipline knowledge and professional behaviour. Most academic research has also stressed the importance of the student's direct involvement in engagement (Trowler 2010, Krause 2011, Thomas 2012, Coates (2005, 2007), Dunne and Owen 2013). In contrast, sector organisations such as HEFCE, QAA and the HEA have taken a more governance or curricula design stance. UKES is the HEA survey and is designed in terms of the opportunities that have been designed by curricula or pedagogy to give opportunity for students to be engaged. In marketing literature, value co-creation was found to be analogous with student engagement. Work on value co-creation by, for example, Grönroos (2007), Vargo and Lusch (2004 and 2008), Saarijärvi (2012) Payne et al (2008) and Auh et al (2007) was incorporated into this survey design to enhance the HEA UKES survey. I therefore took the HEA survey and incorporated aspects from student engagement. The additional section I included on belonging and perceived quality asked directly about their experience and feelings about Staffordshire University. This proved to be very successful as these elements had some of the highest scores within the final model.

The CFA final five-factor model is presented below in figure 7-1 and then each of these factors will be taken in turn.

Figure 7-1 Model of Student Engagement



7.2.1 Critical Thinking

The items in the critical thinking factor are:

- Analysing ideas or theories in depth
- Applying facts, theories or methods (for example to practical problems or new situations)
- Evaluating or judging a point of view, decision or information source
- Forming a new understanding from various pieces of information

This section focuses on how the course has developed knowledge and understanding for the student. It uses the vocabulary of Bloom's taxonomy (1956) of high-level cognitive skills such as analysis, application, evaluating and new understanding (creating). This is well used and understood in academic circles, for example, it is integrated into the qualification frameworks published by the QAA. However, as a concept and as criteria for assessment, it is not generally understood by students or articulated clearly by academics. Explanation and illustration of critical thinking or analysis in class would support learning in this factor. This was supported by the open comments where it was clear that students wanted to know

why they were learning something and its importance for assessment or employment.

7.2.2 Interacting with tutors

The interacting with tutor factor includes:

- Talked about your career plans with teaching staff or advisors
- Discussed ideas from your course with teaching staff outside taught sessions, including by email/online
- Discussed your academic performance and/or feedback with teaching staff

These items were reduced from the original six with CFA. The final one regarding discussing academic performance would probably be expected in any tutor- student interaction. Discussing ideas outside class would include clarification on assessment and again would be expected. Talking about career plans with tutors was reassuring given some of the lower scores on employability skills development. It was interesting here to note the elements taken out included asking questions in class and making significant changes to assessment following feedback. It may be that tutors do not allow the submission of drafts but it was surprising that asking questions and generally contributing in class had to be removed from the final model. From the open comments in this section personal relationships with staff, where the student felt they were individuals was valued. Where there were problems these centred on the service characteristics of variability and accessibility. The variable 'service' that tutors gave in terms of perceived quality of teaching, support and feedback was a particular issue for students. Communications where emails were unanswered and tutors were too busy to meet with students also caused distress. The service marketing solution to these problems would usually concern standardisation and managing expectations. Sometimes universities develop student charters to specify what expectations are on students and what they can expect from the university.

7.2.3 Belonging and Perceived Quality

This is not included in the UKES but was added following the literature review on value co-creation and partnership and adds significantly to the debate as to what engagement includes. The elements scored highly within the model and measured involvement, attitudes and beliefs they have towards the University.

The factor of belonging and perceived quality includes:

- I would recommend Staffordshire University to others
- Overall, I am satisfied with the course I am currently studying
- I would rate my course to be at an appropriate standard
- My experience at Staffordshire University is what I hoped it would be
- I am clear as to what I need to do to be successful in my studies
- I feel a strong sense of belonging to Staffordshire University
- The University communicates well with me on course matters

This factor then covers respondent's attitudes towards the perceived quality and their satisfaction with the University. It also encompasses communication elements that are important in value co-creation and partnership working. An important aspect of co-creation is the perception of belonging and this is covered within the components of this factor.

7.2.4 Skills Development

The factor on skills development includes:

- Thinking critically and analytically
- Being an informed and active citizen
- Developing or clarifying personal values or ethics
- Exploring complex real-world problems

This factor was reduced significantly from the original item list, due to some strong correlations with other items on different factors. There was a group of items on writing and speaking that correlated with the critical analysis factor so were omitted from the final model. It was disappointing given the University emphasis on graduate employability and embedding this into the curricula that employability skills was not rated very highly and not in the final model. It may be that it was not

successfully embedded or that these initiatives were not communicated to or perceived by students. The open comments were enlightening in this section especially from post experience students who did not think that there was enough application of theory to practice and that they already had employability skills. Although some reported that independent learning skills had grown throughout the course it was not particularly valued, as they perceived this as a reflection on staff not wanting to help and poor value for money. What was appreciated was when skills could be applied to their career path and the social aspects of meeting new people that would not normally be in their circle.

7.2.5 Reflecting and Connecting

The items in the reflecting and connecting factor includes:

- Tried to better understand someone else's views by imagining how an issue looks from his or her perspective
- Examined the strengths and weaknesses of your own views on a topic or issue
- Connected ideas from your course to your prior experience and knowledge
- Changed the way you thought about a concept or issue as a result of what you learned

The reflecting and connecting factor includes high cognitive level items and covers elements that differentiates university study from lower level education and training. It stretches thinking from the narrow viewpoint of the course to applying concepts from previous experience and different ways of viewing the world. Respondents appreciated real world scenarios within teaching and preferred a course to be designed with some integration of modules rather than a disparate collection with few linkages. It was heartening to read in the open comments that students said they wanted to see the wider value of a module or subject rather than it just be passed. This is in contrast to reports of assessment driven learning behaviour of students at the expense of wider learning. The implications for pedagogy then is that universities should not simply go down the line of 'edutainment'. They need to make learning material engaging and meaningful for students to be engaged.

The five factors that have been retained in the model in figure 7-1 are the core elements of student engagement. So rather than including all the elements of the UKES model this has been refined but also extended to incorporate important elements of student behaviour and attitudes. When these factors were analysed in the light of the extant literature on value co-creation and the specific characteristics of the university experience it became apparent that this concept could be termed as 'co-transformation'. This means that students, tutors and the university should work together for positive outcomes that not only creates value but also has a deeper lifelong effect for the student and the long-term success of the university. This will be further explained in the section on contribution to theory, initially though the contribution to method will be proposed.

7.3 Significance of the Contribution

The research has a number of significant contributions that have both conceptual and practice implications. These are specified and evaluated as contributions to method, theory and practice below.

7.3.1 Contribution to Method

This study has:

- Added to the evidence of testing of student engagement instruments in the UK.
- Incorporated elements of social constructivism within a survey instrument

Student engagement surveys are a relatively new introduction to the surveys universities use to gauge student activity and satisfaction. The importance of engagement in quality as measured by learning gains is well-established (Tinto 1992, Ramsden 2003, Kuh et al 2007, Krause and Coates 2008, Krause 2011). It has been argued in this thesis that engagement surveys are far superior to satisfaction

surveys in gaining information on quality as measured by learning gains (Gibbs 2014). The engagement surveys in American and Australia have been used for a number of years and have been tested for their effectiveness (Pascarella et al 2010, Kuh et al 2007). The introduction of the UKES survey in 2015 after two years of piloting was fortuitous to this study. However, I realised that this survey omitted some of the behavioural and attitudinal aspects necessary for a comprehensive study. The survey instrument was designed to incorporate these factors and the testing of the final model confirmed that these items were important in gauging student engagement. This thesis proposed that student engagement is intrinsically a socially constructed paradigm. The components of engagement, or items, in the survey were open to interpretation by individual respondents. For this reason open comments were requested on each of the engagement constructs. This gave some very interesting insight into the constructs and added to the method in terms of using qualitative alongside quantitative data.

7.3.2 Contribution to Theory

This study has:

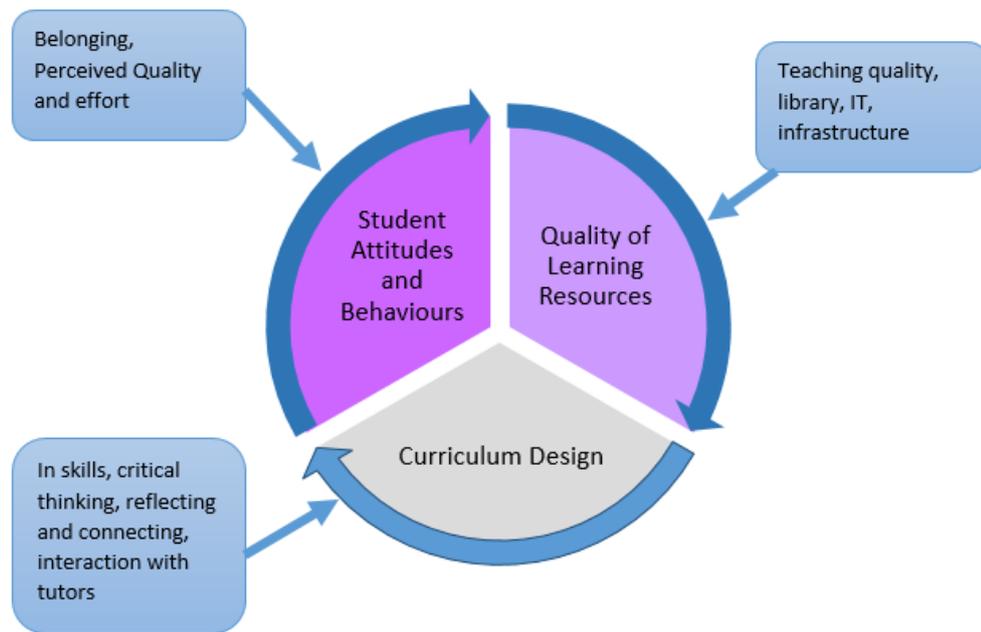
- Influenced the debates on quality dimensions and measures in higher education.
- Integrated the disciplines of educational policy and psychology, consumer behaviour and professional services marketing in an interdisciplinary study.
- Identified co-transformation as a concept and the development of a symbiotic model of behaviour between students and university.

This research has integrated debates on service quality and educational quality in chapter four, which is an innovative approach as it cuts across the two disciplines. As demonstrated by the research, a comprehensive model of student engagement incorporates student behaviour and attitudes and not just the design of the learning opportunities by the university as indicated in figure 7.2. The model has included elements of co-creation, which has concentrated on their attitudes and feelings of belonging. The effort a student puts into their studies is also of

paramount concern within any measures of engagement. However, crude measures of effort such as time spent on learning activities or other activities was not found to be very useful in the study. The questioning on course challenge and elements of interacting with tutors could have indicated some degree of student effort but was not sufficiently strong to be retained. Successful study would depend on class preparation, participation, reading and active involvement in learning activities inside and outside the classroom. So when looking at the application of the model I have also included the efforts students put into their studies. The problem is that any direct measure of this through self-reporting may not be accurate so it was asked in this study by indirect means.

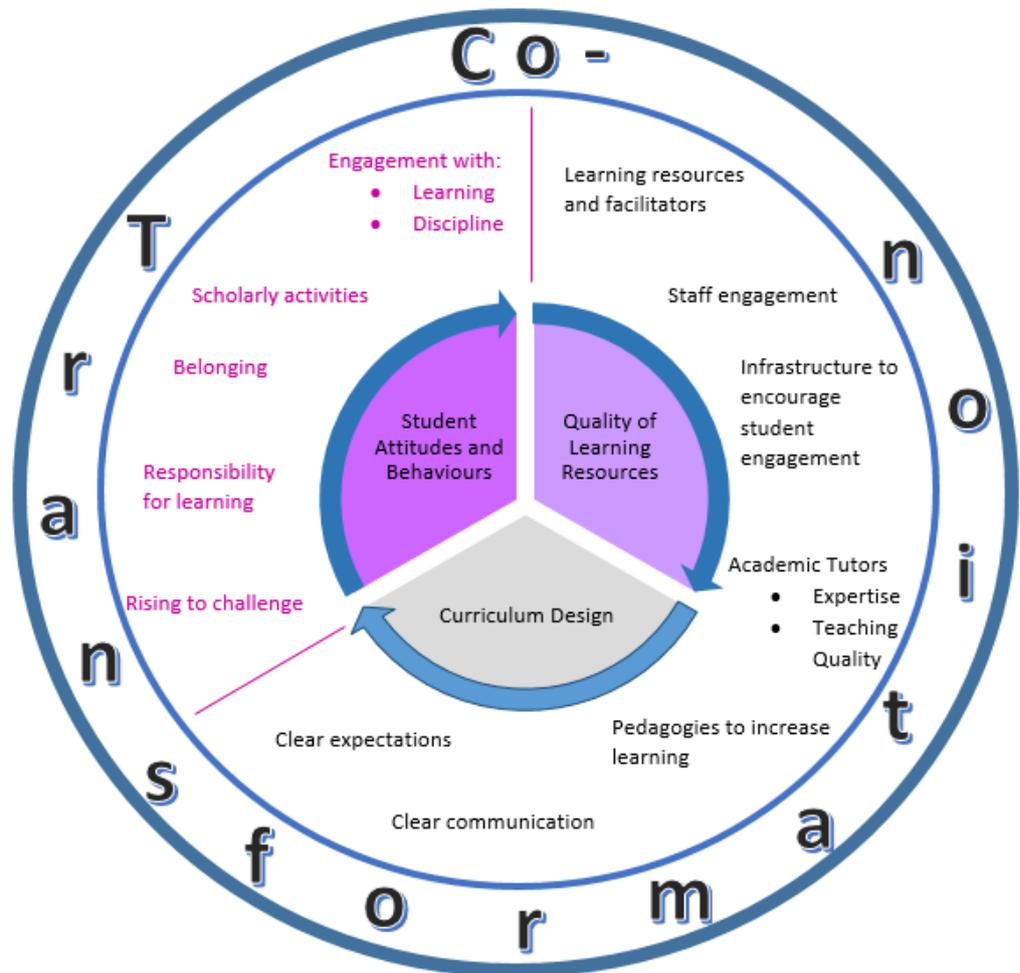
I have argued throughout this thesis that achievement and quality in higher education is measurable by learning gains and an important element of learning gains is student engagement. This engagement can be encouraged by universities by designing the curriculum so that it ensures the five factors in the model are emphasised. This means designing the curriculum and delivery so that it allows the necessary skills development, critical thinking, reflection, connecting and interaction with tutors. It also means that students should perceive the experience as being good quality and are satisfied. Universities therefore should not ignore student satisfaction, as it is important in their engagement in their studies. Actions to improve satisfaction can also help in fostering feelings of belonging, which again are important in engagement. Students in order to be successful would also need access to the appropriate learning resources. These would include physical resources such as adequate classrooms, IT, library and research facilities and the quality of teaching. Quality of teaching would encompass the content of syllabus, the appropriate academic level, the pedagogies used in addition to the skill and ability of the lecturer. The elements of engagement factors and quality of teaching are interconnected as can be shown by figure 7.2.

Figure 7-2 Engagement Elements of Learning Gains



I have taken the model of student engagement outlined in section 7.2 and combined this with the elements of learning gains in figure 7-2 to incorporate the notion of *co-transformation*. This concept of co-transformation is a major contribution to theory from this study. The standpoint of educational quality used throughout is transformation; this is backed by the literature on quality (Harvey and Green 1993) and learning gains (Gibbs 2010a). When this is evaluated with theories of value co-creation and the output from the student engagement model in figure 7-3, a theory of co-transformation emerges. This means that there is a symbiotic relationship between the university and student for successful educational outcomes. This is presented in figure 7-3 below.

Figure 7-3 Symbiotic Relationship model of Co- transformation



Factors to the right-hand side of the model are concerning the university infrastructure that are controlled by the university itself. Going around the model there are more specific interventions from individual tutors and to the left of the model are the student led activities and behaviour. It would be a mistake though to only think these behaviours are intrinsic to the individual student, although some may be more pre-disposed than others, they can be fostered by the university. This will be explained further in contribution to practice.

7.3.3 Contribution to Practice

This study has:

- Proposed a conceptual framework for a relationship based model of co-transformation that can be used to drive policy
- Specified student engagement behavioural activities that influence educational learning gains
- Addressed the implications for university interventions on educational infrastructure, pedagogy and influencing student behaviour
- Influenced policy at institutional level and disseminated to the wider sector

Value co-creation and associated student engagement can be viewed as a continuum rather than a steady state. It may be that at some points in the student journey and when engaging with the different functions of the university that there will be a different type of relationship between students and the university. This study was not looking at a partnership versus a consumerist approach but rather as a continuum of engagement bringing in educational theories, consumer behaviour and value co-creation. The student – university relationship can, at times be a straightforward customer – service provider relationship. This for example would be the case for the peripheral services that a student may purchase, including food and drink on the premises. Further along the continuum, a partnership approach may occur where the university and students are working together but have distinct separate roles. This could be in the case when using some of the facilities such as the library and IT resources. Co-production is when the student and university are working more closely together with joint roles. An example would be on a course approval committee, where a student representative is a full member of a development team or approval panel. The output there would be the design of a new course or a significantly altered course and curriculum. The co-creation occurs when new knowledge is created so would be the case where research students are

working with professors to create something new. However, value co-creation has a different emphasis as it is concerning the additional value created during that relationship and I argue this is intrinsic to learning in the student – university relationship and facilitated by tutors. As this value co-creation is so important to engagement and subsequent learning gains it can also be thought of as co-transformation. It is not simply concerning the creation of value but as higher education transforms lives it takes on a higher significance.

Although it has been argued that students are not customers in the strict sense, it is imperative that they are fully involved in the co-creation of value. Universities have to put their own effort into student learning and so the model has to be symbiotic. Figure 7-3 demonstrated this relationship. Universities have to invest in the quality of learning resources and the design of the curriculum. They are also integral in providing opportunities where students can engage and to ensure that there is sufficient challenge to allow students to be able to reach the higher learning necessary in higher education. It will also be necessary to educate students into how to learn and how to become engaged. This means that university expectations of students should be high but they should also understand that students might need more specific guidance themselves as to how to get the most out of their opportunity. This guidance should centre on the engagement items in the model from this study. These include:

1. Critical thinking needs to be built into the curriculum but also clearly articulated in teaching and assessment.
2. Skills should be integrated to the curriculum but also in teaching pedagogies so practicing these skills in taught sessions.
3. Reflecting and connecting involves high-level cognitive development that stretches students reasoning outside the confines of the module or course. This stretch then needs to inform teaching and learning strategies.
4. Tutors also need to think about the best way to ensure that students interact with them in a positive way. For example, to consider inclusive

learning activities that make sure all students have the opportunity to interact and to be conscious of their availability to students.

As a whole, these engagement items can be incorporated into course and learning design by evaluating the content, expectations and learning activities. Giving explicit guidance and articulating expectations is crucial. In addition to the expectations of involvement in in-class activities there should be pre and post class study direction and expectation. The clear articulation of what, how and why to study will foster engagement and subsequent learning gains. There are interventions in addition to the design of the curriculum, teaching and learning strategies around a course that encourage engagement. These concern positively rewarding engagement behaviour or indicating the benefits of engagement behaviour. Individual, personal messaging and big data, or learning analytics can be used in this way (Grove 2016b, Else 2017). Student activity can be tracked, so engagement with the VLE site can be monitored and then messages directed back to individual students. It may be for a student who has completed more than a required number of exercises on the VLE would get a congratulatory message whereas a student who had not would get a warning or a reminder. This may affect student behaviour both in their engagement in class and out of class. This type of personalised learning has been shown to improve performance and retention significantly in the United States (Else 2017). During networking activity with other universities there was informal discussion as to their student engagement initiatives. Some universities, such as Exeter, have required their students to download an app, which tracks their movements and activities and then sent messages such as, 'students who get a 2:1 or above usually spend a minimum of 10 hours a week on the VLE or in the library. This week you have spent 2 hours on this activity.' The use of data analytics has significant implications for designing this personalised learning. It could be used not only as an instrument of monitoring attendance and grades but also for more subtle behavioural and attitudinal prompts on belonging and challenge, for example.

The items on belonging and perceived quality in the model also have implications for universities. Opportunities and actions to foster belonging should be incorporated into the design of the student experience. Universities put a significant effort into 'welcome week' and student induction to encourage the feelings of belonging. Some universities start this process before students join, for example, Birmingham City University send email and SMS messages to open day attendees with tips and hints as to how to get through A level stresses. The first-year experience has been recognised as a particular touchpoint and the focus of HEA and individual university initiatives. Induction programmes now frequently do not end in the first couple of weeks of study and there is a trend for 'spiral' induction where initiatives are spread throughout the first semester. Student journey projects have been launched in many universities that concentrate on the touchpoints a student has throughout their year or whole degree. Mentor or 'buddy' schemes where new students are paired with existing students are utilised with frequent opportunities for advice, guidance and socialising. Formal student union, clubs, societies, and course representation activities are integrated into university life and governance. The use of employers and alumni can be used to raise student aspirations and encourage engagement. Many of these type of 'belonging' activities centre on first year undergraduates living away from home with other groups being overlooked. Students who commute from home or have caring responsibilities may not be able to engage fully in the social aspects of the experience. The part time, distance learners, direct entrants into higher years and postgraduate students are sometimes not the focus of initiatives. Many of these strategies involve peer activities and student union led actions and ignore the key relationships of student with tutors. Engaged students are likely to perceive the quality of their course as high although it could be argued it may be that if students consider their course as being of good quality they are more likely to be engaged. Although student satisfaction should not be equated to quality, universities should consider the role satisfaction plays in engagement.

The definition of student engagement used throughout this study has been that, ***'Students are actively participating and involved in learning activities that have been designed to enhance learning gains'***. It has been argued here that the engagement factors within the model are a good basis to develop university strategies around the benefit of students and the university. It can also be considered that these engagement factors could be used in the selection of students. If a university is selecting students who are likely to perform well at degree level study, then as an additional criterion to prior achievement, a predisposition to being well engaged could be a useful differentiator.

This study has indicated a number of practical interventions to ensure that universities are creating opportunities for learning and engagement. Some of these have been taken on board by my own university where I am a member of the student engagement strategy group and in the Business School where I am developing these principles into a project called 'onboarding'. This is developing the design of the curricula and student behaviour interventions from pre-enrolment to graduation. I am also involved with the HEA as a principal fellow and a member of various national groups who are interested in student engagement such as RAISE and the student engagement partnership. As such I have the opportunity to influence on the developments and debates within student engagement and bring an innovative perspective using value co-creation and the notion of co-transformation.

7.4 Objectives Revisited

The objectives of this study have been achieved and demonstrated within this thesis. Under each objective, there is a short explanation as to how this was achieved and where in the thesis this is exhibited.

- 1. Apply and adapt theories of value co-creation, co- production, services marketing and consumer behaviour to higher education.**

Higher education and the relevant developments in the sector was introduced in chapter two. The application of theories around services marketing, consumer behaviour, co-production and value co-creation was in chapter three. The higher education environment in the UK has undergone significant and irreversible changes over the past 20 years and there is now a focus on what students gain from going to a university and whether or not they should be treated as customers. In the context of these changes, the application of services marketing concepts and consumer behaviour was particularly useful in framing the subsequent research aims and analysis. During the literature review phase of this research, it was noted there was a substantial body of literature in the area of educational quality that was developed independently from that of marketing. I observed strong parallels between the concepts of value co-creation and student engagement. This study brought the two areas together to inform the research philosophy and instrument design. This development is explained in section 5.1 and 5.2 in the research methodology

2. Evaluate the relationships between student engagement, educational gain and educational quality.

Quality in higher education is a complex concept and in chapter four, this is fully explored. There was found to be a vast amount of previous research in educational quality from both the school and tertiary sectors. Some of this centred on teaching quality itself but rather than investigate this in depth I decided that the overall quality of the experience was more valuable in terms of contribution. A key contributor to this subject is Graham Gibbs (2010, 2012, and 2014) whose work on dimensions of quality was a cornerstone to this research. A simplistic perspective on quality may be output measures such as degree class or employment. The largest predictors of these are what the students enter with in terms of grades, contacts and social capital and therefore do not indicate the quality of the time spent at university. Therefore, learning gains, being the 'distance travelled' was used in this work as a basis for educational quality. One of the major components and predictors of learning gains is student engagement. This relationship and the

quality infrastructure around it was comprehensively reviewed in chapter four. From this came my working definition of student engagement and a clarification of the link to value co-creation.

3. Test the effectiveness of the amended UK Engagement Survey as an instrument to assess student engagement.

Surveys linked to student engagement were introduced in 4.7-4.11. These included the reputable NSSE and AUSSE survey used extensively in America and Australia respectively. The UKES survey launched in 2015 after two years of testing was used as a base for this research. It was realised that there were some gaps in the survey design when comparing with literature on assessing value co-creation and student engagement. An amended survey instrument was designed as outlined in 5.3 incorporating value co-creation, student attitudes and behaviour. The amended survey was launched and proved a very effective instrument to assess student engagement. The analysis of the survey, in chapter 6, included descriptive statistics on all the engagement items, scale reliability and cross tabulations. The analysis was extended to then cover exploratory factor analysis and the model worked well but as described earlier in 7.2 confirmatory factor analysis was then conducted to refine the model further. The additional value co-creation items that I included improved the overall model and a number of these were retained in the final model.

4. Develop a conceptual framework for a symbiotic model of student engagement incorporating university input and student behaviour.

The model defined from confirmatory factor analysis was evaluated in terms of implications for student and universities. This integrated analysis of the literature on student engagement further developed the model to incorporate university strategies and actions and student behaviours. This has been presented in this chapter in section 7.3.2 and 7.3.3. The model in figure 7-3 shows the clear link between the quality of learning resources, curriculum design and student attitudes and behaviours. Staff engagement, pedagogy and clarity of expectations are key from the university perspective. The students need guidance as to how to be

engaged and how this translates into learning activities. It was shown from the research in 7.2 that the factors of engagement included some that were designed into courses, such as critical thinking, interaction with tutors, skills and reflection. Some however were attitudinal and behavioural on the part of the student and these were not covered in the HEA UK engagement survey questions. Feelings of belonging and positivity towards the institution and course can of course be fostered by the university but may also be intrinsic to the individual student.

5. Establish tutor and student roles, expectations and implications for university interventions

The symbiotic model presented in this chapter, in section 7.3.2, has highlighted that students, tutors and the wider university have to work together for successful outcomes. Value co-creation is intrinsic in achieving this.

The university has a role in:

- Providing good quality learning resources
- Ensuring staff engagement
- Developing an infrastructure conducive to student engagement
- Recruiting academics with the correct level of expertise and who have good teaching skills

The lecturers have a role in:

- Designing pedagogies to enhance knowledge and learning
- Developing courses with engagement in mind
- Ensuring they are current in their academic discipline
- Continually develop teaching skills and techniques
- Clearly communicating expectations

Students have a role in:

- Being engaged in the discipline and in learning itself
- Spending enough time on scholarly activities
- Communicating with tutors effectively

- Taking responsibility for learning
- Rising to challenges
- Developing a sense of belonging to the course and university

These roles should be specified more directly to all parties to enhance the co-creation of learning opportunities and then in turn develop an ethos of co-transformation.

7.5 Limitations

The concept of integrating an educational policy theoretical framework and research tradition with that of marketing and value co-creation is unusual and therefore not well established. Although this enhances the contribution, it also can be thought of as a limitation. The survey instrument used UKES as a basis, extended to include specific value co-creation questions, which may have meant it was a little restrictive. The sample was self-selecting from the population of the undergraduates at Staffordshire University. These may not have been representative of the population either of the University or of university students as a whole. This was checked against the data that the HEA published that year from all the universities that took part and the responses to the UKES questions were not out of line with others. There is always the possibility that students did not fully understand a question and therefore the research was in some way flawed. Throughout the process however, care was taken to minimise any bias and problems of validity and reliability. The timing of the research had some difficulties, as UKES only could be launched after January and ending in June 2015 and the University did not wish for it to overlap too much with the NSS. A student self-reporting survey does not take account of what, for example, what skills tutors thought their courses were delivering. It may have been useful to gain more information on how much effort students had put into their studies. It was thought that the measure of independent study time may have been informative but it did not really give useful results. Some of the individual items may need further testing

to refine the questions. Critical thinking may not be as universally understood as assumed and learning with others could be re-phrased to ensure it was not confused with plagiarism. Finally, there is a limitation on the various definitions of student engagement. There is no universal definition as to what it covers and therefore what it does not, as the constructs are complex and interrelated. The same can be said for learning gains and the complex relationship between learning gains and engagement. Does engagement lead to learning gains or is there also a reverse relationship where if a student learns then they become more engaged?

7.6 Directions for Future Research and Practice

This study has made a valuable contribution to the future research agenda in student engagement and value co-creation. There are a number of areas the research could be taken further. It has been shown that items on value co-creation are important to an overall measure of engagement and some of these could be evaluated further. It could be extended to develop some specific measure of effort that a student puts into their studies. This would need to be a more robust and sophisticated measure than a simple self-reporting of perceived study time or effort and cover extensive behavioural and attitudinal factors. Learning with others or peer learning could be investigated further to see if a re-phrasing would give a more positive result. There could be more analysis on the differences between subject groups to see if some subjects were more engaged than others and why this may be the case. If data were available, a study linking degree classifications and the engagement measure would go some way to producing a causal link between performance and engagement. However, it has been argued here that degree class is not a good measure of quality and instead learning gains should be used. However, there is currently no robust measure of learning gains available, although HEFCE are currently funding projects to develop this approach. The final model that was produced could be re-run to provide a measure of engagement for different groups. Some of the elements that did not appear strong enough in the final model are worth exploring further such as 'course challenge' and the development of

employability skills. Future implications for practice include the development of strategies specifically around the symbiotic model. I am launching an 'onboarding' project within Staffordshire University this year that will use this study. In addition, it is planned to disseminate this study further within connections in the HEA and in academic publications.

References

- ABRAMI, P.C., D'APOLLONIA, S. and COHEN, P.A., 1990. Validity of student ratings of instruction: What we know and what we do not. *Journal of educational psychology*, 82(2), pp. 219.
- ACEVEDO, A., 2011b. Business Ethics 101: The student is not a customer. A rejoinder. *International Journal of Management Education*, 9(3).
- ACEVEDO, A., 2011a. Business Ethics 101: The student is not a customer. *International Journal of Management Education*, 9(3).
- AKERMAN, K., 13th October 2016-last update. Is the UK's external examiner system past its sell by date? [Homepage of WONKHE], [Online]. Available: <http://wonkhe.com/blogs/analysis-external-examining-system-past-its-sell-by-date/> [Last accessed 27/6/17].
- ALDERMAN, G., 2016. Self-regulation by UK universities is dead. So whose fault is it? *Times Higher Education*, 9th June, pp. p28-9.
- ALDRIDGE, S. and ROWLEY, J., 1998. Measuring Customer Satisfaction in Higher Education. *Quality Assurance in Education*, 6(4), pp. 197-204.
- ALVESSON, M. and DEETZ, S., 2000. *Doing critical management research*. London: Sage Publications.
- ANDREWS, J., CLARK, R. and THOMAS, L., 2012. *Compendium of effective practice in higher education retention and success*. Aston University and the Higher Education Academy.
- ANGELL, R.J., HEFFERNAN, T.W. and MEGICKS, P., 2008. Service quality in postgraduate education. *Quality Assurance in Education*, 16(3), pp. 236-254.
- ANGLIM, J., 2015-last update, *Confirmatory Factor Analysis using Amos and Introduction to Amos* [Homepage of You Tube], [Online]. Available: <https://www.youtube.com/watch?v=0OHAK7ArQ> [last accessed 27/3/17].
- ARUM, R. and ROKSA, J., 2011. *Academically adrift: Limited learning on college campuses*. University of Chicago Press.
- ASHWIN, P., 2012. *Analysing teaching-learning interactions in higher education: Accounting for structure and agency*. A&C Black.
- ASHWIN, P. and MCVITTY, D., 2015. The meanings of student engagement: implications for policies and practices. *The European Higher Education Area*. Springer, pp. 343-359.
- ASTIN, A.W., 1993. *What matters in college: Four critical years revisited*. San Francisco.
- ASTIN, A.W., 1984. Student involvement: A developmental theory for higher education. *Journal of college student personnel*, 25(4), pp. 297-308.
- ASTIN, A.W., 1985. *Achieving educational excellence*. Jossey-Bass.
- ATHIYAMAN, A., 1997. Linking student satisfaction and service quality perceptions: the case of university education. *European Journal of Marketing*, 31(7), pp. 528-540.
- AUH, S., BELL, S.J., MCLEOD, C.S. and SHIH, E., 2007. Co-production and customer loyalty in financial services. *Journal of Retailing*, 83(3), pp. 359-370.

- BAJADA, C. and TRAYLER, R., 2016. Introduction to threshold concepts in business education. *Education + Training*, 58(5), pp. 458-462.
- BAKER, S., 2017. Are dropout rates higher at England's private providers? *Times Higher Education*, 6th April, pp. p18.
- BAKER, S., 2011. Verdict on QAA reform: amateurish and daft. *The Times Higher Education Supplement: THE*, (7th July 2011). p8.
- BAREFOOT, B.O., 2004. Higher education's revolving door: Confronting the problem of student drop out in US colleges and universities. *Open Learning: The Journal of Open, Distance and e Learning*, 19(1), pp. 9-18.
- BARTLETT, M.S., 1954. A note on the multiplying factors for various χ^2 approximations. *Journal of the Royal Statistical Society. Series B (Methodological)*, pp. 296-298.
- BBC NEWS, 8th March 1999-last update, Blair wants student boom [Homepage of BBC News: Education], [Online]. Available: <http://news.bbc.co.uk/1/hi/education/292504.stm> [Last accessed 12/6/2017].
- BEKHRADNIA, B., 2015-last update, Students Loans: Third Report of Session 2014/15 [Homepage of House of Commons. Business Innovation and Skills Committee], [Online]. Available: <https://www.publications.parliament.uk/pa/cm201415/cmselect/cmbis/558/558.pdf> [Last accessed 26/6/17].
- BENSIMON, E., M., 2009. Forward in Harper, S. R. and Quaye S.J (eds) *Student Engagement in Higher Education*. New York and London. Routledge. pp xxi-xxvi.
- BENTON, T. and CRAIB, I., 2001. *Philosophy of social science: the philosophical foundations of social thought*. Palgrave Macmillan.
- BERRY, L.L., 2002. Relationship marketing of services perspectives from 1983 and 2000. *Journal of relationship marketing*, 1(1), pp. 59-77.
- BHASKAR, R., 1989. *Reclaiming Reality: A Critical Introduction to Contemporary Philosophy*. London: Verso.
- BIENSTOCK, C.C., DEMORANVILLE, C.W. and SMITH, R.K., 2003. Organizational citizenship behaviour and service quality. *Journal of services marketing*, 17(4), pp. 357-378.
- BIGGS, J., 1999. What the student does: Teaching for enhanced learning. *Higher education research & development*, 18(1), pp. 57-75.
- BIGGS, J.B., 1993. From theory to practice: A cognitive systems approach. *Higher education research and development*, 12(1), pp. 73-85.
- BIGGS, J.B., TANG, C.S. and SOCIETY FOR RESEARCH INTO HIGHER EDUCATION, 2011. *Teaching for quality learning at university: what the student does*. 4th edn. Maidenhead: Open University Press.
- BITNER, M.J., BOOMS, B.H. and TETREAULT, M.S., 1990. The Service Encounter: Diagnosing Favourable and Unfavourable Incidents. *The Journal of Marketing*, 54(1), pp. 71-84.
- BLACK, P. and WILIAM, D., 1998. Assessment and classroom learning. *Assessment in Education: principles, policy & practice*, 5(1), pp. 7-74.

- BLAIKIE, N., 2010. *Designing social research: the logic of anticipation*. Cambridge: Polity.
- BLAIKIE, N., 2007. *Approaches to social enquiry: advancing knowledge*. Cambridge: Polity.
- BLAKE, H., 10th November 2010-last update, Grants, loans and tuition fees: a timeline of how university funding has evolved [Homepage of The Telegraph], [Online]. Available: <http://www.telegraph.co.uk/education/educationnews/8057871/Grants-loans-and-tuition-fees-a-timeline-of-how-university-funding-has-evolved.html> [25th March, Accessed 2017].
- BLANDEN, J. and MACHIN, S., 2013. Educational Inequality and the Expansion of UK Higher Education. *Scottish Journal of Political Economy*, 60(5), pp. 578-596.
- BLOOM, B.S., ENGELHART, M.D., FURST, E.J., HILL, W.H. and KRATHWOHL, D.R., 1956. *Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook I: Cognitive Domain*. New York: David McKay Company. Inc. (7th Edition 1972).
- BLYTHE, J., 2013. *Consumer Behaviour*. 2nd edition edn. London: Sage.
- BOOMS, B.H. and BITNER, M.J., 1981. Marketing strategies and organization structures for service firms. *Marketing of services*, 25(3), pp. 47-52.
- BOUND, J. and TURNER, S., 2007. Cohort crowding: How resources affect collegiate attainment. *Journal of public Economics*, 91(5), pp. 877-899.
- BOVAIRD, T., 2007. Beyond engagement and participation: User and community coproduction of public services. *Public administration review*, 67(5), pp. 846-860.
- BOVILL, C., 2013a. Students and staff co-creating curricula: a new trend or an old idea we never got around to implementing?
- BOVILL, C., 2013b. Students and Staff Co-Creating Curricula: An Example of Good Practice in Higher Education? In: E. DUNNE and D. OWEN, eds, *Student Engagement Handbook: Practice in Higher Education*. Emerald Group Publishing, pp461- 476
- BOVILL, C., COOK-SATHER, A. and FELTEN, P., 2011. Students as co-creators of teaching approaches, course design, and curricula: implications for academic developers. *International Journal for Academic Development*, 16(2), pp. 133-145.
- BOWMAN, N.A., 2009. College diversity courses and cognitive development among students from privileged and marginalized groups. *Journal of Diversity in Higher Education*, 2(3), pp. 182.
- BRAMMING, P., 2007. An argument for strong learning in higher education. *Quality in Higher Education*, 13(1), pp. 45-56.
- BRIGGS, V., 2015. Fun times, but was it a good learning experience. *Times Higher Education, Sponsored Supplement (November)*, pp. pp21-22.
- BRITTON, J., DEARDEN, L., SHEPHARD, N. and VIGNOLES, A., 13 April 2016. How English domiciled graduate earnings vary with gender, institution attended, subject and socio-economic background. IFS Working Paper.
- BROCHADO, A., 2009. Comparing alternative instruments to measure service quality in higher education. *Quality Assurance in Education*, 17(2), pp. 174.
- BROWN, R., 2014. *What price quality enhancement: A history of quality enhancement in learning and teaching in English higher education since 1992*. Higher Education Academy.

- BROWN, R., 2010. Comparability of degree standards? Higher Education Policy Institute Oxford.
- BROWN, S., 2011. Bringing about positive change in the higher education student experience: a case study. *Quality Assurance in Education*, 19(3), pp. 195-207.
- BROWNE, R., 2010. *Securing a Sustainable Future for Higher Education: The Independent Review of Higher Education Funding and Student Finance*. London: Department for Business, Innovation & Skills.
- BRYMAN, A. and BELL, E., 2011. *Business research methods*. Oxford: Oxford University Press.
- BUCHANAN, D. and BRYMAN, A., 2009. *The Sage handbook of organizational research methods*. Sage Publications Ltd.
- BUCKLEY, A., 2012. *Making it count: Reflecting on the National Student Survey in the Process of Enhancement*. Higher Education Academy.
- BUCKLEY, A., 2015. *Students' perceptions of skills development: UK Engagement Survey 2015*.
- BUCKLEY, A., 2014. *The UK Engagement Survey 2014: The Second Pilot Year*.
- BUCKLEY, A., 2013. *Engagement for enhancement: Report of a UK survey pilot*.
- BYRNE, D., 2002. *Interpreting quantitative data*. Sage.
- CABS, 22nd January 2016-last update, *Response to the Higher Education Green Paper* [Homepage of Chartered Institute of Business Schools], [Online]. Available: <https://charteredabs.org/publications/response-higher-education-green-paper/> [last accessed 26/6/17].
- CALLENDER, C., RAMSDEN, P. and GRIGGS, J., 2014. *Review of the national student survey*. Higher Education Funding Council for England (HEFCE).
- CARINI, R.M., KUH, G.D. and KLEIN, S.P., 2006. Student engagement and student learning: Testing the linkages. *Research in higher education*, 47(1), pp. 1-32.
- CARRILLAT, F.A., JARAMILLO, F. and MULKI, J.P., 2007. The validity of the SERVQUAL and SERVPERF scales. *International Journal of Service Industry Management*, 18(5), pp. 472-490.
- CATTELL, R.B., 1966. The scree test for the number of factors. *Multivariate behavioural research*, 1(2), pp. 245-276.
- CHALMERS, A.F., 1999. *What is this thing called science?* Buckingham: Open University Press.
- CHATHOTH, P., ALTINAY, L., HARRINGTON, R.J., OKUMUS, F. and CHAN, E.S.W., 2013. Co-production versus co-creation: A process based continuum in the hotel service context. *International Journal of Hospitality Management*, 32, pp. 11.
- CHEN, J., TSOU, H. and CHING, R.K.H., 2011. Co-production and its effects on service innovation. *Industrial Marketing Management*, 40(8), pp. 1331-1346.

- CHENG, J.H. and MARSH, H.W., 2010. National Student Survey: are differences between universities and courses reliable and meaningful? *Oxford Review of Education*, 36(6), pp. 693-712.
- CHEONG CHENG, Y. and MING TAM, W., 1997. Multi-models of quality in education. *Quality assurance in Education*, 5(1), pp. 22-31.
- CHICKERING, A.W. and GAMSON, Z.F., 1987. Seven principles for good practice in undergraduate education. *AAHE bulletin*, 3, pp. 7.
- CHILD, A., 2011. NSS fitness hardly a given. *The Times Higher Education Supplement: THE*, (8th September 2011), pp. 36.
- CHUNG, S.L.D., 2010. Quality assurance in post-secondary education. *Quality Assurance in Education*, 18(1), pp. 64-77.
- COATES, H., 2005. The value of student engagement for higher education quality assurance. *Quality in Higher Education*, 11(1), pp. 25-36.
- COATES, H., 2007. A model of online and general campus-based student engagement. *Assessment & Evaluation in Higher Education*, 32(2), pp. 121-141.
- COATES, H., 2010. Development of the Australasian survey of student engagement (AUSSE). *Higher Education*, 60(1), pp. 1-17.
- COCKBURN, J., 2005. Perspectives and politics of classroom observation. *Research in post-compulsory education*, 10(3), pp. 373-388.
- COHEN, L., MANION, L. and MORRISON, K., 2007. *Research methods in education*. London: Routledge.
- KOOPMAN, C., 2011. Rorty's Linguistic Turn: Why (More Than) Language Matters to Philosophy. *Contemporary Pragmatism*, 8(1), pp. 61.
- COLLINI, S., 2016. Who are the spongers now? *London Review of Books*, 38(2), pp. 33-37.
- COLLINI, S., 2012. *What are universities for?* Penguin UK.
- COMPASS, 2017. *Journal of Teaching and Learning: TEF Special Edition*. Vol 10. no 2. London: Compass.
- COMPETITION AND MARKETS AUTHORITY, 2015. *Higher education: guide to consumer rights for students*. 12 March. Competition and Markets Authority: UK Government.
- COOK, R., BUTCHER, I. and RAESIDE, R., 2006. Recounting the scores: an analysis of the QAA subject review grades 1995–2001. *Quality in higher education*, 12(2), pp. 135-144.
- COOK-SATHER, A., BOVILL, C. and FELTON, P., 2014. *Engaging Students as Partners in Learning and Teaching. A Guide for Faculty*. Jossey- Bass.
- COUGHLAN, S., 3 September 2015-last update, How Germany abolished tuition fees [Homepage of BBC Education], [Online]. Available: <http://www.bbc.co.uk/news/education-34132664> [last accessed 26th June 2017].
- COUGHLAN, S., 3 November 2010-last update, How about 80% going to university? [Homepage of BBC Education], [Online]. Available: <http://www.bbc.co.uk/news/education-11438140> [Last accessed 26/6/17].

- CREIGHTON, J., BEASLEY, S. and JEFFREYS, P., 2008. Reading Student Survey 2008. University of Reading,
- CRONBACH, L.J., 1951. Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), pp. 297-334.
- CRONIN, J.J. and TAYLOR, S.A., 1994. SERVPERF versus SERVQUAL; Reconciling performance-based and. *Journal of Marketing*, 58(1), pp. 125.
- CRONIN, J. and TAYLOR, S., 1992. Measuring service quality - a re-examination and extension. *Journal of Marketing*, 56(3), pp. 55-68.
- CURTIS, N., 2010. 'Customer' isn't always right: market model could lead to disaster. *Times Higher Education*, 4th March (2010), p24.
- CUTHBERT, P.F., 1996. Managing service quality in HE: is SERVQUAL the answer? Part 2: 1. *Managing Service Quality*, 6(3), pp. 31.
- DARIAN, L., April 13th, 2016-last update, Human capital: a look at IFS research on graduate earnings [Homepage of WONKHE], [Online]. Available: <http://wonkhe.com/blogs/human-capital-a-look-at-the-ifs-research-on-graduate-earnings/> [last accessed 13/4/16].
- DEAN, A.A., 2011. Enhancing the learning experience of students in Higher Education: Key findings from the NSS survey (2008 to 2010) for University BUSINESS SCHOOLS in England. The Higher Education Academy: Business, Management, Accountancy and Finance Network.
- DEARING, R., 1997-last update, Higher Education in the Learning Society [Homepage of London: Her Majesty's Stationery Office], [Online]. Available: <http://www.educationengland.org.uk/documents/dearing1997/dearing1997.html> [last accessed 18/11/16].
- DELUCCHI, M. and KORGEN, K., 2002. "We're the customer-we pay the tuition": Student consumerism among undergraduate sociology majors. *Teaching sociology*, 30(1), pp. 100-107.
- DENHOLM, A., 21st March 2016-last update, Warning from universities that £60m shortfall in funding may hit quality of courses [Homepage of Scottish Herald], [Online]. Available: http://www.heraldscotland.com/news/14371899.Revealed_The_60_million_annual_funding_gap_facing_Scottish_universities/?ref=mr&lp=4 [accessed 18/3/17].
- DENHOLM, A., 10th April 2015-last update, Scottish universities facing £3.75m fees funding gap [Homepage of Scottish Herald], [Online]. Available: http://www.heraldscotland.com/news/13209230.Scottish_universities_facing_3_75m_fees_funding_gap/ [last accessed 20/3/17].
- DEWEY, J., 1932. Prefatory remarks. *The philosophy of the present*, pp. 31-34.
- DIAMOND REVIEW, 2016. Independent review of higher education funding and student finance arrangements. 22nd November. Cardiff: Welsh Government.
- DÍAZ-MÉNDEZ, M. and GUMMESSON, E., 2012. Value co-creation and university teaching quality. *Journal of Service Management*, 23(4), pp. 571-592.
- DOUGLAS, J.A., MCCLELLAND, R., DAVIES, J. and SUDBURY, L., 2009. Using critical incident technique (CIT) to capture the voice of the student. *The TQM Journal*, 21(4), pp. 305-318.

- DOUGLAS, J., DOUGLAS, A. and BARNES, B., 2006. Measuring student satisfaction at a UK university. *Quality Assurance in Education*, 14(3), pp. 251-267.
- DOUGLAS, J., MCCLELLAND, R. and DAVIES, J., 2008. The development of a conceptual model of student satisfaction with their experience in higher education. *Quality Assurance in Education*, 16(1), pp. 19-35.
- DRENNAN, L.T. and BECK, M., 2001. Teaching quality performance indicators—key influences on the UK universities' scores. *Quality Assurance in Education*, 9(2), pp. 92-102.
- DUNNE, E. and OWEN, D., 2013. *The student engagement handbook: practice in higher education*. Emerald.
- DUQUE, L.C. and LADO, N., 2010. Cross-cultural comparisons of consumer satisfaction ratings. *International Marketing Review*, 27(6), pp. 676-693.
- EAGLE, L. and BRENNAN, R., 2007. Are students customers? TQM and marketing perspectives. *Quality Assurance in Education*, 15(1), pp. 44-60.
- EAMES, L., 2015. Will more students mean less satisfaction? *Times Higher Education: Student Experience Survey*, 9th April, pp. 27-29.
- EASTERBY-SMITH, M., THORPE, R. and JACKSON, P., R., 2008. *Management research*. London: SAGE.
- ELMES, J., 10th March 2016-last update, Business schools: UK immigration policy sparks drop in students [Homepage of Times Higher Education], [Online]. Available: <https://www.timeshighereducation.com/news/business-schools-united-kingdom-uk-immigration-policy-sparks-drop-in-students> [last accessed 26/6/17].
- ELSE, H., 2017. How do Universities use Big Data? *Times Higher Education*, April 13th.
- ERTIMUR, B. and VENKATESH, A., 2010. Opportunism in co-production: Implications for value co-creation. *Australasian Marketing Journal (AMJ)*, 18(4), pp. 256-263.
- ESPINOZA, J., 13th August 2015-last update, Record number of students accepted to universities, figures show. [Homepage of The Telegraph], [Online]. Available: <http://www.telegraph.co.uk/education/educationnews/11800972/Record-number-of-students-accepted-to-universities-figures-show.html> 13th August 2015 [last accessed 3/3/16].
- FIELD, A., 2013-last update, Factor Analysis/PCA [Homepage of You Tube], [Online]. Available: <https://www.youtube.com/watch?v=UWP9OEoaNnE>. [last accessed 28/6/17]
- FIELD, A., 2009. *Discovering statistics using SPSS: and sex and drugs and rock 'n' roll*. Los Angeles: SAGE.
- FILIPPAKOU, O., 2011. The Idea of Quality in Higher Education: A Conceptual Approach. *Discourse: Studies in the Cultural Politics of Education*, 32(1), pp. 15-28.
- FINNEY, T.G. and FINNEY, R.Z., 2010. Are students their universities' customers? An exploratory study. *Education and Training*, 52(4), pp. 276-291.
- FIRDAUS, A., 2006. Measuring service quality in higher education: HEdPERF versus SERVPERF. *Marketing Intelligence & Planning*, 24(1), pp. 31-47.

FIRDAUS, A., 2005. HEdPERF versus SERVPERF: The quest for ideal measuring instrument of service quality in higher education sector. *Quality Assurance in Education*, 13(4), pp. 305.

FLINT, A., OXLEY, A., HELM, P. and BRADLEY, S., 2009. Preparing for success: one institution's aspirational and student focused response to the National Student Survey. *Teaching in Higher Education*, 14(6), pp. 607-618.

FORD, J.B., JOSEPH, M. and JOSEPH, B., 1999. Importance-performance analysis as a strategic tool for service marketers: the case of service quality perceptions of business students in New Zealand and the USA. *Journal of Services Marketing*, 13(2), pp. 171-186.

FRASER, S.P. and BOSANQUET, A.M., 2006. The curriculum? That's just a unit outline, isn't it? *Studies in Higher Education*, 31(03), pp. 269-284.

FREDRICKS, J.A., BLUMENFELD, P.C. and PARIS, A.H., 2004. School engagement: Potential of the concept, state of the evidence. *Review of educational research*, 74(1), pp. 59-109.

FUREDI, F., June 4th, 2009-last update. Now is the age of the discontented [Homepage of Times Higher Education], [Online]. Available: <https://www.timeshighereducation.com/features/now-is-the-age-of-the-discontented/406780.article> [last accessed 28/6/17].

GALLIFA, J. and BATALLÉ, P., 2010. Student perceptions of service quality in a multi-campus higher education system in Spain. *Quality Assurance in Education*, 18(2), pp. 156-170.

GANSEMER-TOPF, A.M., SAUNDERS, K., SCHUH, J.H. and SHELLY, M., 2004. A Study of Resource Expenditures and Allocation at DEEP Colleges and Universities: Is Spending Related to Student Engagement? DEEP.

GASKIN, J., 2016-last update, Gaskination's Statistics. SEM Series Part 5a: Confirmatory Factor Analysis. Model fit during a Confirmatory Factor Analysis (CFA) in AMOS. 4. Confirmatory Factor Analysis [Homepage of You Tube], [Online]. Available: <http://youtube.com/Gaskination> [last accessed 26/3/17].

GIBBS, G., 2014. You don't have to guess at who's doing well. *Times Higher Education*, 5th June, pp. p20-21.

GIBBS, G., 2012. Implications of 'Dimensions of quality' in a market environment. Higher Education Academy.

GIBBS, G., 2010a. Dimensions of Quality. Higher Education Academy.

GIBBS, G., 2010b. It may have a great reputation - shame about the education. *Times Higher Education*, (2nd December, Reported by Attwood).

GIBBS, G. and COFFEY, M., 2004. The impact of training of university teachers on their teaching skills, their approach to teaching and the approach to learning of their students. *Active learning in higher education*, 5(1), pp. 87-100.

GIBBS, G., LUCAS, L. and SIMONITE, V., 1996. Class size and student performance: 1984–94. *Studies in higher education*, 21(3), pp. 261-273.

GIBBS, G., MORGAN, A. and TAYLOR, E., 1982. A review of the research of Ference Marton and the Goteborg Group: A phenomenological research perspective on learning. *Higher Education*, 11(2), pp. 123-145.

GILL, J., 2015. Building the Perfect Beast. *Times Higher Education*, 23rd July, p5.

- GLASS, G.V. and SMITH, M.L., 1979. Meta-analysis of research on class size and achievement. *Educational evaluation and policy analysis*, 1(1), pp. 2-16.
- GORDON, J., LUDLUM, J. and HOEY, J.J., 2008. Validating NSSE against student outcomes: Are they related? *Research in Higher Education*, 49(1), pp. 19-39.
- GOSLING, D. and D'ANDREA, V., 2001. Quality Development: A New Concept for Higher Education. *Quality in Higher Education*, 7(1), pp. 7-17.
- GRACE, G.W., 1987. *The linguistic construction of reality*. Routledge.
- GRANDE, T., 2016-last update, Interpreting SPSS Output for Factor Analysis [Homepage of You Tube], [Online]. Available: https://www.youtube.com/watch?v=g_3kaSnq-DY [last accessed 27/3/17].
- GRANDE, T., 2015-last update, Factor Analysis (Principal Components Analysis) with Varimax Rotation in SPSS [Homepage of You Tube], [Online]. Available: <https://www.youtube.com/watch?v=d588GFOEnP0>. [last accessed 27/3/17]
- GREEN PAPER, 2015. Fulfilling our Potential – Teaching Excellence, Social Mobility and Student Choice' November. Department for Business, Innovation & Skills. UK Government.
- GREEN, D., ed, 1994. *What is quality in higher education?* Buckingham, UK: SRHE and Open University Press.
- GRISSEMAN, U.S. and STOKBURGER-SAUER, N.E., 2012. Customer co-creation of travel services: The role of company support and customer satisfaction with the co-creation performance. *Tourism Management*, 33(6), pp. 1483.
- GRÖNROOS, C., 1984. A service quality model and its marketing implications. *European Journal of marketing*, 18(4), pp. 36-44.
- GRÖNROOS, C., 1990. Service management: a management focus for service competition. *International Journal of Service Industry Management*, 1(1), pp. 6-14.
- GRÖNROOS, C., 2004. The relationship marketing process: communication, interaction, dialogue, value. *Journal of business & industrial marketing*, 19(2), pp. 99-113.
- GRÖNROOS, C., 2007. Service management and marketing: Customer management in service competition.
- GRÖNROOS, C., 2011. Value co-creation in service logic: A critical analysis. *Marketing theory*, 11(3), pp. 279-301.
- GROVE, J., 2015c. Elements of Framework Construction. *Times Higher Education*, 23rd July, pp33-37.
- GROVE, J., 2015b. Student Survey Puts Teaching High on Agenda. *Times Higher Education*, 4th June, P6-7.
- GROVE, J., 2015a. Results from NSS unrelated to teaching quality, study claims. *Times Higher Education*, 17th September, p11.
- GROVE, J., 2016a 14th July. TEF 'is about much more than teaching'. *Times Higher Education*, p8.

- GROVE, J., 2016b. Should universities monitor students' time in the stacks. *Times Higher Education*, 8th September, p.18.
- GROVE, J., 2017. High-flying graduates underestimate skill level. *Times Higher Education*, 12th January, p9.
- GRUBER, T., FUß, S., VOSS, R. and GLÄSER-ZIKUDA, M., 2010. Examining student satisfaction with higher education services. *International Journal of Public Sector Management*, 23(2), pp. 105-123.
- GRUEN, T.W., SUMMERS, J.O. and ACITO, F., 2000. Relationship Marketing Activities, Commitment, and Membership Behaviours in Professional Associations. *Journal of Marketing*, 64(3), pp. 34-49.
- GUILD HE AND STUDENT ENGAGEMENT PARTNERSHIP, 2015. *Making Student Engagement a Reality: Turning theory into practice*. London: Guild HE.
- GUPTA, S. and VAJIC, M., 2000. The contextual and dialectical nature of experiences. *New service development: Creating memorable experiences*, pp. 33-51.
- GURNEY-READ, J., 13th April, 2016-last update, Graduates earn less than those without degrees at low performing universities [Homepage of The Telegraph], [Online]. Available: <http://www.telegraph.co.uk/education/2016/04/12/graduates-from-wealthy-homes-earn-thousands-more-than-poorer-pee/> [last accessed 25/3/17].
- GWINNER, K.P., GREMLER, D.D. and BITNER, M.J., 1998. Relational benefits in services industries: the customer's perspective. *Journal of the academy of marketing science*, 26(2), pp. 101-114.
- HAIR, J., BLACK, W., BABIN, B. and ANDERSON, R., 2010. *Multivariate Data Analysis Seventh Edition* Prentice Hall.
- HALBESLEBEN, J.R. and WHEELER, A.R., 2008. The relative roles of engagement and embeddedness in predicting job performance and intention to leave. *Work & Stress*, 22(3), pp. 242-256.
- HAMMERVOLL, T., 2014. Service provision for co-creation of value. *International Journal of Physical Distribution & Logistics Management*, 44(1/2), pp. 155-168.
- HAMMOND, M., 2013. The contribution of pragmatism to understanding educational action research: value and consequences. *Educational Action Research*, 21(4), pp. 603-618.
- HANSEN, K., JONES, E., JOSHI, H. and BUDGE, D., 2010. *Millennium Cohort Study Fourth Survey: A user's guide to initial findings*. London: Centre for Longitudinal Studies, University of London.
- HARPER, S.R. and QUAYE, S.J., 2009. Beyond sameness, with engagement and outcomes for all. *Student engagement in higher education*, pp. 1-15.
- HARRIS, R., HARRIS, K. and BARON, S., 2003. Theatrical service experiences: Dramatic script development with employees. *International Journal of Service Industry Management*, 14(2), pp. 184-199.
- HART, M. and RUSH, D., 2007. E-Learning and the development of "voice" in business studies education. *International Journal of Educational Management*, 21(1), pp. 68-77.

- HARVEY, L. and GREEN, D., 1993. Defining Quality. *Assessment & Evaluation in Higher Education*, 18(1), pp. 9-34.
- HATTIE, J., BIGGS, J. and PURDIE, N., 1996. Effects of learning skills interventions on student learning: A meta-analysis. *Review of educational research*, 66(2), pp. 99-136.
- HATTIE, J. and MARSH, H.W., 1996. The relationship between research and teaching: A meta-analysis. *Review of educational research*, 66(4), pp. 507-542.
- HATTIE, J. and TIMPERLEY, H., 2007. The power of feedback. *Review of educational research*, 77(1), pp. 81-112.
- HAVERGAL, C., 2014. Scholars or toddlers? Charters 'infantilise' students, forum hears. *Times Higher Education*, (2nd October 2014), p13.
- HAVERGAL, C., 2015a. Calling in the consultants. *Times Higher Education*, (17th December), pp 30-35.
- HAVERGAL, C., 2015b. Standard tests: giant leap or heading in the wrong direction. *Times Higher Education*, (8th October), p20.
- HAVERGAL, C., 2016a. More English think degree is poor value for money. *Times Higher Education*, (9th June), pp6-7.
- HAVERGAL, C., 2016b. Estates spending 'may not result in better learning experience'. *Times Higher Education*, 26th May, p12.
- HAVERGAL, C., 2016c. Absolute beginners: Degree powers from day one. *Times Higher Education*, 19th May, p7.
- HAVERGAL, C., 2016d. Flux in alternative sector highlights growing pains of youthful providers. *Times Higher Education*, 2nd June, p15.
- HAVERGAL, C., 2016e. A New Perspective. *Times Higher Education*, 23rd June, pp37-49.
- HAVERGAL, C., 2016f. Students 'not enthusiastic' about TEF, ministers heard. *Times Higher Education*, 26th May, p7.
- HAVERGAL, C., 2016g. Universities told to pay record compensation to students. *Times Higher Education*, (9th June), p10.
- HAVERGAL, C., 2016h. Brazil leads the way of measuring undergraduates' learning gain. *Times Higher Education*, (7th January), p23.
- HEA, 2012 -last update, Students as Partners in the Curriculum [Homepage of HEA], [Online]. Available: <https://www.heacademy.ac.uk/hea-work-area/students-partners-curriculum> [last accessed 27/6/17]
- HEA, 2015. A Review of External Examiner Arrangements across the UK. HEFCE.
- HEALEY, M., FLINT, A. and HARRINGTON, K., 2014. Engagement through partnership: students as partners in learning and teaching in higher education. York: HEA .
- HEFCE, 2008. Tender for a study into student engagement. Higher Education Funding Council for England.
- HEFCE, 2010. Enhancing and Developing the National student Survey: Report to HEFCE by the Centre for Higher Education Studies at the Institute of Education. HEFCE.

- HEFCE, 2015. New approach to ensure high-quality learning and teaching in universities and colleges.
- HEFCE, 2016a-last update, Register of HE Providers [Homepage of HEFCE], [Online]. Available: <http://www.hefce.ac.uk/reg/register/search/Overview> [last accessed 2/3/17].
- HEFCE, 16th September, 2016b-last update, Education in England 2016: Key Facts [Homepage of HEFCE], [Online]. Available: <http://www.hefce.ac.uk/pubs/year/2016/201620/> [last accessed 23/3/17].
- HEFCE, 2016c. Review of information about learning and teaching, and the student experience: Summary of responses to consultation on changes to the National Student Survey, Unistats and information provided by institutions. Higher Education Funding Council England.
- HEPI/HEA, 2014. Student Academic Experience Survey. Higher Education Policy Institute and Higher Education Academy.
- HEPI/HEA, 2015. The Student Academic Experience Survey. Higher Education Policy Institute, Higher Education Academy.
- HESA, 2017-last update, Higher education student enrolments and qualifications obtained at higher education providers in the United Kingdom 2015/16 [Homepage of Higher Education Statistics Agency (HESA)], [Online]. Available: <https://www.hesa.ac.uk/news/12-01-2017/sfr242-student-enrolments-and-qualifications> [last accessed 26/6/17].
- HIGGINBOTHAM, J., 2002. On Linguistics in Philosophy, and Philosophy in Linguistics. *Linguistics and Philosophy*, 25(5/6), pp. 573-584.
- HIGHER EDUCATION AND RESEARCH BILL, 2017. Department for Education, HMSO. London
- HILLMAN, N., 2014-last update, A Guide to the Removal of Student Number Controls: Report no 69 [Homepage of Higher Education Policy Institute (HEPI)], [Online]. Available: <http://www.hepi.ac.uk/wp-content/uploads/2014/09/Clean-copy-of-SNC-paper1.pdf> [last accessed 15/12/16].
- HILTON, T. and HUGHES, T., 2013. Co-production and self-service: The application of Service-Dominant Logic. *Journal of Marketing Management*, 29(7-8), pp. 861-881.
- HODGE, M., 24th February, 2015-last update, Financial support for students at alternative higher education providers [Homepage of Commons Select Committee. UK Parliament], [Online]. Available: <https://www.parliament.uk/business/committees/committees-a-z/commons-select/public-accounts-committee/news/report-financial-support-for-students-at-alternative-higher-education-providers/> [last accessed 26/6/17].
- HORROCKS, P., 29th April 2016-last update, Lifetime learning will be the key to transforming lives [Homepage of WONKHE], [Online]. Available: <http://wonkhe.com/blogs/transforming-lives-through-lifetime-learning/> [Last accessed 26/6/17].
- HOUSE OF COMMONS, 2009. Students and Universities. Eleventh report of session 2008-09. The Stationary Office: Innovations, Universities and Skills Committee. London.
- HU, S. and KUH, G.D., 2002. Being (dis) engaged in educationally purposeful activities: The influences of student and institutional characteristics. *Research in Higher Education*, 43(5), pp. 555-575.

- IND, N. and COATES, N., 2013. The meanings of co-creation. *European Business Review*, 25(1), pp. 86-95.
- JACKSON, M.J., HELMS, M.M. and AHMADI, M., 2011. Quality as a gap analysis of college students' expectations. *Quality Assurance in Education*, 19(4), pp. 392-412.
- JAMES, R., BALDWIN, G., and MCINNIS, C., 1999. *Which University? The factors influencing the choices of prospective undergraduates*. Australia: Centre for the Study of Higher Education. The University of Melbourne.
- JOHNSON, R.B. and ONWUEGBUZIE, A.J., 2004. Mixed methods research: A research paradigm whose time has come. *Educational researcher*, 33(7), pp. 14-26.
- JUNGBLUT, J., VUKASOVIC, M. and STENSAKER, B., 2015. Student perspectives on quality in higher education. *European Journal of Higher Education*, 5(2), pp. 157-180.
- KAISER, H.F., 1970. A second generation little jiffy. *Psychometrika*, 35(4), pp. 401-415.
- KANDIKO, C.B. and MATOS, F., 2013. Engagement for enhancement: Full qualitative testing report of a UK survey pilot. *Higher Education Academy*.
- KETTUNEN, J., 2011. Strategy and Quality Maps in Higher Education. 8(2), pp. 149-156.
- KHAN, H. and MATLAY, H., 2009. Implementing service excellence in higher education. *Education + Training*, 51(8/9), pp. 769-780.
- KINGMAN-BRUNDAGE, J., 1989. Blueprinting for the bottom line. *Service excellence: Marketing's impact on performance*.
- KOTZE, T.G. and DU PLESSIS, P., 2003. Students as "co-producers" of education: a proposed model of student socialisation and participation at tertiary institutions. *Quality assurance in education*, 11(4), pp. 186-201.
- KRAUSE, K., 2005. Understanding and promoting student engagement in university learning communities. Paper presented as keynote address: Engaged, Inert or Otherwise Occupied, pp. 21-22.
- KRAUSE, K.D., 2011. Chapter 6 Transforming the Learning Experience to Engage Students. *Institutional Transformation to Engage a Diverse Student Body*. Emerald Group Publishing Limited, pp. 199-212.
- KRAUSE, K. and COATES, H., 2008. Students' engagement in first-year university. *Assessment & Evaluation in Higher Education*, 33(5), pp. 493-505.
- KUH, G., KINZIE, J., BUCKLEY, J., BRIDGES, B. and HAYEK, J., 2007. Major theoretical perspectives on student success in college. *Piecing Together the Student Success Puzzle: Research, Propositions, and Recommendations: ASHE Higher Education Report*, 32(5), pp. 13-20.
- KUH, G.D., 2009. The national survey of student engagement: Conceptual and empirical foundations. *New directions for institutional research*, (141), pp. 5-20.
- KUH, G.D. and PASCARELLA, E.T., 2004. What does institutional selectivity tell us about educational quality? *Change: The magazine of higher learning*, 36(5), pp. 52-59.

- LANASA, S.M., OLSON, E. and ALLEMAN, N., 2007. The impact of on-campus student growth on first-year student engagement and success. *Research in Higher Education*, 48(8), pp. 941-966.
- LENGNICK-HALL, C.A., CLAYCOMB, V.(. and INKS, L.W., 2000. From recipient to contributor: examining customer roles and experienced outcomes. *European Journal of Marketing*, 34(3/4), pp. 359-383.
- LEVITT, T., 1972. Production-line approach to service. *Harvard business review*, 50(5), pp. 41-52.
- LINDSAY, R. and PATON-SALTZBERG, R., 1987. Resource changes and academic performance at an English polytechnic. *Studies in Higher Education*, 12(2), pp. 213-227.
- LITTLE, B., LOCKE, W., SCESA, A. and WILLIAMS, R., 2009. Report to HEFCE on student engagement.
- LITTLE, S., SHARP, H., STANLEY, L., HAYWARD, M., GANNON-LEARY, P., O'NEILL, P. and WILLIAMS, J., 2011. Collaborating for staff-student partnerships: Experiences and observations. *Staff-student partnerships in higher education*, pp. 215-225.
- LIZZIO, A. and WILSON, K., 2009. Student participation in university governance: the role conceptions and sense of efficacy of student representatives on departmental committees. *Studies in Higher Education*, 34(1), pp. 69-84.
- LOCKE, E.A. and LATHAM, G.P., 1990. Work motivation and satisfaction: Light at the end of the tunnel. *Psychological science*, 1(4), pp. 240-246.
- LOMAS, L., 2002. Does the Development of Mass Education Necessarily Mean the End of Quality? *Quality in Higher Education*, 8(1), pp. 71-79.
- LOMAS, L., 2007. Are students customers? Perceptions of academic staff. *Quality in Higher Education*, 13(1), pp. 31-44.
- LOVELOCK, C.H., 1981. Why marketing management needs to be different for services.
- LUCAS, L., GIBBS, G., HUGHES, S., JONES, O. and WISKER, G., 1997. A study of the effects of course design features on student learning in large classes at three institutions: A comparative study. *Improving student learning through course design*, pp. 10-24.
- MANN, S.J., 2001. Alternative perspectives on the student experience: alienation and engagement. *Studies in higher education*, 26(1), pp. 7-19.
- MARHAN, J., 2015. Measure of teaching could lead to reshuffle. *Times Higher Education*, (7th May).
- MARKWELL, D., 2007. The challenge of student engagement, Keynote address at the Teaching and Learning Forum. University of Western Australia, 30–31 January 2007.
- MARSH, H.W., 1987. Students' evaluations of university teaching: Research findings, methodological issues, and directions for future research. *International journal of educational research*, 11(3), pp. 253-388.
- MARTON, F. and WENESTAM, C., 1978. Qualitative differences in the understanding and retention of the main point in some texts based on the principle-example structure.

- MCCORMICK, A., 2015. in Jack Grove, 'elements of framework construction'. Times Higher Education, 23rd July, pp34-37.
- MCCULLOCH, A., 2009. The student as co-producer: learning from public administration about the student-university relationship. Studies in Higher Education, 34(2), pp. 171-183.
- MCGETTIGAN, A., 2013. The great university gamble: money, markets and the future of higher education. London: Pluto Press.
- MCGETTIGAN, A., April 30th, 2016a-last update. The cost of student loans [Homepage of Critical Education], [Online]. Available: <https://andrewmcgettigan.org/2016/04/30/the-cost-of-student-loans/> [last accessed 20/3/17].
- MCGETTIGAN, A., May 17th, 2016b-last update. The challengers (and challenges) in higher education market reform [Homepage of Wonkhe.com. London], [Online]. Available: <http://wonkhe.com/blogs/analysis-the-challengers-and-challenges-market/> [last accessed 27/6/17].
- MCGRATH, C., HOAREAU, GUERIN, B., HARTE, E., FREERSON, M. and MANVILLE, C., 2015. Learning Gains in Higher Education RAND Europe and HEFCE.
- MCHUGH, M.L., 2013. The chi-square test of independence. Biochemia medica: 23(2), pp. 143-149.
- MCMILLAN, J.J. and CHENEY, G., 1996. The student as consumer: The implications and limitations of a metaphor. Communication Education, 45(1), pp. 1-15.
- MEADMORE, D., 1999. Mapping the landscape. Understanding education: Contexts and agendas for the next millennium. Sydney, NSW: Prentice Hall-Sprint Print, pp. 1-10.
- MITRA, K., REISS, M.C. and CAPELLA, L.M., 1999. An examination of perceived risk, information search and behavioural intentions in search, experience and credence services. Journal of Services Marketing, 13(3), pp. 208-228.
- MORGAN, J., 20th March, 2014a-last update, Cost of new fee regime may soon exceed the old [Homepage of Times Higher Education], [Online]. Available: <https://www.timeshighereducation.com/news/cost-of-new-fee-regime-may-soon-exceed-the-old/2012146.article> [last accessed 3/3/17].
- MORGAN, J., May 29th, 2014b-last update, RAB charge debate will 'perplex' future generations, says Willetts [Homepage of Times Higher Education], [Online]. Available: <https://www.timeshighereducation.com/news/rab-charge-debate-will-perplex-future-generations-says-willetts/2013615.article> [last accessed 26/6/17].
- MORGAN, J., 2015. Measure of teaching could lead to reshuffle. Times Higher Education, 7th May 2015, p6-7.
- MORGAN, J., 2016a. Graduates from Rich Families get extra boost. Times Higher Education, (14th April), pp. p6-7.
- MORGAN, J., 2016b. May's shake-up prompts warnings on education exports. Times Higher Education, (21st July), p6-7.
- MORGAN, J., 2016c. Traineeship levy 'may add to part time degree crisis'. Times Higher Education, (21 April), pp. p6.

- MORGAN, J., 2016d. TEF: Warning on link to multiple fee caps. Times Higher Education, 21st January, p6-7.
- MORGAN, J., 2016e. Moves to boost new private providers 'dangerous for students'. Times Higher Education, 19th May, p6-7.
- MUNTEANU, C., CEOBANU, C., BOBÂLCĂ, C. and ANTON, O., 2010. An analysis of customer satisfaction in a higher education context. *International Journal of Public Sector Management*, 23(2), pp. 124-140.
- NATIONAL UNION OF STUDENTS, 2012. A Manifesto for Partnership. NUS.
- NEARY, M., 2010. Student as producer: a pedagogy for the avant-garde? *Learning Exchange*, 1(1).
- NEARY, M. and WINN, J., 2009. The student as producer: reinventing the student experience in higher education. eprints.lincoln.ac.uk .
- NEVES, J. and HILLMAN, N., 2017-last update, Student Academic Experience Survey [Homepage of Higher Education Policy Institute (HEPI)], [Online]. Available: <http://www.hepi.ac.uk/wp-content/uploads/2017/06/2017-Student-Academic-Experience-Survey-Final-Report.pdf> [last accessed 20/6/17].
- NORTON, A., 2014-last update, Unleashing student demand by ending number controls in Australia: An incomplete experiment. Report no 68 [Homepage of Higher Education Policy Institute (HEPI)], [Online]. Available: <http://www.hepi.ac.uk/wp-content/uploads/2014/08/NORTON-As-uploaded.pdf> [last accessed 11/2/16].
- NUNNALLY, J.C. and BERNSTEIN, I., 1994. *Psychometric theory*. New York: MacGraw-Hill.
- NYGAARD, C., BRAND, S., BARTHOLOMEW, P., MILLARD, L. and (EDS), 2013. *Student engagement: Identity, motivation and community*. Libri Publishing.
- OAKLEIGH CONSULTING and STAFFORDSHIRE UNIVERSITY., 2010. Understanding the information needs of users of public information about higher education. HEFCE.
- OBERMILLER, C. and ATWOOD, A., 2011. In defence of the student as customer metaphor. *International Journal of Management Education*, 9(3).
- OLDFIELD, B.M. and BARON, S., 2000. Student perceptions of service quality in a UK university business and management faculty. *Quality Assurance in Education*, 8(2), pp. 85-95.
- OSBORNE, S.P. and STROKOSCH, K., 2013. It takes Two to Tango? Understanding the Co-production of Public Services by Integrating the Services Management and Public Administration Perspectives. *British Journal of Management*, 24(S1), pp. S31-S47.
- OSTERMAN, K.F., 2000. Students' need for belonging in the school community. *Review of educational research*, 70(3), pp. 323-367.
- OWEN, D., 2013. Haven't We Seen It All Before? Historical Themes in Student Engagement. In: E. DUNNE and D. OWEN, eds, *Student Engagement Handbook: Practice in Higher Education*. Emerald Group Publishing, pp. pp5-21.
- PACE, C.R., 1990. *The Undergraduates: A Report of Their Activities and Progress in College in the 1980's*.

- PALLANT, J., 2013. SPSS survival manual. McGraw-Hill Education (UK).
- PALMER, A., 2014. Principles of services marketing. 7th edn. New York: McGraw-Hill.
- PARASURAMAN, A., BERRY, L.L. and ZEITHAML, V.A., 1991. Refinement and Reassessment of the SERVQUAL Scale. *Journal of Retailing*, 67(4), pp. 420.
- PARASURAMAN, A., ZEITHAML, V.A. and BERRY, L.L., 1988. SERVQUAL; A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, 64(1. Spring).
- PARASURAMAN, A., ZEITHAML, V.A. and BERRY, L.L., 1985. A Conceptual Model of Service Quality and It's Implications for Future Research. *The Journal of Marketing*, 49(no 4), pp. 41 - 50.
- PASCARELLA, E.T., SEIFERT, T.A. and BLAICH, C., 2010. How effective are the NSSE benchmarks in predicting important educational outcomes? *Change: The Magazine of Higher Learning*, 42(1), pp. 16-22.
- PASCARELLA, E.T., SEIFERT, T.A. and BLAICH, C., 2009. Validation of the NSSE benchmarks and deep approaches to learning against liberal arts outcomes. University of Iowa Center for Research on Undergraduate Education, Iowa City.
- PASCARELLA, E.T. and TARENZINI, P.T., 2005. How college affects students. Jossey-Bass San Francisco, CA.
- PAYNE, A., BALLANTYNE, D. and CHRISTOPHER, M., 2005. A stakeholder approach to relationship marketing strategy: The development and use of the "six markets" model. *European Journal of Marketing*, 39(7/8), pp. 855-871.
- PAYNE, A., STORBACKA, K.E. and FROW, P., 2008. Managing the co-creation of value. *Journal of the Academy of Marketing Science*, 36(1), pp. 83-96.
- PELLS, R., 13th January 2017-last update, Record number of university students graduate with first-class degrees [Homepage of The Independent], [Online]. Available: <http://www.independent.co.uk/news/education/education-news/uk-university-graduates-degree-quarter-achieve-increase-first-class-second-class-third-class-a7526286.html> [last accessed 26/3/17].
- PHOENIX, D., 2016. Making a success of employer sponsored education. 83. Higher Education Policy Institute (HEPI).
- POLLITT, C., 2013. The logics of performance management. *Evaluation*, 19(4), pp. 346-363.
- POPENICI, S., 2013. Towards A New Vision for University Governance, Pedagogies and Student Engagement. In: E. DUNNE and D. OWEN, eds, *Student Engagement Handbook: Practice in Higher Education*. Emerald Group Publishing, pp23-42.
- PORTER, S.R., 2011. Do college student surveys have any validity? *The Review of Higher Education*, 35(1), pp. 45-76.
- POUNDER, J., 1999. Institutional performance in higher education: is quality a relevant concept? *Quality Assurance in Education*, 7(3), pp. 156-165.
- PRAHALAD, C.K. and RAMASWAMY, V., 2000. Co-opting customer competence. *Harvard Business Review*, 78(1), pp. 79-90.

- PRAHALAD, C.K. and RAMASWAMY, V., 2004. Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), pp. 5-14.
- QAA, 2012a -last update, Student Experience Research Projects 2010-12 [Homepage of Quality Assurance Agency], [Online]. Available: <http://www.qaa.ac.uk/partners/student-engagement/projects> [last accessed 27/3/17].
- QAA, 2012b -last update, Understanding the barriers to student engagement [Homepage of QAA and NUS], [Online]. Available: <http://www.qaa.ac.uk/en/Publications/Documents/understanding-barriers-to-SE.pdf> [last accessed 26/6/17].
- QAA, Quality Code for Higher Education [Homepage of Quality Assurance Agency], [Online]. Available: <http://www.qaa.ac.uk/assuring-standards-and-quality/the-quality-code> [last accessed 27/6/17].
- RALSTON, S.J., 2011. The linguistic-pragmatic turn in the history of philosophy. *Human Affairs*, 21(3), pp. 280-293.
- RAMASWAMY, V. and OZCAN, K., 2013. Strategy and co-creation thinking. *Strategy & Leadership*, 41(6), pp. 5-10.
- RAMSDEN, P., 2003. *Learning to teach in higher education*. Routledge.
- RAMSDEN, P. and MOSES, I., 1992. Associations between research and teaching in Australian higher education. *Higher Education*, 23(3), pp. 273-295.
- RATCLIFFE, A. and DIMMOCK, A., 2013. What does Student Engagement Mean to Students? In: E. DUNNE and D. OWEN, eds, *The Student Engagement Handbook*.
- REAY, D., DAVID, M. and BALL, S., 2001. Making a difference? Institutional habituses and higher education choice.
- REEVES, C.A. and BEDNAR, D.A., 1994. Defining Quality: Alternatives and Implications. *The Academy of Management Review*, 19(3), pp. 419-445.
- RICHARDS, B., 2016. Passports to Progress: How do vocational qualifications help young people in building their careers? 7th July. Social Market Foundation.
- RICHARDSON, J.T.E., SLATER, J.B. and WILSON, J., 2007. The National Student Survey: development, findings and implications. *Studies in Higher Education*, 32(5), pp. 557-580.
- ROBBINS, R., 1963-last update, Higher Education: Report of the Committee appointed by the Prime Minister under the Chairmanship of Lord Robbins [Homepage of London: Her Majesty's Stationery Office], [Online]. Available: <http://www.educationengland.org.uk/documents/robbins/robbins1963.html> [last accessed 19/11/16].
- RORTY, R., 1982. *Consequences of pragmatism: Essays, 1972-1980*. U of Minnesota Press.
- ROWLEY, J., 1997. Beyond service quality dimensions in higher education and towards a service contract. *Quality Assurance in Education*, 5(1), pp. 7-14.
- RUDOLPH, K., 2006. The Linguistic Turn Revisited: On Time and Language. *Differences*, 17(2), pp. 64-95.

- RUSHTON, A.M. and CARSON, D.J., 1985. The marketing of services: managing the intangibles. *European Journal of Marketing*, 19(3), pp. 19-40.
- SAARIJÄRVI, H., 2012. The mechanisms of value co-creation. *Journal of Strategic Marketing*, 20(5), pp. 381-11.
- SABRI, D., 2011. What's wrong with 'the student experience'? *Discourse: Studies in the cultural politics of education*, 32(5), pp. 657-667.
- SAINSBURY REVIEW, 2016. Post-16 skills plan and independent report on technical education. 8th July. Department for Business, Innovation & Skills, Department for Education.
- SAUNDERS, M., LEWIS, P. and THORNHILL, A., 2007. *Research methods for business students*. Harlow: Financial Times Prentice Hall.
- SCHIFFMAN, L.G., KANUK, L.L. and HANSEN, H., 2012. *Consumer Behaviour: A European Outlook*. 2nd edition edn. Harlow, England: Pearson Education Ltd.
- SCHIFFMAN, L.G. and KANUK, L.L., 2010. *Consumer behaviour*. London: Pearson Prentice Hall.
- SCOTT, I., 2011. *Student Engagement Final Report: Survey of student activity and engagement*. York. UK: Higher Education Academy.
- SHAW, C., 7th August 2014-last update, Lifting the cap on student numbers: five lessons learned from Australia [Homepage of The Guardian], [Online]. Available: <http://www.theguardian.com/higher-education-network/2014/aug/07/lifting-the-cap-on-student-numbers-five-lessons-learned-from-australia> [last accessed 12/11/16].
- SHEKARCHIZADEH, A., RASLI, A. and HON-TAT, H., 2011. SERVQUAL in Malaysian universities: perspectives of international students. *Business Process Management Journal*, 17(1), pp. 67-81.
- SHETH, J.N. and PARVATLYAR, A., 1995. Relationship marketing in consumer markets: antecedents and consequences. *Journal of the Academy of marketing Science*, 23(4), pp. 255-271.
- SHORTHOUSE, R. and DOBSON, J., Nov 16th, 2015-last update, Understanding and reversing the decline in PT students [Homepage of WONKHE], [Online]. Available: <http://wonkhe.com/blogs/understanding-and-reversing-the-decline-in-part-time-he-students/> [Last accessed 26/6/17].
- SHOSTACK, G.L., 1985. Planning the service encounter. *The service encounter*, 1, pp. 243-254.
- SMITH, J., MCKNIGHT, A. and NAYLOR, R., 2000. Graduate employability: policy and performance in higher education in the UK. *The Economic Journal*, 110(464), pp. 382-411.
- SMITH, J. and NAYLOR, R., 2005. Schooling effects on subsequent university performance: evidence for the UK university population. *Economics of Education Review*, 24(5), pp. 549-562.
- SOLOMON, M.R., RUSSELL-BENNETT, R. and PREVITE, J., 2013. *Consumer behaviour: Buying, Having, Being*. Pearson Australia.

- SOLOMONIDES, I., 2013. A Relational and Multidimensional Model of Student Engagement. In: E. DUNNE and D. OWEN, eds, Student Engagement Handbook: Practice in Higher Education. Emerald Group Publishing, pp43-58.
- SPARQS, A Student Engagement Framework for Scotland [Homepage of Scottish Funding Council], [Online]. Available: <http://www.sparqs.ac.uk/upfiles/SEFScotland.pdf>. [last accessed 28/6/17]
- STREETING, W. and WISE, G., 2009. Rethinking the values of higher education-consumption, partnership, community? Gloucester UK: QAA.
- STREINER, D.L., 2003. Starting at the beginning: an introduction to coefficient alpha and internal consistency. *Journal of personality assessment*, 80(1), pp. 99-103.
- SURRIDGE, P., 2008. The National Student Survey 2005-2007: Findings and Trends. A Report to HEFCE. HEFCE.
- SWAIL, W.S., 2011. In SEARCH of a BETTER MOUSETRAP. *College and University*, 86(4), pp. 28.
- TABACHNICK, B.G. and FIDELL, L.S., 2013. Using multivariate statistics. 6th (International) edn. London: Pearson.
- TASHAKKORI, A. and TEDDLIE, C., 1998. Mixed methodology: Combining qualitative and quantitative approaches. Sage.
- TAVAKOL, M. and DENNICK, R., 2011. Making sense of Cronbach's alpha. *International journal of medical education*, 2, pp. 53.
- TAYLOR, S.A., HUNTER, G.L., MELTON, H. and GOODWIN, S.A., 2011. Student engagement and marketing classes. *Journal of Marketing Education*, 33(1), pp. 73-92.
- TERENZINI, P.T. and PASCAREUA, E.T., 1994. Living with myths: Undergraduate education in America. *Change: The Magazine of Higher Learning*, 26(1), pp. 28-32.
- TESTA, 2010. Transforming the Experience of Students through Assessment. available from www.winchester.ac.uk/studyhere/ExcellenceinLearningandTeaching/research/pages/TESTA.aspx. [last accessed 26/6/17]
- THE STUDENT ENGAGEMENT PARTNERSHIP, website. Available: <http://tsep.org.uk/>, [last accessed 27/6/17]
- THE STUDENT ENGAGEMENT PARTNERSHIP, Making Student Engagement a Reality: Turning theory into practice. 2015, Guild HE. The Student Engagement Partnership.
- THE STUDENT ENGAGEMENT TOOLKIT, [Homepage of National Union of Students], [Online]. Available: <https://www.nusconnect.org.uk/the-student-engagement-partnership-tsep/student-engagement-toolkit> [last accessed 29/6/17].
- THOMAS, L., 2012. Building student engagement and belonging in Higher Education at a time of change: final report from the What Works? Student Retention & Success programme. Higher Education Funding Council for England, The Higher Education Academy and Action on Access.
- THURSTONE, L.L., 1947. Multiple factor analysis. Chicago: University of Chicago Press.

- TIMES HIGHER EDUCATION, 2017. Non- elites bear brunt of student visa curbs. Times Higher Education, 23rd Feb, p6.
- TIMES HIGHER EDUCATION, 2015. Student Experience Survey. April 9th. Times Higher Education.
- TIMES HIGHER EDUCATION, 2016. Student Experience Survey. March 17th. Times Higher Education.
- TIMES HIGHER EDUCATION, 2017. Student Experience Survey. March 23rd. Times Higher Education.
- TINTO, V., 1992. Student attrition and retention. The encyclopaedia of higher education, 3, pp. 1697-1709.
- TINTO, V., 1993. Toward a theory of doctoral persistence. Leaving college. Rethinking the causes and cures of student attrition, pp. 230-256.
- TINTO, V., 1975. Dropout from higher education: A theoretical synthesis of recent research. Review of educational research, 45(1), pp. 89-125.
- TRIGWELL, K. and ASHWIN, P., 2004. Undergraduate students' experience at the University of Oxford.
- TRIGWELL, K. and PROSSER, M., 2004. Development and use of the approaches to teaching inventory. Educational Psychology Review, 16(4), pp. 409-424.
- TROWLER, P. and TROWLER, V., 2010. Student engagement evidence summary.
- TROWLER, V., 2010. Student engagement literature review. The higher education academy, 11, pp. 1-15.
- UCAS, 24 September, 2015-last update, Three per cent rise in students entering UK higher education this year, UCAS interim analysis shows [Homepage of UCAS], [Online]. Available: <https://www.ucas.com/corporate/news-and-key-documents/news/three-cent-rise-students-entering-uk-higher-education-year> [last accessed 26/6/17].
- UNIVERSITIES UK, 2016-last update, Facts and Stats. Available: <http://www.universitiesuk.ac.uk/facts-and-stats/Pages/impact-of-higher-education.aspx> [last accessed 25/3/17].
- UNIVERSITIES UK, 2011. Efficiency and effectiveness in higher education: a report by the Universities UK Efficiency and Modernisation Task Group. 15th September. Universities UK.
- VALLERAND, R.J., 1997. Toward a hierarchical model of intrinsic and extrinsic motivation. Advances in experimental social psychology, 29, pp. 271-360.
- VAN DER VELDEN, G.M., NAIDOO, R., LOWE, J.A., PIMENTEL BOTAS, P.C. and POOL, A.D., 2013-last update, Student engagement in learning and teaching quality management: A study of UK practices, commissioned by the Quality Assurance Agency. Project report [Homepage of University of Bath and QAA], [Online]. Available: http://www.bath.ac.uk/learningandteaching/pdf/student_engagement/Project_Report_11.9.2013.pdf. [last accessed 12/12/16]
- VARGO, S.L. and LUSCH, R.F., 2008. Service-dominant logic: continuing the evolution. Journal of the Academy of Marketing Science, 36(1), pp. 1-10.

- VARGO, S.L. and LUSCH, R.F., 2004. Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, 68(1), pp. 1-17.
- VAUGHAN, E. and WOODRUFFE-BURTON, H., 2011. The disabled student experience: does the SERVQUAL scale measure up? *Quality Assurance in Education*, 19(1), pp. 28-49.
- VIGURS, K., JONES, S. and HARRIS, D., 2016. Greater Expectations of Graduate Futures? A Comparative Analysis of the Views of the Last Generation of Lower-Fees Undergraduates and the First Generation of Higher-Fees Undergraduates at Two English Universities. Society for Research into Higher Education.
- VOSS, R., GRUBER, T. and REPEL, A., 2010. Which classroom service encounters make students happy or unhappy? *International Journal of Educational Management*, 24(7), pp. 615-636.
- WALLER, L., RUSTY, 2013-last update, Factor Analysis - An Introduction to Factor Analysis – Assumptions, Factor Analysis - Using SPSS, - Interpreting the Readout. Examining Factor Loadings [Homepage of You Tube], [Online]. Available: <https://www.youtube.com/watch?v=MB-5WB3eZl8> [last accessed 27/3/17].
- WALTON, J., 2013. Active Participation in Learning: Students Creating their Educational Experience. In: E. DUNNE and D. OWEN, eds, *Student Engagement Handbook: Practice in Higher Education*. Emerald Group Publishing, pp401 - 421.
- WARREN, J., 2016. Standards fall when offering satisfaction is the name of the game. *Times Higher Education*, (25th August), p24.
- WATSON, R., ATKINSON, I. and EGERTON, P.A., 2006. *Successful statistics for nursing and healthcare*. Palgrave Macmillan.
- WATTY, K., 2006. Want to Know about Quality in Higher Education? Ask an Academic. *Quality in Higher Education*, 12(3), pp. 291-301.
- WELLS, W.D., and TIGERT, D.J., 1971. Activities, Interests and Opinions. *Journal of Advertising Research*, 11(4), pp. 27-35.
- WERDER, C. and OTIS, M.M., 2010. *Engaging student voices in the study of teaching and learning*. Stylus.
- WESTWOOD, A., 2014. *Quality, Quantity or Diversity? The next ten years of higher education change in England*. Higher Education Academy.
- WHICH, 2014-last update, A Degree of Value: value for money from the student perspective [Homepage of Which], [Online]. Available: <http://press.which.co.uk/wp-content/uploads/2014/11/Which-A-degree-of-value-Nov-2014.pdf> [accessed 20/3/17].
- WHITE PAPER, May 2016-last update, *Success as a Knowledge Economy: Teaching Excellence, Social Mobility and Student Choice* [Homepage of Department for Business, Innovation and Skills], [Online]. Available: https://www.gov.uk/Government/uploads/system/uploads/attachment_data/file/523396/bis-16-265-success-as-a-knowledge-economy.pdf [last accessed 20/6/16].
- WHITE PAPER, June 2011-last update, *Higher Education: Students at the Heart of the System* [Homepage of Department for Business, Innovation and Skills], [Online]. Available: https://www.gov.uk/Government/uploads/system/uploads/attachment_data/file/31384/11-944-higher-education-students-at-heart-of-system.pdf [last accessed 20/11/16].

WHITE PAPER, January 2003-last update, 'The Future of Higher Education' [Homepage of Department for Education and Skills], [Online]. Available: <http://webarchive.nationalarchives.gov.uk/20040117001247/http://dfes.gov.uk/highereducation/hstrategy/pdfs/DfES-HigherEducation.pdf> [last accessed 25/3/17].

WILLETTS, D., 28 July 2012-last update, Speech to Bright Blue Conference: 'Tory modernisation 2.0: the future of the Conservative Party'. Available: <http://brightblueonline.com/index.php/medias/speeches> [last accessed 20/3/17].

WILLIAMS, P., 2014. Call to arms: are we on the brink of yet another Quality War? *Times Higher Education*, (16th October), pp. 30-31.

WIRTZ, J., CHEW, P. and LOVELOCK, C., 2012. *Essentials of services marketing*. 2nd edition edn. Pearson.

WOLF, M., 16th Feb 2017-last update, Why universities are not supermarkets [Homepage of Times Higher Education], [Online]. Available: <https://www.timeshighereducation.com/features/he-bill-why-universities-are-not-supermarkets> [last accessed 26/6/17].

WRIGHT, R., 2006. *Consumer behaviour*. Cengage learning EMEA.

YORKE, M., 1999. *Leaving early*. London: Falmer.

YORKE, M. and VAUGHAN, D., 2012. Deal or no deal? The expectations and experiences of first-year students in Art & Design. *Higher Education Academy*.

ZOLFAGHARIAN, M.A. and SHENG, X., 2012. The CCP Scale: Measuring Customer Co-Production of Services. *Services Marketing Quarterly*, 33(3), pp. 211-229.

Appendix 1 Focus Group Information and Consent Form

Information Sheet and Consent form – Student Engagement Focus Groups - Staffordshire University

Thank you for coming along to this Focus Group on Student Engagement. The objectives of this research are to:

1. Help determine how students interpret the UK Engagement Survey developed by the Higher Education Academy and provide feedback on individual sections/ questions.
2. Investigate what the sections mean for students studying a particular subject.
3. Help to develop a deeper understanding of differences in the responses of particular groups of students in specific subjects and postgraduate students.
4. Provide evidence on the types of initiatives that would be welcomed by students and be effective in encouraging student engagement.

I will be audio recording the interviews and may use direct quotes in the final reporting. I will be asking for your name, course and level for the focus group and will use names during the Focus Group.

After transcribing the interviews your responses will be anonymous and confidential. Your responses will be quoted as 'female undergraduate level 4 business student' for example, and you will not be named.

I will present the findings of the focus groups to all the students who have taken part in a written report (if you wish to be included in the circulation please indicate by leaving your email over the page)

CONSENT FORM

Title of Project: **Student Engagement Focus Groups**

Name of Researcher: **Anne Harbisher**

Please tick all boxes

1. I confirm that I have read and understand the information over the page for this study.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.

3. I understand that the Focus Group will be audio recorded. Names will be used in the interview but will not be used in the final reporting

4. I understand that my participation is voluntary and that I am free to withdraw from the project at any time up until it is published at the end of May 2015 without giving any reason.

5. I agree to take part in the above study.

Name of Participant _____

Date _____

Signature _____

Email address (if you would like an invitation to a session on the results of this study)

Interview Script for Focus Groups

Introduction

- Thank you for taking time to help us explore what student engagement means to you and what you think of the planned survey.
- There is research to suggest that engaged students do well on their courses and enjoy their University experience
- The objectives of the focus group is to:
 1. Help determine how students interpret the UK Engagement Survey developed by the Higher Education Academy and provide feedback on individual sections/ questions.
 2. Investigate what the sections mean for students studying a particular subject.
 3. Help to develop a deeper understanding of differences in the responses of particular groups of students in specific subjects and postgraduate students.
 4. Provide evidence on the types of initiatives that would be welcomed by students and be effective in encouraging student engagement.
- We will be audio recording the interview
- We have followed the ethics protocols at Staffordshire University to carry out these focus groups and as part of the ethics procedure; we will need you to sign a consent form (give out the form).
- There is plenty of time for the interview and we would like you to be as honest and thoughtful as possible in your responses and comments. Do you have any questions before we begin?

Interview

(Give out paper copies of the survey Qs) This survey is going to be distributed on line. Could you briefly have a look at the survey. (5 mins) I'd like you to describe your initial impression of the survey. What do you think of the layout, the

instructions for answering questions, the response options, and the overall 'flow' of the survey.

Probes:

Why do you feel that way?

Then go through each question and ask 'what does this mean to you'

Probes:

Why do you feel that way?

Are there additional questions you believe should be asked?

Are there questions you believe should be deleted?

Are there questions you believe should be modified?

Are there words used in the questions that you think could be changed to make it more understandable to students?

Has filling in this survey changed your conception of your student experience?

How do you feel about an engagement survey as a 'student voice' mechanism?

Does this let students 'have their say' in the same way as a satisfaction survey?

(Compare to NSS for final year students Student Viewfinder for others)

Do you have any questions for me

Interview Conclusion

- "Thank you for participating in this discussion. Your responses will help Staffordshire University get a better understanding of the undergraduate experience."

Appendix 2 – Email to Students



Dear student,

I know you may feel you have completed recent surveys for the University and all of these are important. The National Student Survey and Student Viewfinder Survey are both really useful for finding out what you think of the University and what improvements we can make. However, I would really appreciate if you could find the time for one more survey! Staffordshire University is running the UK Engagement Survey with the Higher Education Academy to understand better what activities you value in your course and what you feel you have gained in terms of skills from your course. This information will be compared with the thirty other Universities running the survey this year. Completing the survey should take no longer than about 10 minutes and can be accessed through the link:

<https://staffsuni.onlinesurveys.ac.uk/staffsukes2015>

To access the survey, you will need to log in with the following details:

Username: mdb3

Password: 12345678

I am sure you will find the survey interesting and by completing it you will have an opportunity to be entered into the prize draw for your chance to win £100. Many thanks and I'll look forward to receiving your response.

Best wishes,

Anne Harbisher; BEL Faculty Academic Quality Manager

If you have any questions at all about the surveys, please email Anne Harbisher on a.harbisher@staffs.ac.uk

Appendix 3 – Copy of Questionnaire

UK Engagement Survey - UKES - 2015 Staffordshire University

Page 1: UK Engagement Survey -- UKES 2015

Welcome

This survey is about how you have been supported to engage with your course. Your responses will be combined with those of others to help inform Staffordshire University about the experiences of undergraduates. This will help improve future support for the learning of students like you. The results are also used nationally to help understand and improve students' engagement across the country.

Many thanks for your participation.

Data Protection

All data collected in this survey will be held securely. Results are confidential to your institution, though your institution may choose to share or publish aggregated, anonymous results. All participating institutions have agreed not to identify any individuals when reporting their results internally or externally, and to use their best efforts to ensure that no individuals can be identified by implication. The full UKES dataset will be available to the Higher Education Academy and selected third parties in order to conduct national level research and analysis, and for legal/audit purposes. All results will be reported in an aggregated and anonymised form.

Some information held by your institution is attached to your response so that you do not have to provide it again. This data helps your institution and the sector better meet the needs of students like you. An identifier is attached to your response that will allow the Higher Education Academy to combine it with other data and carry out further research into students' experiences.

1 To continue the survey please confirm below that you have read the data

protection statement and consent to the data being used in the way described.

Please select exactly 2 answer(s).

- I have read and understand the data protection statement
- I consent to my responses being used as described in the data protection statement

Notes for completion

The questionnaire should take **between five and ten minutes** to complete. When you arrive at the **final 'thank you' page**, you will know that your responses have been recorded on our database.

Where "course" is used in the questionnaire, this refers to your programme of study at your institution e.g. BA (Hons) History, BSc (Hons) Physics, etc.

After some sections you will be asked for any further comments on the issues covered, to enable staff to gain a better understanding of what has gone well and what has worked less well.

Once you click 'Next' you will be directed to the first section of the survey.

Critical thinking

2 During the current academic year, how much has your course emphasised the following activities?

	Very much	Quite a bit	Some	Very little
Applying facts, theories or methods (for example to practical problems or new situations)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Analysing ideas or theories in depth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluating or judging a point of view, decision or information source	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forming a new understanding from various pieces of information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3 If you have any further comments on these issues then please provide them here. Please be as specific as possible:

Learning with others

4 During the current academic year, about how often have you done each of the following?

	Very often	Often	Sometimes	Never
Worked with other students on course projects or assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Explained course material to one or more students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked another student to help you understand course material	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prepared for exams or assessments by discussing or working through course material with other students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5 If you have any further comments on these issues then please provide them here. Please be as specific as possible:

Interacting with staff

6 During the current academic year, about how often have you done each of the following?

	Very often	Often	Sometimes	Never
Asked questions in taught sessions or contributed to discussions about course material in other ways	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed your academic performance and/or feedback with teaching staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talked about your career plans with teaching staff or advisors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed ideas from your course with teaching staff outside taught sessions, including by email/online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worked with teaching staff on activities other than coursework	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Made significant changes to your work based on feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7 If you have any further comments on these issues then please provide them here. Please be as specific as possible:

Reflecting and connecting

8 During the current academic year, about how often have you done each of the following?

	Very often	Often	Sometimes	Never
Combined ideas from different modules when completing assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connected your learning to real-world problems or issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Examined the strengths and weaknesses of your own views on a topic or issue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Changed the way you thought about a concept or issue as a result of what you learned	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connected ideas from your course to your prior experience and knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9 If you have any further comments on these issues then please provide them here. Please be as specific as possible:

Course challenge

10 During the current academic year, how much has your course emphasised taking responsibility for your own learning?

- Very much
- Quite a bit
- Some
- Very little

11 During the current academic year, how much has your course challenged you to do your best work?

- Very much
- Quite a bit
- Some
- Very little

12 If you have any further comments on these issues then please provide them here. Please be as specific as possible:

Skills Development

13 How much has your overall student experience contributed to your knowledge, skills and personal development in the following areas?

	Very much	Quite a bit	Some	Very little
Writing clearly and effectively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speaking clearly and effectively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thinking critically and analytically	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Analysing numerical and statistical information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acquiring employability skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Becoming an independent learner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being innovative and creative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working effectively with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing or clarifying personal values or ethics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exploring complex real-world problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being an informed and active citizen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14 If you have any further comments on these areas then please provide them here. Please be as specific as possible:

How you spend your time

15 About how many hours do you spend in a typical 7-day week during term-time doing the following?

	0 hours	1-5 hours	6-10 hours	11-15 hours	16-20 hours	21-25 hours	26-30 hours	More than 30 hours
Time spent in taught sessions	<input type="radio"/>							
Time spent in independent study	<input type="radio"/>							
Participating in extra-curricular or co-curricular activities (societies, sports, etc., via the institution or the students' union)	<input type="radio"/>							
Working for pay	<input type="radio"/>							
Doing volunteer work	<input type="radio"/>							
Providing care for dependants (children, parents, etc.)	<input type="radio"/>							
Commuting to campus (driving, walking, etc.)	<input type="radio"/>							

16 If you have any further comments on these activities then please provide them here. Please be as specific as possible:

17 How much do you agree or disagree with the following statements?

	Definitely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Definitely agree
I feel a strong sense of belonging to Staffordshire University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My experience at Staffordshire University is what I hoped it would be	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tell others of my experience at Staffordshire University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Too much of my career/ study aspirations would be disrupted if I left Staffordshire University early	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have worked with staff to make improvements on my course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend Staffordshire University to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The University communicates well with me on course matters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would rate my course to be at an appropriate standard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am clear as to what I need to do to be successful in my studies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I plan to join the Staffordshire University alumni association	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would study another course at Staffordshire University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I am satisfied with the course I am currently studying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18 What entry qualifications did you have when you started the course you are currently studying?

- More than 400 UCAS points
- 300-390 UCAS points
- 200-290 UCAS points
- 100-190 UCAS points
- Less than 100 UCAS points
- Diploma/ HND
- non standard qualification (eg experience)
- Don't know
- Other - please write in box below

19 If answered 'other' above please write below your entry qualification

20 Did you enter your course through Clearing?

21 Have you undertaken or plan to do a work placement, internship or work experience module on your course

22 How would you rate the quality of your current course at Staffordshire University?

- Excellent
- Good
- Average
- Poor
- Very Poor

23 On your current course what category have most of your grades been up to now?

- 70% and over
- 60-69%
- 50-59%
- 40-49%
- lower than 40%
- No grades have been available yet

Please click on just ONE choice. If you change your mind click again to cancel the response.

24 Whilst you have been at Staffordshire University have you been...

	Yes	No
A student representative on your course?	<input type="radio"/>	<input type="radio"/>
An active member of a university student society or sports club?	<input type="radio"/>	<input type="radio"/>
Involved in running the Student Union?	<input type="radio"/>	<input type="radio"/>

To help us understand whether provision at this institution and across the sector is meeting the needs of all undergraduates, we would now like to ask some questions about you and your course. As with the rest of the survey, all reporting will be anonymous and your responses will be treated confidentially.

About yourself

25 What is your age?

- 18 years old or under
- 19-21 years old
- 22-25 years old
- 26-30 years old
- 31-35 years old
- 36-40 years old
- 41-45 years old
- 46-50 years old
- 51-55 years old
- 56 years old or over
- Prefer not to say

26 What is your gender?

- Male
- Female
- Prefer not to say
- Other

26.a If you selected **Other**, please specify:

27 Do you consider yourself to have a disability? (for example dyslexia, long-term illness, mental health condition, physical impairment)

- Yes
- No
- Prefer not to say

27.a If 'Yes', please choose one or more from the following options:

- Social/communication impairment such as Asperger's syndrome/other autistic spectrum disorder
- Blind/serious visual impairment uncorrected by glasses
- Deaf/serious hearing impairment
- Long standing illness or health condition such as cancer, HIV, diabetes, chronic heart disease, or epilepsy
- Mental health condition, such as depression, schizophrenia or anxiety disorder
- Specific learning difficulty such as dyslexia, dyspraxia, or AD(H)D
- Physical impairment or mobility issues, such as difficulty using your arms or using a wheelchair or crutches
- A disability, impairment or medical condition that is not listed above
- Prefer not to say

28 For fees purposes, is your normal place of residence registered as:

+ More info

- UK
- Other European Union (EU)
- Non-EU

29 Where is your normal place of residence?

30 What is your ethnic group? (Please choose one option that best describes your ethnic group or background)

- White or White British
- White or White British: Gypsy or Traveller
- Black or Black British: Caribbean
- Black or Black British: African
- Any other Black background
- Asian or Asian British: Indian
- Asian or Asian British: Pakistani
- Asian or Asian British: Bangladeshi
- Chinese
- Any other Asian background
- Mixed: White and Black Caribbean

About your course

For these questions, please respond in relation to the undergraduate course you are currently studying

31 Please indicate, which of the following most closely matches your discipline. Please note that a) if you are undertaking teacher training, you should select 'Teacher Training' rather than the discipline you aim to teach; b) if you are studying management or business in relation to a particular discipline then you should select that discipline (e.g. nursing, tourism, computer science):

32 What type of qualification are you studying for?

- Bachelor of Arts (BA) or Bachelor of Science (BSc)
- Foundation degree
- Certificate of Higher Education (CertHE) or Diploma of Higher Education (DipHE)
- Higher National Certificate (HNC) or Higher National Diploma (HND)

33 What are you currently registered as?

- Full-time
- Part-time

34 What year of your course are you currently in?

- 1
- 2
- 3
- 4
- 5
- 6 or more

35 Are you in the final year of your course?

- Yes
- No

36 I am:

- Primarily a face to face learner (e.g., based at my institution)
- Primarily a distance learner (e.g. work based learner, OU student)

Please now click the 'Finish' button for your answers to be recorded.

Thank you

Thank you very much for taking the time to complete this survey. Your answers have now been recorded on our database.

Below were pre-loaded if available on the enrolment data and so not visible

Key for selection options

20 - Did you enter your course through Clearing?

- Yes
- No

21 - Have you undertaken or plan to do a work placement, internship or work experience module on your course

- Yes
- No

29 - Where is your normal place of residence?

- United Kingdom -- England
- United Kingdom -- Northern Ireland
- United Kingdom -- Scotland
- United Kingdom -- Wales
- Afghanistan
- Åland Islands
- Albania
- Algeria
- American Samoa
- Andorra
- Angola
- Anguilla
- Antigua and Barbuda
- Argentina
- Armenia
- Aruba
- Australia
- Austria
- Azerbaijan

Two further pages of options on drop down box if not already pre-loaded

31 -Please indicate, which of the following most closely matches your discipline. Please note that a) if you are undertaking teacher training, you should select 'Teacher Training' rather than the discipline you aim to teach; b) if you are studying management or business in relation to a particular discipline then you should select that discipline (e.g. nursing, tourism, computer science):

Teacher Training (please indicate this if you are undertaking Teacher Training -not the discipline that you teach)
Education studies (including Research Skills in Education; and Academic Studies in Education)
Social Work (including Child Care and Community Work)
Medicine and Dentistry

Medical Science and Pharmacy (including Anatomy; Neuroscience; Pharmacology; Physiology and Pathology)
Nursing (including Midwifery)
Other subjects allied to Medicine (for example: Aural and Oral sciences; Nutrition; Public Health; Medical Technology)
Biology and related Sciences (including Biochemistry, Ecology, Genetics, and Microbiology)
Sports Science (including Sport Coaching, Sport Development, Sport Studies)
Psychology
Veterinary Sciences (for example: Pre-Clinical and Clinical Veterinary Medicine) Agriculture and related subjects (for example: Food & Beverage Studies; Animal Science; Environmental Conservation)
Physical Science (for example: Physics; Chemistry; Forensic and Archaeological Science; Geology)
Physical Geography and Environmental Science
Mathematical Sciences (including Statistics and Operations Research)
Computer Science
Mechanically-based Engineering (including Aerospace Engineering; Production & Manufacturing Engineering)
Electronic and Electrical Engineering
Civil and Chemical Engineering (and other Engineering not covered above)
Technology (for example: Biotechnology; Maritime Technology; and Materials Technology)
Architecture; Building and Planning
Human and Social Geography
Sociology; Social Policy and Anthropology
Politics (including International Studies)
Law
Economics
Business (including Marketing)
Management (including Human Resource Management)
Finance and Accounting
Tourism; Transport; Travel (and others in Business and Administrative studies not covered above)
Media studies (including Media Production)

Appendix 4 – Qualitative Comments on Questionnaire

Critical Thinking Section

Lack of understanding of critical thinking

'My course didn't need critical thinking' 19-21 year old male, computer games student who considered course 'good quality', grades 70% or higher.

'If the "new understanding" means the data received is new then yes.' 19-21 year old male, computer games student who considered course 'excellent', grades 50-59%.

'The lecturers emphasise the need to critically analyse but I had little training or little time to research on how to do it correctly.' 41-45 year old male, Business Management student who considered course 'average', grades 50-59%.

'The above statements are not very relevant to my course this year; however it was done very much in first and second year.' 19-21 year old female, Journalism student who considered course 'excellent', grades 60-69%.

Positive

'Building these four skills were included in every module, demonstrating these in assignments was crucial to achieving good results.' 41-45 year old female, HRM student who considered course 'excellent', grades 60-69%.

'Lecturers are great; they know their work and explain course work very well.' 22-25 year old male, Mechanical Engineering student who considered course 'excellent', grades 60-69%.

'Much of this has become more emphasised during my final year of study, when I had the opportunity to research more into techniques that I had not been familiar with before.' 36-40 year old female, Biomedical Sciences student who considered course 'good', grades 50-59%.

'Opportunities to apply theories and methods to practical scenarios such as much crime scenes and lab practical assessment in the form of a literature review on a

topic of our choice allowed for extensive research and evaluation of a subject of interest' 19-21 year old female, Forensic Biology student who considered course 'excellent', grades 60-69%.

'This is an important area and helps provide guidance for future tasks' 51-55 year old male, Accounting student who considered course 'excellent', grades 70% or above.

Negative

Interestingly negative comments on critical thinking did not mean that students had lower grades; most had grades of over 60%.

'Any kind of theory work was mostly taught at surface level, with some encouragement to think deeper. This year has mostly been focused on developing skills with software. More emphasis on applying knowledge would have been helpful, as I know some people's work has suffered due to lack of direction.' 26-30 year old male, Computer Games student who considered course 'good', grades 70% and over.

'During my three years on a Screenwriting course I have not even seen a professionally written screenplay used in a lecture for cross examination and academic comparison.' 22-25 year old male, Screenwriting student who considered course 'very poor', grades 60-69%.

'In some modules such as management accounting, we didn't really learn new concepts. We just skimmed over some very basic topics. Some more depth could have been useful.' 19-21 year old female, Accounting student who considered course 'poor', grades 70% and over.

'No critical thinking development. Very substandard.' 19-21 year old male, Geography student who considered course 'very poor', grades 70% and over.

'Seminars were not utilised in order to understand and deconstruct ideas/theories due to students not completing the work that was expected of them and/or lecturers not using seminars for the purpose of which they are intended.' 26-30 year

old female, Crime and Deviance student who considered course 'average', grades 70% and over.

Variability in modules

'This was a tricky one to answer, as some modules did a much better job than others, so my score is averaged, rather than using the best module.' 22-25 year old male, Computer Games student who considered course 'excellent', grades 70% and over.

'The research mindedness module was very good at allowing students to learn in depth about theories and analysis, however other modules this year have not allowed for this.' 26-30 year old male, Social Work student who considered course 'average', grades 60-69%.

'Modules have varied between reasonable emphasis and high levels of focus on this area.' 19-21 year old female, Law student who considered course 'excellent', grades 50-59%.

'Massive difference between lectures and seminars' 19-21 year old female, Psychology student who considered course 'good', grades 60-69%.

Suggestions for improvements

'I would have liked more lectures on academic research and reasoning behind principles applied' 31-35 year old female, Graphic Design student who considered course 'good', grades 70% and over.

'The curriculum doesn't focus on a lot of theories - it relies heavily on independent study, not towards assessments. Also, there is a lot of drugs knowledge missing. Some of the core learning for the job is left to learn on placement' 26-30 year old female, Nursing student who considered course 'average', grades 60-69%.

'If theories are needed to improve grades, this should be outlined in the assignment brief along with the statement of a minimum of references to be used. I feel some of

the briefs are misleading.' 31-35 year old female, Marketing student who considered course 'average', grades 70% and above.

Learning with Others

Positive, reporting a good support network with other students

'All individual assignments but discussed assessment requirements/understanding in small groups, both formally and informally' 56 or over year old female, Mental Health student who considered course 'good', grades 70% and above.

'Especially for dealing with difference, a lot of people on this module had difficulties understanding what was expected, the only way to understand was to help each other' 19-21 year old female, Psychology student who considered course 'good', grades 60-69%.

'Everybody is in the same boat and has been very helpful whenever I may be needing any guidance.' 19-21 year old male, Nursing student who considered course 'good', grades 50-59%.

'Have good support network with other students on my course.' 31-35 year old female, Education student who considered course 'good', grades 50-59%.

Sometimes students have said they have had to work with others to supplement their learning.

'(I) have had to rely on other students to generate understanding and others have had to rely on me as well' 19-21 year old male, Sports student who considered course 'excellent', grades 60-69%.

'I have had to ask students for help explaining things as lecturers often came up short when asked or didn't simplify it enough to grasp a basic understanding before adding to that understanding.' 19-21 year old female, Psychology student who considered course 'average', grades 50-59%.

'I think with Fine Art, the main experience of the course is to explore and question, this is only done by seeing what other students know and being able to develop

each others work' 18 year old female, Fine Art student who considered course 'good', grades 50-59%.

Problems with group work

'Working within a group causes complications,.....However, only myself and one other completed the work the other two members were not involved yet achieved the same grade.' 19-21 year old female, Tourism Management student who considered course 'average', grades 60-69%.

'This year has been very individual focused - I much prefer not having to rely on others in a group to receive a good grade' 19-21 year old female, Law student who considered course 'good', grades 50-59%.

'I see a need for teamwork but being assessed as a group is always unfair as one person always ends up taking the majority of the workload while the others get a free ride. A grade should be an assessment of your own personal understanding and learning not an average of the highest achiever in a group.' 19-21 year old male, Biology student who considered course 'good', grades 60-69%.

'I don't agree with group work in the final year of a degree, it results in one person having to do most, if not all, of the work and others getting credit when they don't deserve it' 22-25 year old female, Marketing student who considered course 'good', grades 70% and over.

'Group work this year has been a massive pain for me personally.' 19-21 year old male, Film, TV and Radio student who considered course 'good', grades 60-69%.

Not enough

'Group assignments were quite limited and I think students would benefit more from an increase in this area.' 26-30 year old female, Law student who considered course 'good', grades 60-69%.

'It is unfortunate that I tried but usually other student I do contact are not open' 46-50 year old male, Nursing student who considered course 'excellent', grades not available.

'It was apparent at GradEX that we would have benefitted from sharing our development through a FYP for crucial peer feedback. But instead we are told to keep things secret. Computing has been built on open and free knowledge and technology, Uni should be sharing the same view.' 22-25 year old male, Web Development student who considered course 'very poor', grades 60-69%.

'Only one of modules actually had me working with others. If we could prepare presentations, teach each other, and work with each other, that'd be much better! Think critically about what the modules are like and put yourselves in the shoes of the students.' 19-21 year old male, Computer Games student who considered course 'very poor', grades 40-49%.

Interacting with Staff

Positive relationships with staff

'Throughout my course all the tutors I came in contact with were very supportive. Particularly X and Y - they took a real interest in my career goals and aspirations and supported me to take the needed steps to achieve these goals.' 22-25 year old female, Mental Health student who considered course 'excellent', grades 60-69%.

'This part of life at Staffordshire University cannot be faulted as 99% of tutors will always spend time with students.' 26-30 year old male, Business Management student who considered course 'good', grades 60-69%.

'My tutors have been very helpful and accessible any queries or problems no hesitations to approach the staff.' 26-30 year old female, Psychology student who considered course 'excellent', grades 60-69%.

'My lectures are always available to help with personal and academic problems' 19-21 year old female, Radio Production student who considered course 'good', grades 70% or over

'I have worked with teaching staff to clarify my understanding and approach to assignments. I have also discussed my expectations and aims with my tutors so that they are best able to guide me towards meeting them.' 41-45 year old male, Animal Biology student who considered course 'good', grades 70% or over

Problems with feedback

'This is probably one of the biggest issues at the moment. A significant amount of the final year student populous had received entirely NO feedback all year. I myself only had 2 hours of taught content each week.' 22-25 year old male, Computer Games student who considered course 'poor', grades 70% or over

'The feedback I have been given, considering it is my first year at University, I think is inadequate, as it does not really give me any indication as to where I am failing what I need to focus on to improve. I mean some of my formative assessments from the first few weeks I have not had back yet, so I do not feel comfortable answering exam, essay type questions, as I do not know whether or not I am on the right track. Comparing this to my cousin who is doing Sports Therapy at the same University her feedback is in depth, lecturers mark over her work, and show her, her weaknesses helping her to obtain higher 1st class grades.' 19-21 year old female, Law student who considered course 'average', grades 60-69%

'Some of the tutors did give the feedback which was "It's good" but then marked low. I would say the tutor need to be accurate and honest with us by saying "you can aim higher by adding theorist" etc or give us a hint that it could be better. I'm not asking for rough idea of grade but just bit of support on the essay.' 19-21 year old female, Early Childhood Studies student who considered course 'good', grades 50-59%

'One of the largest issues with this course is that there has been no feedback for anything, which I am under the impression we should have received, as such

performance has been hindered. The overall system for giving feedback is either non-existent or grossly underutilized.' 22-25 year old male, Computing student who considered course 'very poor', grades 60-69%

'Most of the feedback received was not particularly illuminating, only a couple of lecturers actually gave me feedback I could work with.' 19-21 year old female, Film TV and Radio student who considered course 'poor', grades 70% and over

'I feel that the feedback has been given to us too late to make a real difference in my work. For example, we only had one essay per academic year. I was never given any feedback for the essay from my second year. By the time it came to writing my third year essay, I had no idea how I could have made improvements. Therefore, I received a similar grade to my last one. I feel that my grade would have been improved tenfold if I had been given feedback, or at least a brief conversation would have helped.' 22-25 year old female, Stop Motion student who considered course 'good', grades 60-69%

Variability of tutors

There were many comments on variability and it caused high emotions

'This depended a lot on the module. International Relations was very engaging. Analysing Modern Societies might have as well have been a solo course due to almost no interaction with the tutor at all.' 31-35 year old male, International Relations student who considered course 'good', no grades available

'Some staff (in particular X) actually care about their students and attempt to engage them and encourage them in many ways. Others however do not.. and I question why these people teach in higher education!' 26-30 year old female, Crime, Deviance and Society student who considered course 'average', grades 70% or higher

'Feedback varies hugely from Module to Module. Sometimes none and other times excellent. The timeliness also varies from very timely and announced feedback

dates, to receiving feedback so late as to be useless.' 56 or over year old male, Electrical Engineering student who considered course 'poor', grades 70% or higher

'Feedback on work differed massively from course to course. With some offering progressive assignments that could then all be resubmitted at the end while others simply had an assignment with a deadline and the assignment when returned offered little feedback.' 26-30 year old male, Intelligence and Security student who considered course 'excellent', grades 70% or higher

'Feedback was too prescriptive to the work completed and not instructive enough for future work. Feedback from so many tutors was inconsistent in that some weighted things far heavier than others. You focus on that and lose marks because that's not what the next tutor wanted!' 36-40 year old female, HRM student who considered course 'very poor', grades 70% or higher

Communication - importance or problems

'Would be good to have an update on what grade we are working at so that we could know whether we are on track or need to work harder to obtain a good grade.' 19-21 year old female, Photojournalism student who considered course 'poor', grades 60-69%

'The relationship between tutor and student is all about communication, regularly explaining your current ideas and theories.' 18 year old female, Fine Art student who considered course 'good', grades 50-59%

'The lecturers in the law school don't have the time to see students. There are maybe a few people in the law school who will go above and beyond for their students however a majority of them just can't be bothered to see you.' 26-30 year old female, Law student who considered course 'average', grades 50-59%

'Staff contact has been quite difficult due to the fact that mutual student/staff availability was sometimes not possible and not a lot of time was devoted to student/staff meetings with some members of staff. I feel that some ideas and concepts could have been explained in more detail during lectures rather than just

following displayed lecture notes. 36-40 year old female, Biomedical Science student who considered course 'good', grades 50-59%

'On the ECS course a few students including myself have commented on how little time we get with the lecturers and how they're not accessible when we need them to be. E.g 'out of office and will get back to you as soon as they can' when deadlines are approaching for that module is not acceptable for what we pay a year.' 19-22 year old female, Early Childhood Studies student who considered course 'average', grades 50-59%

Reflecting and Connecting

Positive

'A positive of this course is that you are able to reflect in depth on various aspects of practice and there is a somewhat supportive environment to do this in.' 26-30 year old male, Social Work student who considered course 'average', grades 60-69%

'Assignments and exams are often based on real-life scenarios to emphasise the importance on learning information that can be applied after University.' 19-21 year old male, Computing student who considered course 'excellent', grades 70% or over

'Having learnt more from playing games than I have from school's all of my life, it's great to finally be in a place where I can learn what I want to learn and where my views on a topic matter.' 19-21 year old male, Games Design student who considered course 'excellent', grades 50-59%

'I deliberately picked my modules so they are all different, therefore connections between them are quite rare but from a work perspective and exam preparation I have used the same techniques for revision etc across all modules. We have been examining a few world problems / issues and been assessed on them.' 22-25 year old male, Biology student who considered course 'good', grades 70% or above

Negative – not done or variable

'There is a lot of potential with the course, but it all seems rather "messy" for want of a better term. More integration between modules would be beneficial.' 22-25 year old male, Computer Games student who considered course 'poor', grades 70% or above

'The course does not relate to real world issues or theory. I cannot connect the knowledge gained to my full time role and do not understand how the learning will assist me in the future, the material is purely taught to facilitate passing an exam.' 19-21 year old female, Business Management student who considered course 'poor', grades 60-69%

'I have sometimes linked new ideas to old concepts learned in my previous professional life, however, this was just from a natural evolution of understanding as opposed to anything that was actually taught by the university.' 26-30 year old male, Law student who considered course 'average' grades 50-59%

'As mentioned before there is only so much I could do as a student to stay focused and engaged in a module. The material is not presented in an engaging way and nor do the majority of lecturers do anything to make the module engaging.' 26-30 year old female, Law student who considered course 'average', grades 50-59%

Course Challenge

Positive

'Design futures module on the film production course is a great eye opener to the future of my career, life and aspirations' 22-25 year old male, Media student who considered course 'excellent', grades 60-69%

'Entering higher education as a mature student has been extremely difficult. The course has pushed and challenged me to my best abilities!' 26-30 year old female,

Crime deviance and Society student who considered course 'average', grades 70% or more

'In regard to the above answer it should not be a case of a person's chosen course challenging them to do their best. It should be for the student to do their best on their own merit and initiative.' 26-30 year old male, Business Management student who considered course 'good', grades 60-60%

'Lectures very much involve providing initial guidance to set up my own independent learning whilst practicals are to support me in the things I have learned in my own time.' 19-21 year old male, Computing student who considered course 'good', grades 70% or above

'My lecturers have always pushed me further and given me sufficient critiques so that I can produce the best work possible.' 19-21 year old male, Games Design student who considered course 'good', grades 60-69%

'The course is fantastic, it's challenging and most certainly boosts your confidence to enhance the decisions you make.' 26-30 year old male, Operating Department student who considered course 'excellent', no grades yet available

'Though the work you are producing is totally unique and based purely upon your own abilities, you are always being encouraged (never pushed) to achieve the best that you can. Every staff member appears to believe in you to perform well, and is there to offer appropriate assistance where required, even if it is only to signpost to a service which would be better suited to your needs.' 19-21 year old female, Nursing student who considered course 'excellent', grades 70% or above

Negative

'Being told "it's first year so you only have to pass" is not a great motivator to do well.' 19-21 year old female, Psychology student who considered course 'good', grades 60-69%

'Every time I submit a piece of work I feel I could of done better; if only I understood how to critically analyse better.' 41-45 year old male, Business Management student who considered course 'average', grades 50-59%

'I challenge myself to provide my best work but this is not hugely encouraged by the university' 26-30 year old female, Nursing student who considered course 'average', grades 70% or more

'I don't feel that my best work is required as the pass rate is set at 40%' 51-55 year old female, Nursing student who considered course 'very poor', grades 70% or above

'Sometimes it hasn't felt possible to produce the highest quality work I can because my aims were not matched by lecturers. I'm far from work shy; my grades will tell you that if you care to look, but the attitude of some lecturers has been a hindrance. For example, being told "well, you only need to pass", was particularly disheartening when I was chasing a first; for that particular module I ended up spending so much time revising statistics that my other work suffered (over compensation due to a lack of guidance driven by a will to do well, a sad combination and poor reflection of the university)'. 26-30 year old male, Business Management student who considered course 'poor', grades 60-69%

Skills Development

Mature students or post experience

'My full time employment has taught me more about the above than education ever has. Education is purely theory whereas university does not assist you in putting this into practice.' 19-21 year old female, Business Management student who considered course 'poor', grades 60-69%

'I don't feel that my course has helped me to develop many of the skills above as I am already in employment and have been for a while which I believe has helped me to develop the majority of my skills. Independent learning has been developed but

because of necessity due to the lack of help from staff.' 19-21 year old male, Information Technology student who considered course 'average', grades 60-69%

'I am a mature student working full-time and studying part-time, so most of the above I already do in my work and external roles.' 36-40 year old female, Business Management student who considered course 'average', grades 60-69%

'As a mature, working person who takes an active role in the governance at child's school I had these skills , the course has given me a deeper understanding of them and broadened my application.' 41-45 year old female, HRM student who considered course 'excellent', grades 60-69%

Positive

'The content of the course was really useful in the majority. Being introduced to some of the key concepts behind modern business really helped me to engage better at work, ultimately leading to me being promoted (which was my main motivation behind doing a degree to begin with)' 26-30 year old male, Business Management student who considered course 'poor', grades 60-69%

'So many people I never knew and their viewpoints....' 19-21 year old female, Computing student who considered course 'good', grades 60-69%

'I have enjoyed my student experience very much, learnt a lot through both my studies and meeting new people' 19-21 year old female, English student who considered course 'average', grades 50-59%

'I have a better understanding of the world around me after the three years I have spent here, in all aspects of life - from politics and the history of the Government, to theories on why criminals behave in certain ways. 19-21 year old female, Law student who considered course 'excellent', grades 50-59%

Negative

'I am leaving university the way I came in 3 years ago. I have learnt nothing nor will I take anything from my university experience.' 22-25 year old male, Screenwriting student who considered course 'very poor', grades 60-69%

'I don't feel my degree has actually helped that much with any of the above neither has the general student experience.' 22-25 year old female, Events Management student who considered course 'poor', grades 50-59%

'Some modules feel a bit dated, in engineering and technology courses I believe that the modules should change each year based on real-world problems to gain a sense of achievement.' 22-25 year old male, Motorsports student who considered course 'average', grades 60-69%

'Our modules, although some were very much accountancy related, did not relate anything to real world situations and did not contribute even an iota to improve our employability skills. In fact, we found ourselves to be at a disadvantage in terms of work/jobs/experience. The employability modules were absolutely useless and could have been substituted with internship opportunities provided by the uni (even if unpaid!!).' 19-21 year old female, Accounting student who considered course 'poor', grades 70% or above

'In fact, I think this year has drained my ability to be innovative and creative. A lot of time it feels like answering a checklist rather than trying to create things...probably because our criteria would be effectively that.' 19-21 year old male, Computer Games student who considered course 'good', grades 50-59%

'I think that one of my strengths before university was communication, hence university has not really had much of an impact on that.' 22-25 year old male, Computing student who considered course 'good', grades 60-69%

How you Spend your Time

Too little time

'Working full time in a demanding job (50 hours per week), supporting a family (Wife, 2 children, a dog and a house that requires maintenance) takes priority over

Uni work. Any spare time is used for study, even holiday booked off from work to help with revision or complete course work. This can be very stressful at times and also has an impact on the family.' 41-45 year old male, Business Management student who considered course 'average', grades 50-59%

'was difficult working part time with a heavy work load' 19-21 year old female, English student who considered course 'average', grades 50-59%

'Some of these options aren't really relevant to nursing students. As a student nurse we spend 50% of our time out on placement and 50% of our time in lectures over a 45 week year. How long we spend in lectures a week varies depending on how many modules have been launched and or completed. When on placement we do 37.5 hours a week, unpaid.' 22-25 year old female, Nursing student who considered course 'good', grades 60-69%

'Other than the full day at work every Wednesday, I have woken up at 6am and gone to bed at 10pm. In between that is nothing but work towards University. Not a ideal or very effective way of working, but it is what needs to be done to tackle the amount of work you get when the assignments get released in the short space of time.' 22-25 year old male, Web Development student who considered course 'very poor', grades 60-69%

Suggestions for improvements

'I'm a full time art student and a mother , not sure if relevant but I'm extremely disappointed in the fact that the uni Easter holidays didn't mirror the schools holidays.....I felt isolated from preparation for the most important part of the year, the end of year show. I don't feel who made this decision considered people with children and the effect its had..... This is the only thing that I'm unhappy about concerning the university .' 41-45 year old female, Fine Art student who considered course 'good, grades 70% and over

'It would have been great if the university offered to study part time, long distance or allow experienced student to start from the second year. I am mature student who already working as biomedical assistant. In past I had to postpone my

university during 2nd year due to my health issue, coming back to education and re-starting from year 1 is bit of too lengthy. Already considering leaving university!

26-30 year old female, Biomedical Science student who considered course 'average', grades 40-49%

'University needs to have a minibus from the campus to a major town/ place (Stafford University to Stafford Train Station), buses can be unreliable.' 22-25 year old male, Computer Games student who considered course 'excellent', grades 60-69%.

Not really interested in spending free time at university

'As a mature student I do not really use the university for social purposes.' 31-35 year old male, Illustration student who considered course 'good', grades 70% and over.

'As I am a distance learning student I do not tend to, with the exception of the residential elements, attend taught phases or do any extra-curricular activities.' 36-40 year old male, Intelligence and Security student who considered course 'average', grades 70% and over.

