

# COMBINED DEGREES & EMPLOYABILITY: A COMPARATIVE ANALYSIS OF SINGLE AND JOINT HONOURS GRADUATES OF UK UNIVERSITIES

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## **Abstract**

*Over the last decade, there has been an increase in the popularity and number of combined or joint degrees in English and Welsh Universities. Combined or joint honours represent 10% of all undergraduates – 50,000 out of 500,000<sup>1</sup> currently enrolled on all honours degrees. This significant and special way of learning therefore warrants scrutiny. Combined degrees enable students to enroll on two or more subjects, with varying levels of integration of the courses, which leads to either a BA or BSc honours joint award. The growing number of students on such degrees across universities in England and Wales has led to a debate as to the intrinsic value of such degrees especially in relation to graduate employability and career opportunities. This paper examines the nature and relative attractiveness of combined degrees and explores the employability of combined honours degree graduates in comparison with single honours degree graduates.*

**Keywords:** Joint honours; combined honours; employability

## **Introduction**

Joint honours degrees provide an opportunity for students to study subjects that reflect more broadly their preferred choices and interests. Joint honours degrees are beneficial to those who have particular cross-discipline interests or those who are not yet sure within which academic discipline they wish to specialise. This type of course facilitates students combining the study of two subjects to honours level, with modules delivered from two academic disciplines. A broader range of academic teaching, learning and assessment styles enables students to choose subjects that favour and develop their preferred learning needs and styles. The joint honours degree also enables students to create a personalised course that reflects high academic goals, as well as supporting personal strengths and career aspirations. By further developing creativity, intellectual and problem-solving skills, a joint honours degree, when compared to single honours, gives a broad and diverse education that is attractive to employers as well as being stimulating and satisfying for the student.

A joint honours degree enables students to select modules from two different academic disciplines based on specific individual interests, needs and career intentions. In this way, students personalise their degree to suit their own personal preferences, giving greater choice over what is studied. Students can pursue diverse interests or conversely explore the connections and synergies between two related areas. Generally, joint honours students attend classes and integrate with students who study allied single honours courses. Collaborating with a larger pool of students in this way can also enhance the academic and social experience of joint honours students while at university, compared to single honours students.

Because the work environment is ever changing, employers are looking for graduates who can demonstrate adaptability together with diverse knowledge and skills. Specialising in two subject areas, rather than just one, provides graduates with the opportunity to distinguish themselves from their more specialised peers in an increasingly competitive jobs market. Graduates can stand out as flexible and adaptable, possessing excellent interpersonal, organisation and problem solving skills, who can undertake independent research from more than one discipline and have the ability to work as part of a team.

For students who are considering pursuing postgraduate qualifications at PGCE, Masters or PhD, joint honours study delivers substantial benefits via the experience of identifying the links between different subjects; this means joint honours graduates can approach research and further study from a number of perspectives. Since much

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<sup>1</sup> UCAS, (2015), Applicants and Acceptances by Groups of Students, [online]. Available at: <https://www.ucas.com/corporate/data-and-analysis/ucas-undergraduate-releases/ucas-undergraduate-end-cycle-data-resource-4> > [Accessed 3 February 2016]

postgraduate research and many taught postgraduate degrees are interdisciplinary in nature, the joint honours graduate is particularly well prepared for this intellectual mind-shift, in the way that single honours students may not be.

Using available data and anecdotal evidence, this paper argues that combined degrees, more than the single honours, now offer an important framework for enhancing students' employability and career development in an increasingly diverse and multi-skilled jobs market. The paper argues that the wide range of skills and flexibility, which combined degrees develop in students, enables and equips them to deal with work-based challenges more than their counterparts studying single honours degrees. The paper reflects that universities could better enhance the provision of their combined degrees as a means to boosting their graduates' employment opportunities. Future work will go further and explain how university leaders, careers advisors and academics can best serve their students in relation to key performance indicators for the higher education sector in the England and Wales.

The purpose of this paper is to focus on both truly interdisciplinary and also multi-subject degrees, the latter where the student is largely left to themselves to work out the potential for synergistic learning between their two subjects. No value judgement is attached to either model, but we will critique and reflect upon the challenges and benefits of teaching and studying multi-subject as well as interdisciplinary courses.

**Body of paper:** (A) General Overview of Combined Degrees in the UK HE Sector

Many students are attracted to study two subjects that they have already studied at GCSE/Advanced level, and so they are familiar with the broad curriculum aims and teaching of their subjects and the learning and assessment styles. For example, History and Politics is an ever popular combination, with 82<sup>2</sup> universities in the UK offering this combination. However substantial numbers seek out something new to study at university, such as International Relations, often combining with a familiar subject to balance out the risk of academic underachievement. Other students will pair a vocational subject with a traditional academic discipline, e.g. Journalism and English Literature, while others will look for something practical paired with a theory based subject, e.g. Drama and Mathematics.

Employability considerations will often drive student choice – combinations including a business degree dominate the market, with over 20,000 acceptances in 2015<sup>3</sup>. When combined with a vocational subject, such as Art & Design or with a foreign language, then the graduate can justifiably promote themselves to employers as being more diversely equipped than many single honours graduates.

There is great variation between and within universities in terms of the size and design of combined or joint honours degrees. Not all universities will provide the combination of subjects that a student is looking for, and indeed some combinations, such as Geology and Zoology (University of Derby, University of Worcester), or Geography and Law (University of Derby, SOAS University of London), may be available at only a very small number of institutions.

Some universities offer joint honours degrees in related subjects such as Chemistry and Biology, Geography and Geology, Drama and Music, etc. Other universities permit pairs of subjects to be studied from entirely separate academic disciplines and/or bridging the arts/science/social science divide.

Many institutions will develop a relatively small number of truly inter-disciplinary awards, with bespoke modules that bridge between two disciplines and with explicit opportunities to connect and synthesise knowledge from one subject to another.

The prevalent degree model is for students to study equally between their two subjects – true 'joint honours'. However there is increasing interest in US style major / minor awards<sup>4</sup>, where students study roughly two thirds in their major subject and one third in the minor.

Nevertheless, in the United States there is a shift in the opposite way with 'double majors' on the rise, similar to the UK true joint honours, because of a positive impact on career earnings: 'Majors combining business and science or math have returns more than 50% greater than the returns to having a single major in these fields.'<sup>5</sup>

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<sup>2</sup> UCAS (2016), Course search tool, [online]. Available at < <http://search.ucas.com/>> [Accessed 22 February 2016]

<sup>3</sup> UCAS (2015), Applications and acceptances for types of higher education course- 2015, [online]. Available at < <https://www.ucas.com/corporate/data-and-analysis/ucas-undergraduate-releases/ucas-undergraduate-end-cycle-data-resource-5>> [Accessed 22 February 2016]

<sup>4</sup> Paton, G., (2014), Universities to offer US-style 'major and minor' degrees, [online]. Available at < <http://www.telegraph.co.uk/education/universityeducation/10865699/Universities-to-offer-US-style-major-and-minor-degrees.html>> [Accessed on 22 February 2016]

<sup>5</sup> Del Rossi, Allison; Hersch, Joni (2008). "Double Your Major, Double Your Return?". *Economics of Education Review* 27 (4): 375–386. doi:10.1016/j.econedurev.2007.03.001.

The move to major/minor awards reflects the practical reality that students often have one stronger subject, or go on to develop a stronger interest and enthusiasm for one of their subjects as the course progresses. This model also lowers the risk of studying two subjects, and can facilitate a move to a single honours degree in some cases where this is appropriate for student interest and success. Majoring facilitates study to the depth and breadth comparable with a single honours award, while maintaining a subsidiary study in a still relatively substantial way.

Arguably, one weakness of studying joint honours degrees, at least in the UK, is the relatively short length of study in the UK compared to other European countries. This means there may not be sufficient time to build up the required body of knowledge required by specialist professions. Perhaps for that reason, subjects such as Engineering, Medicine and Veterinary Science are not common joint honours offerings in UK universities.

**(B) Comparison of Single and Combined Degrees:** B.1 Pedagogical arguments for and against combined degrees  
 Students must often cope with markedly different academic sub-cultures and approaches to teaching, learning and assessment. For example they may study a traditional, theory-based subject such as Geology with an emphasis on lectures and examinations, alongside a highly creative, expressive and interactive subject such as Creative Writing featuring seminar debate and compositions for assessment.

While joint honours students may not necessarily be required to enroll on or study more credits than single honours students, there are extra challenges in succeeding in two subjects for joint honours students. Also, joint honours students are more likely to receive only half the feedback on assessment and have less practice in the subject. Nonetheless the assessed work is marked to the same criteria and expectations as the single honours students'. By default, the students have only half the breadth and depth of knowledge in each subject, and must read around and do extra studying in order to compete with the best single honours students. Although this may be perceived as a disadvantage of the joint honours degree, there are huge benefits in studying combined subjects as Table 1 and figure 1 shows.

Intrinsic Benefits of Joint Honours Degrees

Key areas of degree	Joint Honours	Single Honours
Flexibility of module choice	Flexible	Restricted
Employability	Wider Opportunity	Narrower Opportunity
Entry Requirements for higher degrees	Wider range of choice of post graduate studies	Limited range of choice in post graduate studies
Transferrable Skills	Wider scope	Narrower scope
Collaborative Opportunities	Wider subjects-related network	Narrower subject-related network
Mode of Course Delivery	Varied	Restricted
Learning, teaching and assessment	Varied	Restricted
Academic cultures	Diverse	Narrow
Extra and co-curricular opportunities	Diverse	Narrow

Source: Authors, 2016

Although there are variations between and within institutions as to the perceived benefits of studying joint honours degrees, anecdotal evidence suggests that generally joint honours degrees have intrinsic values that make them a popular and important provision in an increasingly competitive job market.

First, joint honours students benefit from the flexibility of module choice compared to single honours students who tend to have a more specialised and narrow range of modules. The flexibility of choice enables joint honours students, more than their single honours counterparts, to choose modules that they enjoy and are more likely to give them wider opportunities in the jobs market. For joint honours students pursuing higher degrees, the combined subjects offer them a wider choice of degrees at postgraduate/Masters level.

Second, joint honours students, by the nature of studying combined subjects, are equipped with a wider scope of transferable skills developed over two or more subject areas. This can give them an edge over their single honours counterparts, whose acquired skills may be relatively narrow in focus.

Third, in relation to collaborative opportunities, joint honours students tend to have a wider subject-related network that they can tap into. This wider subject-related network opportunity can be useful in opening up opportunities for career development which would not have been possible to develop if they had studied a single honours degree.

Analysis of degree outcomes from the authors' institution evidences that joint honours students perform equivalently to their single honours counterparts, and succeed in gaining First or 2.1 degrees in similar numbers. The reasons behind this success, given the preceding comments about breadth and depth, are multi-faceted but, anecdotally, joint honours students are a self-selected group who thrive on challenge and diversity and it is perhaps unsurprising that they are driven to succeed at the highest level.

### **B.2 Single vs Combined - Admissions requirements**

Students who miss the UCAS points or specific requirements to study a subject, will sometimes be made an offer to study the subject in combination with another<sup>6</sup>. This approach on the part of some universities can sometimes then result in the student struggling while studying the same modules alongside single honours students. Students have the added complexity and the energy required to study a second subject, often having to immerse in two highly differing academic sub-cultures.

Based on student feedback at the authors' university, the perspective of some academics is that joint honours students are not 'committed' enough to study the subject as a single honours degree. Universities can be inadvertently complicit in this, by encouraging academics to be passionate about their discipline, which can lead to the inference that only single honours students are worthy of intrinsic respect and encouragement. Academics must accept that their subject is an academic construct with fluid boundaries and definitions, and that new academic disciplines are commonplace. However it is necessary for joint honours students to be clear, confident and determined in their intention to study two subjects, for their own personal and objective benefit.

### **B.3 Single vs Combined - Course structures, duration and delivery**

Although joint honours degrees offer flexibility, in some cases studying a joint honours course can lead to less choice rather than more. In order to organise the course, there may be set pathways in place, and pre-requisites for certain modules. Sometimes joint honours students cannot choose what they wish to do in the long-term - they are directed down a route pre-decided by their departments, and in some cases this can be a less enjoyable route for the student. In later years while single honours students are doing interesting optional modules, the joint honours student can be constrained on a core module or on a module they would not have selected given the choice.

To address this, some universities, such as King's College London, have ultra-flexible Liberal Arts or Combined Studies degrees, where students in theory have great choice and flexibility to build the degree that best reflects their interests. In practice, timetable and pre-requisite module constraints will always be a limiting factor, and good academic guidance is required in order for a student to emerge with a coherent and useful suite of modules.

Joint honours students might experience difficulties with assessment deadlines, more so than single honours students. With single honours degrees, efforts can be made to avoid excessive 'bunching' of deadlines. However for joint honours degrees, the many permutations of subjects that can be studied usually means any attempt to avoid assessment bunching will fail. Joint honours students soon understand that this cannot be designed or managed away, and that they will be required to develop excellent time management skills in order to achieve the best degrees, with the associated benefit for their career success.

Because joint honours students are studying half the modules of the allied single honours subject (where one exists), they must often back-fill their learning via extended reading lists and additional tutorials, to ensure they perform on a level playing field. Students may also experience a differential approach to academic support for learning between their two subjects, with more contact time, say, in their Science lab-based subject compared with, say, their seminar based Humanities subject. These differences may extend to differing formats for handbooks, Virtual Learning Environment resources, reading lists, assessment requirements, referencing styles and so on.

In the final year of study, most single honours students will complete a dissertation, or independent study. For those on joint or combined honours degrees this can be problematic. It may take up too much credit from one or other of the subjects being studied, or the student may wish to devise an interdisciplinary dissertation, but the two subject areas cannot resource or support this, and splitting credit and income between two departments can be a bureaucratic issue. However, it needs to be noted that this is a problem for university administration and not joint honours students who are enrolled on combined degrees.

Students may also be required to travel between different campuses for their two subjects, learn different software tools, or other practical tools, methodologies and approaches. So a highly motivated and organised approach is essential to yield dividends, again with the associated benefits in the graduate skills therefore developed.

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<sup>6</sup> Sabur, R. (2013), Joint honours degrees: are two subjects better than one? [online]. Available at <  
<http://www.telegraph.co.uk/education/universityeducation/clearing/10226371/Joint-honours-degrees-are-two-subjects-better-than-one.html>> [Accessed on 22 February 2016]

The support for joint honours students may also differ between their two subjects – they may have one personal tutor covering both their subjects, or a personal tutor from each subject, or even a centrally appointed non-subject expert. The students may also experience different support arrangements from administrative staff in terms of record and assessment marks management, timetabling queries and pastoral support. Again, this differentiation will require effort on the part of the student to understand two different ways of working – seldom is a wholly consistent approach evident across institutions, and joint honours students will often find themselves identifying inconsistencies.

The flexible approach to the design of joint honours subjects within a particular university seldom results in a consistent experience for the student. For example one subject may have a wide range of modules to choose from, while the other subject has little or no choice. Universities vary in terms of the level of centralised operational and strategic management of their joint honours subjects, and less than ideal levels of communication between departments can leave students with lecture clashes and misinformation.

#### **B.4 Single vs Combined - Subject range and popularity**

Some of the largest providers<sup>7</sup> of combined and joint honours (Manchester Metropolitan University, University of Cambridge, Leeds Beckett University, Liverpool John Moores University, University of Central Lancashire) have over 600 acceptances onto degrees for a Science combined with a Social Science or Arts subject. Generally only specialist Creative Arts and Design colleges, Business and Administration degrees and Subjects allied to Medicine attract greater numbers of acceptances.

Most universities will offer a variety of combinations within and between the Sciences / Social Sciences / Arts, with variation in terms of the scale of provision and flexibility of choice of subjects to pair. Manchester Metropolitan University has over 150 possible combinations in both closely related and entirely unrelated areas, and the University of Derby has over 400 combinations of subjects across diverse areas. Keele University, which has a long tradition of ‘dual honours’ degrees, has over 500 possible combinations.

On most university’s websites, it is not possible to search for all joint and combined honours degrees, so it is difficult to analyse the true breadth of joint and combined degrees. Similar issues exist on UCAS, the UK agency responsible for processing applications to degree courses, and in other data such as the National Student Survey and the Destination of Leavers from Higher Education, where a student studying a joint honours degree is split evenly across the two subjects of qualification aim. Future work will attempt to address the difficulty in analysing joint and combined honours degrees across the higher education sector.

#### **(C) Combined degrees and employability**

Students are likely to succeed in gaining a good honours degree when they are enjoying the subjects they are studying, and if this means studying two subjects rather than just one, then that is to be encouraged. Additionally, students are more likely to engage with co- and extra-curricular activities when they are happy in their studies, so again the emphasis should be on encouraging students to follow their passions in terms of subjects studied, rather than following well-intentioned but mis-guided advice around the value placed on single versus joint honours degrees, or certain combinations of subjects.

For the linguist, having two languages at degree level, rather than just one, will obviously confer an advantage in the employment market, but arguably more importantly, the benefits lie in having developed transferable skills that will last a lifetime in terms of time management, adaptability, self-confidence and communicating with a wide range of staff and fellow students.

The main source of data for capturing the employment of graduates 6 months after leaving university, is the Destination of Leavers from Higher Education (DLHE).

DLHE data in the public domain does not provide a useful tool for analysing combined or joint honours students, since the two degree subjects are disaggregated and added into the single honours subject, i.e. there is a loss of granularity in the data, and combined or joint honours students cannot be identified and their destinations scrutinised.

In the authors’ own institution, while the data can be inspected at the level of pairs of subject combinations, the numbers are too small to infer statistically significant observations or conclusions. Aggregating the data to college-level (groups of fairly cognate subjects), combinations of a Business and non-Business subject, or a Science and non-Science subject, produced slightly better<sup>8</sup> graduate employability than the allied single honours graduates. Otherwise the employability of joint honours graduates was comparable to the allied single honours subjects.

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<sup>7</sup> UCAS (2015), Applications and acceptances for types of higher education course- 2015, [online]. Available at <<https://www.ucas.com/corporate/data-and-analysis/ucas-undergraduate-releases/ucas-undergraduate-end-cycle-data-resource-5>> [Accessed 22 February 2016]

<sup>8</sup> University of Derby (2016) , internal data source

In future work, the authors will analyse and present findings from a bespoke joint honours DLHE dataset, which will enable direct comparison to be made of the employability of joint versus single honours students. We will also reflect on the employability of various subjects studied and explore whether some combinations are more employable than others, again in comparison with single honours.

**(D) Towards a new framework for enhancing students' employability and career development through combined degrees – lessons for the UK higher education sector**

Further work is required to enable comparisons of joint honours employability across the sector, and future work for the authors will include interviewing alumni to establish their career paths and the advantages and challenges of having a joint honours degree. Secondly, we will conduct a cross-institutional survey to better understand the characteristics and experience of joint honours students in England and Wales. Thirdly, we will seek comparison data from outside the UK, and then make inferences for UK graduates. Lastly we will pursue UK-based comparison data from DLHE, to address the gap that currently exists.

The intention is to establish whether combined or joint honours students are well-served by the current employability and career development activities built into their courses, or available as extra-curricular activities. We hypothesise that the students may miss out on vital messages and skills development, by virtue of studying two subjects, unless the institution makes conscious efforts to ensure they have access to all the resources and support available to single honours students. There can be barriers to finding immediate graduate employment, surmountable by the students via sustained and prolonged effort in learning how to apply for jobs and present themselves well, but which can be avoided by the introduction of proactive, well thought out and consistently implemented employability support.

We further hypothesise that combined and joint honours students develop a unique set of transferable skills around organisation, time management, initiative, self-motivation, flexibility and adaptability. Whether institutions do enough to help students to understand their differentiated experience, and how to present this positively to employers, is a point worthy of exploration and debate. Allied to this is a requirement to ensure that combined and joint honours students are helped to develop high levels of self-confidence, self-efficacy and resilience, which all translate into raising aspiration and achieving high levels of graduate employability post-graduation.

In particular, the authors question whether Employability or Personal / Professional Development Planning (PDP) strategies best serve joint and combined honours students in facilitating their full participation in the process, and thereby maximising the benefit to students. Placement and internship opportunities must be promoted to combined and joint honours students, particularly since most graduate opportunities are degree subject independent and employers are more concerned with attitude and aptitude over degree subject or classification<sup>9</sup>. However if students feel they are being served up the same messages twice, in both their subjects, the risk is that they disengage and conclude that their study pattern and degree is poorly understood by their University.

Helping students to be co-creators and owners of their career development journey through university is vital and here the personal touch is essential. Mass delivered lectures and cross-university generic messages and events will fail to attract and engage the students. Instead a tailored approach, we will propose via a personal tutoring model, is best placed to ensure the students take up the opportunities to excel not only in their academic studies, but also in developing and promoting the characteristics that employers are seeking.

**Conclusion**

The rising costs of education in terms of students' living expenses and increases in their tuition fees means UK students as in many other countries in the world are under pressure to undertake degrees that could maximize their employability and career prospects.

The rise in the popularity of joint or combined degrees over the last decade seems to be an indication of the general perception that such degrees possess intrinsic values that make them appealing to a growing number of students. While the debate on the intrinsic values or benefits of joint and combined degrees over single honours degrees continues, there are certain issues that this paper has highlighted.

First, compared to single honours degrees, there is very little research on the educational experience of joint and combined degrees in the UK higher education sector. Available data and comparative studies of different degree pathways and combinations are patchy and largely anecdotal. The general lack of data makes any meaningful comparative analysis rather difficult. This paper has highlighted the need for further detailed research into the educational experience of combined degrees that could help universities and education policy makers.

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<sup>9</sup> CBI/Pearson (2015), Inspiring Growth: CBI/Pearson Education and Skills Survey 2015, [online] Available at <<http://news.cbi.org.uk/reports/education-and-skills-survey-2015/education-and-skills-survey-2015/>> [Accessed on 29 February 2016]

Second, employability considerations will continue to drive students' choice of degree. As more and more graduates have to compete for increasingly competitive job opportunities, there is a growing need for joint honours students, more than their single honours counterparts, to demonstrate to potential employers that they have a unique set of transferrable skills that employers need. So there is a need for an in depth study of combined and joint honours degrees across universities in the UK higher education sector in order to identify their key features.

Third, the huge variations in the structure and management of joint and combined degrees amongst different universities in the UK presents a challenge to the general perception of these degrees by students themselves and also to potential employers. There is a need for an across-the-sector study and research into the essential similarities and differences amongst UK universities in relation to the common features of combined degrees. Such studies could go a long way in helping students make the right choice and also to help employers understand the value of joint and combined degrees.

Fourth, to achieve true value out of their degree and university experience, joint and combined honours students need to achieve the best degree they are capable of, but also engage fully in the co- and extra-curricular activities that are vital for their personal and professional development. Only with a combination of these outcomes will graduates be maximally attractive to employers and secure the graduate employment that this significant investment in time and money has as its imperative.

### **Brief biography of authors**

Louise Pigden is Head of Joint Honours at the University of Derby. This is a flexible, multi-subject framework that enables students to study two subjects to honours, choosing from a set of 35 subjects, spanning the Arts, Sciences and Social Sciences. This is a popular mode of study, accounting for 10% of undergraduate students both at the University of Derby, and nationally across the UK. Prior to joining the University of Derby, Louise was Assistant Registrar for Assessment, Awards and Regulations, and prior to that was Head of Digital Media and Entertainment Technology where her research interests lay in usability engineering.

Franc Jegede is the Subject Leader for International Relations and Diplomacy. Includes study visits to the United Nations Office in Geneva (UNOG), the European Parliament in Brussels, where students learn about the role these institutions play in promoting democracy, world peace, political stability and development around the world. Coordinates work-based learning for all International Relations and Diplomacy students through external opportunities for internships and vocational training. Current research interests include terrorism and global security. I am particularly interested in the political economy of violence with regards to the rise of state and non-state armed groups.

### **References**

- Apple, M. W. (2005): 'Education, Markets and an Adult Culture'. *Critical Quarterly*, Vol. 47, Issue 1-2, pp. 11-29.
- Jegede, F. (2002): 'Towards an inclusive field course: a case study of the Derby University field course in the Gambia', in Herrington, M. and Dawn Simpson (eds.) **Making Reasonable Adjustments with Disabled Students in Higher Education. Staff Development Materials: Case Studies and Exercises**, A Collaborative HEFCE Project -ADDS 2000-2002. The University of Nottingham. Case Study No.6, pp.22-23, June 2002.
- Jegede, F. (1997): **Learning & Students Support Services Survey- University of Derby**. Report Presented to the Student Opinion Survey Group, University of Derby, May 1997.
- Jegede, F. J. (1994): **Academic & Extra-curricular Activities in the University of Derby - A Survey of Students' Perceptions. (An Exercise in Questionnaire Survey and Data Handling)**. Department of Geography, University of Derby).
- Perna, L. W. (2006 ): 'Studying College Access and Choice: A Proposed Conceptual Model'. *Higher Education: Handbook of Theory and research*, Vol. 21, pp. 99-157.
- Shallcross, D.C. and Wood, D. G. (2002): 'Combined Degrees – A new Paradigm in Engineering Education'. Proceedings of the 2002 American Society for Engineering Education Annual Conference & Exposition. Session 3460. American Society for Engineering Education.