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Nature and extent of undergraduates' work experience

**A report to the HEFCE by the
Centre for Higher Education Research
and Information, and the Centre for
Research into Quality**

December 2002

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Foreword

I am pleased to introduce this report prepared jointly by the Centre for Higher Education Research and Information, and the Centre for Research into Quality. This document provides research information about the nature and extent of higher education students' work experience. This is an important area of interest for the Council and others and will support our drive to enhance the quality of evidence-based policy formulation.

We have published separately an additional report, 'UK graduates and the impact of work experience' (December 2002). I hope that both reports will be read and discussed widely in the higher education sector and elsewhere.

Sir Howard Newby
Chief Executive
Higher Education Funding Council for England

Executive Summary

This report examines the nature and extent of work experience activity amongst full-time higher education undergraduates. In addition to analysing existing sources of data, this study also draws on research undertaken between January and March 2001, involving a small sample of English higher education institutions (HEIs) and organisations offering work experience opportunities. The overall aim of the project was to both estimate the current level of student involvement in work experience, and to outline the different models and types of work experience made available to undergraduates in England. Work experience can take a variety of forms, ranging from work experience that is embedded in the undergraduate curriculum, is assessed and may be accredited, to part-time work in term-time, vacation work and voluntary work.

The key findings are as follows:

- Based on the 1998/9 student cohort, the majority of full-time undergraduates gain some form of work experience during their time in higher education, with around 18% being involved in organised work experience as part of their course.
- Due to a lack of readily available data held either centrally, or within individual institutions, it remains difficult to assess the full extent to which students take advantage of the learning opportunities offered through organised work experience during higher education.
- This report identifies a number of organisations in England running work experience initiatives which are external to specific undergraduate programmes of study. It is concluded however that numbers on these schemes are probably low, compared to the numbers involved in ad hoc work experience (e.g. vacation work). Furthermore, there has been little assessment of the benefits experienced by undergraduates involved in these initiatives.
- A substantial amount of students participate in ad hoc work experience. Participation is mainly motivated by financial reasons, but some institutions now give students the opportunity to explicitly recognise other, less tangible gains from such experiences.

1 Introduction

- 1.1 The Higher Education Funding Council for England (HEFCE) contracted the project team to undertake research into the nature and extent of higher education students' work experience. The team comprised Brenda Little and John Brennan, the Centre for Higher Education Research and Information (CHERI), Open University; Sue Moon and Lee Harvey, Centre for Research into Quality (CRQ), University of Central England; and David Pierce, independent consultant. In addition, Nicola Marlow-Hayne at the Centre for Research into Quality has aided in the research at the initial stage. The project was undertaken between January and March 2001. An important context for the project was the work of the Department for Education and Employment's (DfEE) Work Experience working group. This had been set-up to consider options and recommend a strategy for 'increasing the full range of opportunities for all higher education students to experience paid and voluntary work in a way that better prepared them for employment and assisted in their effective transition from education to work' (Invitation to tender, p.1).
- 1.2 The aim of this project was to estimate current levels of work experience activity amongst full-time undergraduates in English higher education institutions. Sub-degree students were to be included where available. In addition to the estimation of levels of activity, the project was also to provide a mapping of the different models and types of work experience.
- 1.3 Following production of an interim report to the HEFCE and further discussion at the DfEE's Work Experience working group in January and February, the main aim of the project was confirmed as estimating current levels of full-time undergraduate student involvement in work experience across all English higher education institutions. It was further agreed that, in addition to using existing sources of data, a small sample of institutions would be contacted in order to ascertain levels of student involvement in work experience planned as part of a programme of study.¹
- 1.4 It is important to establish the boundaries of a project of this nature. Speaking at last year's annual Association of University Teachers conference, the Secretary of State for Education and Employment stated that '...experience of the world of work and the development of transferable skills should become universal in the (higher education) sector (Blunkett, 2000). But how should 'experience of the world of work' be interpreted? Does it mean actually undertaking a job of work (whether paid or unpaid) or might a broader definition be adopted to include work-related activities that do not actually involve 'doing a job'? Moreover, is there a minimum length of work experience below which such activity should not be included in a survey of this sort?
- 1.5 In the main we have taken the term 'work experience' to include any form of work in which an undergraduate is engaged during his or her period of study. However, there are inevitably some grey areas (see especially sections 4 and 5 for discussion). Furthermore, in estimating current levels of activity it is important to remember that for any single student the 'work experience' might comprise any or all of several different elements. For example, in any one year during higher education, a student may choose to undertake a short-term placement organised as part of the programme of study, may do part-time weekend working during term time, and may also work full-time during both short and long vacations, and may do voluntary work.

¹ Certain aspects of the original project brief concerning target setting and establishing a generic framework for certifying work experience were removed (the latter being the focus of a sub group of the DfEE Work Experience working group).

- 1.6 As well as problems in definition, the project faced limitations arising from the absence of reliable data on the frequency of certain types of work experience. The issue of data sources – their consistency, comprehensiveness and reliability – is addressed separately for the different types of work experiences in the sections that follow.
- 1.7 Three main categories of work experience are examined in this report:
- (i) organised work experience as part of a programme of study;
 - (ii) organised work experience external to programme of study;
 - (iii) *ad hoc* work experience external to a programme of study.

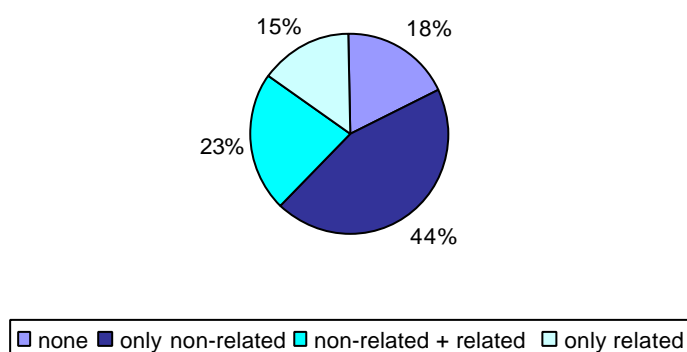
The first of these has a long tradition in British higher education in study programmes leading to employment in specific professional fields, for example teaching and engineering, as well as more general areas of employment, such as business and management. The second category is a heterogeneous one and represents the results of various initiatives taken inside and outside higher education. The third category is of increasing importance as greater numbers of students undertake paid work during term time for predominantly financial reasons. We recognise that the three categories are not mutually exclusive and that categories (ii) and (iii) in particular contain a wide range of possibly overlapping activities. Definitions are by no means clear nor universally adopted. At the start of each of sections 3 to 5, we explore the definitions to be used and the sources of data available before considering the extent of the activities falling within that category of work experience.

- 1.8 In the main, our sources of data have necessarily been limited to existing public sources of information. The project timescales and resources inevitably constrained the extent to which any new primary research could be undertaken. In consequence, we recognise that what is reported here is in some cases only an indication of levels of activity rather than a comprehensive picture. This is especially the situation in section 4 below, which looks at activities which we have grouped together as ‘organised work experience external to programme of study’.

2 Overall levels of work experience among undergraduates

- 2.1 As noted above, the prime focus for the project was full-time undergraduates in higher education in England. Of course, this is not to ignore the fact that many students will also have worked (on a part-time or full-time basis) prior to entering higher education. Indeed, some higher education institutions encourage students wishing to study particular subjects (for example engineering) to ‘take-out’ a year in industry prior to registering on a degree course. In other institutions, departments encourage students to ‘take-out’ a year in industry part way through the undergraduate programme. Some institutionally-based surveys of levels of work experience amongst students have found the majority already had work experience prior to entering higher education (see for example Work Experience Bank, 1998). For undergraduates studying part-time, investigations have found that, in the main, such students continue to work whilst studying (see for example Callender and Kemp, 2000; Brennan, Mills, Shah and Woodley, 1999). Although the focus of this project has been on the incidence of work experience during full-time undergraduate studies, the increasing trend of combining work with study at all stages of post-compulsory education needs to be borne in mind. Today’s entrants to higher education are by no means as naïve about the world of work as were previous generations of students.
- 2.2 Existing sources of data do not provide a comprehensive picture of levels of participation in work experience (in all its forms) amongst the current full-time undergraduate student population. The sections that follow make best estimates for different types of work experience. However, an overall picture can be obtained from the results of a recent European survey of graduates. This study, funded by the European Commission, provides information about the work experiences of nearly 40,000 people who graduated in 1995 (HEFCE, 2002). The UK sample (weighted to reflect subject spread and type of institution) comprises some 4,000 responses from graduates from 27 higher education institutions. 83% of the UK sample had studied on a full-time basis. Of these full-time undergraduates, just under one fifth (18%) had had no work experiences at all during their period of higher education. The majority (82%) had had some work experience during higher education. Of these, a fifth had both work experiences (including placements) related to their degree course, and work experiences unrelated to the programme. The chart below shows the distribution of work experience amongst UK 1995 graduates who had studied a full-time.

Chart 1. Work Experiences of graduates (1995 cohort)



Source: HEFCE, 2002, UK graduates and the impact of work experience.

- 2.3 The above figures derived from the experiences of the UK undergraduate students in the European survey may be taken as indicative of the levels of participation in work

experience, broadly defined, in the UK student population in 1995. It should, however, be recognised that the respondents to the European survey had been undergraduates in the early 1990s. At least in the UK, it could be argued that there have been some significant changes in higher education since then (particularly in the area of student finances) which might have increased participation rates in certain forms of work experience. The brief for this project required more up-to-date and detailed information about the nature and level of different kinds of work experience among current full-time undergraduates in England. The following sections attempt to provide this information for the three main types of work experience undertaken by undergraduate students, although the short time frame for the research means that the results are indicative.

3 Organised work experience as part of programme of study

3.1 Definitions

Earlier work undertaken by CRQ and CHERI identified five possible forms that can usefully be categorised as organised work experience planned as part of a programme of study:

- (i) supervised work experience as part of a sandwich course for a number of weeks (conventionally for an academic or calendar year)
- (ii) 'blocks' of work experience (occurring concurrently or recurrently) where there is a professional or regulatory body requirement that students undertake practical work as part of the undergraduate study
- (iii) short periods of work experience, usually relevant to their subject
- (iv) employer-linked project work (individual or in a team)
- (v) work-place visits (Harvey, Geall and Moon, 1998; Brennan and Little, 1996).

Within this overall category it is assumed that, as the work experience is planned as part of a programme of study, the higher education institution itself plays some role in organising the period of work experience (or at least assists the student in finding the work experience opportunity), and that it supports the students' learning from the work experience in some way. However, the extent to which the work experience is integrated with the overall programme of study, and the level of academic support available, may vary considerably.

The first sub-category, the sandwich course model in which students typically undertake a year of supervised work experience after the second year of the programme, tends to dominate the way people think about organised work experience. The second sub-category typically covers undergraduate programmes of initial teacher training and medicine/dentistry/veterinary science, which involve compulsory 'blocks' of work experience and which lead to eligibility to practise in the relevant profession. Such programmes clearly do include work experience, but it seems that sometimes they are not included in discussions about the incidence of work experience in undergraduate programmes because of the tradition of work-based learning in these 'professional' subject areas. The third category of short periods of work experience, tend to be of 2–15 weeks' duration and offer the student opportunities for development within a work environment usually related to their main subject of study. The fourth category of employer-linked projects covers activities where, as part of the programme of study, the student is engaged in an employer-generated project, or uses the workplace resources or environment to undertake a specific enquiry. The final category covers the situation where, as part of the programme of study, students undertake short visits to a work environment – as such, this last category offers very limited scope for work experience *per se*.

3.2 Sources of data

- 3.2.1 Published data from the Higher Education Statistics Agency (HESA) provides information about full-time student enrolments on undergraduate programmes across the UK. Figures for overall enrolments are broken down into sub-categories from which we can draw information about the levels of participation in the first two of our sub-categories of organised work experience as part of a programme of study;

- (i) supervised work experience as part of a sandwich course, and
 - (ii) ‘blocks’ of work experience where there is a professional or regulatory requirement that students undertake practical work as part of the programme.
- Table 1 below provides the detail for 1998/99.

Table 1: UK students, 1998/99 full-time and sandwich first degrees and other undergraduate programmes, thousands

Organised work experience as part of programme of study	Sandwich/Block placement	Other	Total
First degree with eligibility to register to practise (doctor/ dentist/ veterinary surgeon)	22.2	0.0	22.2
First degree with qualified teacher status/registration with General Teaching Council	37.6	0.0	37.6
All other first degrees and other undergraduate programmes	120.0	847.2	967.2
Total	179.8	847.2	1027.0
Total as % of full-time/sandwich undergraduate population	17.5%	82.5%	

Source: HESA Statistics Focus, Vol. 1 Issue 1 (2000)

Across the UK, in 1998/99, almost a fifth of all full-time undergraduates (on first degrees and other undergraduate programmes) were studying on programmes that included organised work experience planned as part of their programme of study. But this proportion of 18% is almost certainly an underestimation since it omits those students on other undergraduate programmes, such as nursing, that include compulsory ‘blocks’ of work experience.

Moreover, what the official published statistics also fail to capture are the numbers of full-time students registered on undergraduate programmes across the full range of other subject areas, which may include periods of organised work experience (either as a compulsory or optional element), that is our sub-category (iii). Furthermore, information on student numbers involved in employer-linked project work and work-place visits our sub-categories (iv) and (v) are not included in the HESA figures.

- 3.2.2 Other recent surveys can provide some information about these other three sub-categories (along with the first two). For example, for the past three years the National Centre for Work Experience (NCWE) has undertaken a national survey of academically recognised work experience in undergraduate programmes. Findings from the most recent survey (undertaken in June 2000) have not yet been published. However the report of the 1998/99 survey indicates that 12% of the full-time undergraduate population was engaged in some form of organised work experience as part of their programme of study. Although the NCWE survey does cover full-time programmes in addition to sandwich courses (and so provides additional information on student numbers over and above what can be derived from HESA statistics). It also seems explicitly to exclude information about teacher training and ‘medical sciences’ and so the findings represent only a partial picture. Moreover, it is not clear from the published findings what proportion of the ‘12%’ were on sandwich programmes (and thus what proportion were on programmes involving the other types of organised work experience identified in section 3.1 above).

3.3 Mapping of sandwich provision

3.3.1 Before exploring alternative routes to finding out about student numbers on our sub-categories (iii) - (v), it is useful to look in more detail at the incidence of sandwich course provision across a range of universities in England. For the purposes of illustration, in the tables below we show data for several universities selected by size of overall student population and geographic spread. Sandwich course provision is (still) more prevalent in the ‘new’ universities than the ‘old’, although there are some notable exceptions (see Table 2 and 3). For example, at Aston University over half of the full-time undergraduate student population are on sandwich courses. By contrast, less than 1% of undergraduates are on sandwich courses at the University of Warwick.

Table 2: Undergraduate full-time/sandwich student in selected new (post-1992) universities, showing sandwich course enrolments, 1998/99

‘New’ universities	FT/UG total	Total sandwich students	% of FT undergraduate population
Anglia Polytechnic University	10181	593	5.82
Coventry University	11291	3888	34.43
Leeds Metropolitan University	11488	3891	33.87
Liverpool John Moores University	13179	1968	14.93
Middlesex University	15104	2336	15.47
Nottingham Trent University	15611	5454	34.94
Oxford Brookes University	8233	1439	17.48
Sheffield Hallam University	15993	7034	43.98
Staffordshire University	11756	1684	14.32
University of Central England in Birmingham	10583	591	5.58
University of Central Lancashire	11666	1510	12.94
University of East London	7657	167	2.18
University of Huddersfield	9465	4018	42.45
University of North London	9521	1052	11.05
University of Northumbria at Newcastle	13222	4272	32.31
University of Sunderland	9291	1386	14.92
University of the West of England, Bristol	15225	4520	29.69

Source: HESA 1998/99

Table 3: Undergraduate full-time/sandwich student in selected old (pre-1992) universities, showing sandwich course enrolments, 1998/99

'Old' universities	FT/UG total	Total sandwich students	% of FT undergraduate population
Aston University	4857	2666	54.89
Brunel University	8662	3531	40.76
Loughborough University	8865	3492	39.39
University of Birmingham	13356	62	0.46
University of Durham	8703	27	0.31
University of Leicester	7353	130	1.77
UMIST	4928	578	0.12
University of Salford	12286	967	7.87
University of Warwick	8117	28	0.34
University of York	5292	251	4.74

Source: HESA 1998/99

- 3.3.2 Sandwich course provision in England also ranges widely across different subject areas. Table 4 below shows the detail for 1999/2000. Overall, almost 9% of the full-time and sandwich undergraduate student population are on sandwich programmes. In areas such as agriculture and related studies and business and management, over a quarter of students are on sandwich programmes. In computing, this proportion rises to almost a third of all undergraduates (31%). In contrast, less than 5% of students in areas such as librarianship, and social, economic and political studies are on sandwich programmes.

Table 4: Undergraduate sandwich students in English institutions by qualification aim and subject area, 1999-2000

	First degree	Other UG	Sandwich students as % of all undergraduates
Medicine & dentistry	0	0	0
Subjects allied to medicine	3087	748	2.2
Biological sciences	4657	8	8.4
Veterinary science	49	1	2.5
Agriculture & related subjects	2260	1032	27.4
Physical sciences	3706	41	8.6
Mathematical sciences	1344	2	9.7
Computer science	19376	816	31.1
Engineering & technology	15616	583	20.7
Architecture, building & planning	4384	258	19.2
Social, economic & political studies	2667	78	3.4
Law	798	0	2.2
Business & administrative studies	31610	1218	26.3
Librarianship & information science	710	1	4.7
Languages	2326	30	3.7
Humanities	0	0	0
Creative arts & design	3357	8	4.4
Education	161	22	0.4
Combined	4908	20	1.9
Total – all subject areas	101016	4866	8.8

Source: HESA, 2000

- 3.3.3 However, as noted above, the fact that information about sandwich provision in higher education institutions is readily available from published statistics tends to conceal the fact that full-time programmes can also include planned periods of work experience.

3.4 **Establishing levels of activity from data sources other than HESA**

- 3.4.1 Given the limitation of HESA data, particularly in respect of estimating levels of activity in our sub-categories (iii) short periods of work experience; (iv) employer-linked project work; and (v) work-place visits, other approaches needed to be adopted.

In the early phase of our study, an initial attempt was made to elicit the relevant data from the UCAS (Universities and Colleges Admissions Service) web-site, and from institution-specific web-sites. However, although the UCAS web-site contains much useful information for prospective students about particular institutions, their constituent departments and the courses offered by those departments, the UCAS data does not include information about the extent of organised work experience within courses on a systematic basis. For some Welsh higher education institutions, some work experience information is now included, but as yet, it is not possible from UCAS sources to derive a comprehensive picture of such provision across the higher education sector. It may be that the current UCAS initiative to develop entry profiles will encourage institutions to provide information about the extent of work experience in courses.

Furthermore, a comparison between information gleaned from detailed investigations of a small number of institutions' web-sites and 'official' data sources revealed many instances of discrepancies.

- 3.4.2 Thus, following discussions with both HEFCE and the DfEE Work Experience working group it was agreed to focus on a small number of English higher education institutions, and seek information about levels of organised work experience planned as part of programmes of study directly from the institutions concerned, rather than relying on secondary sources of information.

3.5 **Estimating levels of organised work experience in a sample of English higher education institutions**

- 3.5.1 For the purposes of estimating levels of full-time undergraduate student participation in organised work experience planned as part of a programme of study we selected a small number of institutions to investigate in-depth. The institutions were chosen to reflect the range of types and the geographic spread of higher education institutions across England. Thus our group of ten institutions included ancient, old and new universities and other higher education institutions (both specialist, and more generalist).

Given the limited time available to undertake such a data gathering exercise, it was recognised that the accuracy of the data provided by the institutions concerned would necessarily depend to some extent on their own internal processes for recording information about student numbers, and, in particular, the level of detailed data concerning individual programmes.

For example, a detailed case study of one of our selected institutions revealed several instances of discrepancies between the 'official' institutional statistics provided by the central registry, and information on student numbers held by individual departments. The institutional statistics did not necessarily reveal the extent to which year-long placements were compulsory or optional (and if the latter, how many students opted to do a placement in any one year). There seemed to be variations as to what was designated a sandwich programme. Additionally, centrally-held data tended not to

include information about other forms of organised work experience within undergraduate programmes (e.g. employer-linked project work, which in some cases involves students in 30 days work-related study), nor about placements of less than a year's duration.

- 3.5.2 From initial approaches to our selected institutions, it was known that some had a clearly identifiable functional unit (for example, a 'skills and employability' unit) whose tasks included monitoring and promoting all forms of work experience activities within the institution. However, although such units might have fairly comprehensive knowledge about the range of provision across the institution, they tended not to have data on student numbers involved. In others, knowledge about programme-related work experience might rest with a central registry, or within individual departments. Where data was provided at programme level, there was no guarantee that all programmes that had some form of organised work experience had been included.

Additionally, we found that in some institutions, internal audits of programme-related work experience had already been undertaken, whereas in others our request for information meant that the institution would need to draw on various internal data sources to elicit the information we sought. And even where internal audits had been undertaken, the level of detail ranged from a simple three-way categorisation of departmental provision (sandwich placement; shorter/optional placement; project work) to a very detailed categorisation for each department (which covered year of study; in UK/EU or overseas; compulsory or not; paid or unpaid; accredited or not; support arrangements available or not; number of students with opportunity of work experience; actual number who took up opportunity).

And where institutions had attempted to capture work experience activity, a range of approaches was discovered. One might be described as a 'rolling programme' approach with the institution initially undertaking a comprehensive audit of students, academics and employers focussing on direct experience of work. The institution expects that the next phase will focus on looking at good practice. Another institution was using a 'tracking' approach over a two-year period. A further institution was attempting to undertake an institution-wide audit (using HEFCE funding under its Higher Education Reach-out to the Community Scheme) but had not progressed much beyond identifying course directors with responsibilities for courses that included organised work experience.

- 3.5.3 Given the foregoing, it was agreed that we would not require institutions to provide their data in a standardised form. Rather, having indicated in general terms the categories of work experience in which our interest lay, institutions were free to provide the information in a form that could be derived from their own internal sources in a relatively easy manner. We would then try and re-present the data in a more standardised way that reflected, where possible, our main sub-categories.

In the following sections, we present the general results of our investigation in the ten higher education institutions. Although some considerable effort has gone in to providing the data, the institutions would not claim that the figures are necessarily 100% accurate. There is no intention to compare work experience activities across the institutions. Rather, by presenting the data by the main broad subject categories used by HESA we are trying to provide an indication of the range of levels of participation in different types of organised work experience in different subjects, in a number of higher education institutions.

3.6 Sub-categories of organised work experience

3.6.1 The ten institutions that provided more detailed information than available from HESA statistics comprised one ‘ancient’ university, four ‘old’ universities, three ‘new’ post-1992 universities and two colleges (Table 5). Information provided by Institution C was only available by department and this institution has been excluded from the aggregate data discussed in this section.

Table 5: Type of institution

A	Ancient University
B	Old university, large city
C	Old university, large city
D	Old university, large city
E	New university, small city
F	New university, large city
G	New university, large city
H	Specialist college
I	Generalist college
J	Old university, small city

The small sample shows the extent and variation in work experience organised as part of the programme of study (Table 6). Nearly 14000 students in nine institutions (14.6% of the total full-time undergraduate) had some form of organised work experience. The ancient university has about 1% of its students undertaking any kind of work experience as part of the programme of study. At the other end of the spectrum, one of the new universities has an estimated 47% of students undertaking some kind of organised work experience.

Most students, in the sample of nine institutions that provided student numbers, obtained their work experience either through sandwich placements (35%) or professional practice (42%) as a compulsory part of a programme of study. However, nearly 3000 students (23%) had work experience opportunities in the form of short placements or ‘live’ projects with employers or other activities such as work-place visits.

Table 6: Numbers of students undertaking organised work experience, in sample of institutions

Inst'n	S/wich	Prof'l	Short	Project	Other	Total	Total FT/UG`	% of FT/UG total
A	35+	104pa				139	11000	1.26
B	332	1948	574	104		2958	17000	17.40
C	*	*	*	*	*	*	16000	
D**	654	1347	***	226	484	2963	11000	26.94
E	1701	1670	698			4069	8600	47.31
F	634	682	95	255	Some	1666	10500	15.87
G	1052					1052	9500	11.07
H			E162			162	500	32.40
I	448					448	3200	14.00
J	4	80	60	185	50+	379	7500	5.05
Total	4860	5831	1589	770	534	13836	94800	14.59
	35.1%	42.1%	11.5%	5.6%	3.9%	100.0%		

*Information provided by Institution C was only available by department data.

**Information from Institution D was very detailed. However the information did not fit easily within our categories and some assumptions have been made to enable inclusion.

Although not immediately obvious from HESA statistics, the data reveals that in the ancient and 'old' universities, the majority of organised work experience is achieved through professional practice (required for eligibility to register to practise). The 'new' (post-1992) universities, with their polytechnic background have larger proportions of sandwich students but also, in the case of two of them, significant numbers of students on professional practice placements. The generalist college also has significant numbers of sandwich students.

Short placements as part of a programme of study are undoubtedly under-represented in the statistics above. In the main, obtaining this information requires contacting programme directors and the picture obtained to date is only partial. None the less short placements are a significant form of organised work experience at one of the 'old' and one of the 'new' universities.

Employer-linked project work is another area that is probably under-represented in the table above. Several of the institutions in the sample put considerable effort into enabling students to work on employer-linked projects, including three 'old' universities and one 'new' university.

3.6.2 As indicated above (3.5.2), some of the institutions have recently undertaken audits of work experience. Institution B has now undertaken two comprehensive surveys on the extent and nature of course-related work experience in both undergraduate and post-graduate courses (summer 1998 and summer 2000). For the summer 2000 survey, departments/schools were asked to list the types of work experience offered and for each type to indicate the following aspects: year of study; in UK/EU or overseas; compulsory or not; paid or unpaid; accredited or not; support arrangements available or not; number of students with opportunity of work experience; actual number of students who took up the opportunity; whether departments had an excess of students over available placements or vice versa.

Main findings of the 2000 survey include: 39 departments (out of 48) now offer work experience; 16 departments now have compulsory work experience for some or all of their students (an increase of 11 since the 1998 survey); 28% of the total student population now has the opportunity of course-related work experience but of these, only 60% took up the opportunity. Thus 17% of the total student population undertook course-related work experience in 1999/2000.

Similarly, Institution C has undertaken two audits to date. The most recent (summer 2000) provides detail of work experience activity within departments, broken down according to the HESA subject groupings. However, detailed information about student numbers participating in different types of work experience was not available.

Institution D has already undertaken an audit of work experience activity among its undergraduate population and found that in addition to the 1300 students enrolled on programmes involving blocks of work experience (to meet statutory or professional body requirements), some 2000² students across a range of subject areas were on programmes that included elements of organised work experience. Altogether, this represents over a quarter of the full-time undergraduate population.

In Institution E, a limited survey of students' work experience was undertaken a few years ago. In responding to our request for data, the institution sought information from both its departments and its central registry. Almost half of the full-time and sandwich undergraduate population (of some 8600 students) are on programmes involving placements. Of these, the majority (73%) are compulsory placements, ranging from four weeks to one year. The incidence of placements varies greatly between the institution's individual departments. For example, only 2 of the 22 programmes in arts and architecture have (compulsory) placements (and represent just 12% of full-time students in the department); in contrast, of the 21 programmes in business, 7 have compulsory (year-long) placements and a further 5 programmes have optional (year-long) placements (and together these programmes account for 47% students).

- 3.6.3 Some institutions flagged up areas of activity although could not provide detailed data on student numbers involved. For example, Institution A reported some work-experience activity within economics, engineering and management subject areas but the numbers of students participating was not available. The data provided by Institution F is also partial. There is more short placement activity than recorded in the available statistics and some of the programmes with compulsory professional practice were unable to provide student data. There are also some other forms of organised work experience such as work shadowing and visits but numbers are unknown. Similarly, Institution G was aware that there was considerable activity besides sandwich placements. The majority of programmes offer optional planned work experience. Institutional estimates indicate that about two thirds of the student population undertake some form of planned work experience as part of their programme of study. Only 13 degree programmes involve compulsory work placements, but every university student has the opportunity to undertake some form of accredited course-related work experience (from year-long to much shorter placements, minimum duration five weeks). One example of the work experience opportunities available is the Work Placement for Professional Experience module, which is available across almost 90 degree programmes.

Institution H has 500+ undergraduates but none of the 11 degree programmes on offer has a compulsory element of organised work experience. However course-related work

² The data provided by the institution would put this figure at 1300 (Table 6)

experience is encouraged in all programmes, and over the past few years, all students on one particular programme have opted to do a placement (in the second year) lasting 8-10 weeks on average. Many programmes are currently being reviewed and it is likely that most will be redesigned to incorporate organised work experience as a planned part of the programme.

Institution I provided details of sandwich students but considers that much more work experience activity is going on. Of the 60 programmes on offer, 13 include compulsory elements of organised work experience, and a further 8 have optional work experience. The institution estimates that about half the full-time undergraduate population are on programmes that include organised work experience: of these, a third are on sandwich programmes, half are on programmes involving blocks of work experience (to meet statutory/professional body requirements), and the remaining 15% are following programmes that include short periods of work experience.

- 3.6.4 The information presented in the foregoing institutionally-specific sections is tentative. However, it does provide an indication of the levels of organised work experience planned as part of a programme of study that currently prevail in a range of different higher education institutions across England, by broad HESA subject groupings. Although activity is predominantly in the traditional areas of sandwich placement and blocks of work experience (to meet statutory or professional-body requirements), closer investigation of provision within individual institutions reveals the incidence of other forms of organised work experience, planned as part of a programme of study.

3.7 Subject-specific sources of information

In addition to the NCWE whole-institution surveys, there have been some subject-focused studies undertaken recently which can provide further information about the nature and level of organised work experience in programmes of study.

For example an in-depth study of the careers of nearly 2000 art and design graduates across 14 institutions (undertaken in 1998) found that 29% of respondents had undertaken work placements as part of their course (Harvey and Blackwell, 1999). Participation ranged from 13% of fine art graduates, to 58% of textiles graduates. Of those who had done a placement, 59% had a total placement time of less than six weeks and only 7% had 35 weeks or more.

A further example of a subject-focused study is the national audit of placement activity within sociology courses, undertaken by the University of Northumberland at Newcastle (www.unn.ac.uk/academic/ss/sip). Two thirds of sociology and sociology related departments replied to the survey. Of these, almost two fifths of sociology departments offered placement practice. Most of the work placements offered were on a voluntary and part-time basis. Although the average length of placements was 22 weeks, placements ranged from one day a week for 10 weeks, to a full academic year.

3.8 Summary and recommendations

The discrepancies between official data sources, and the indications of employability-related activity within institutions, suggests that ideally there needs to be an audit of such activity in England, with clearly-defined categories of work-experience and employability opportunities. We are aware that this has been undertaken in Wales (HEFCW, 1999, 2000) and the template in use in Wales along with the experiences of the Welsh institutions would provide an ideal pilot for England.

However, it may also be the case that if the annual audits conducted by the NCWE were linked more clearly to explicitly-defined categories of organised work experience, planned as part of a programme of studies, and the results reported in a manner that facilitated comparisons with HESA data (in particular HESA subject groupings) then a more realistic national picture of the whole provision of organised work experience might begin to emerge.

Without wishing to increase the administrative burden on higher education institutions, we would recommend that they are encouraged to undertake audits to determine not just the extent of, but also the types of work experience activity among the undergraduate population. Further, the extent of work experience elements of all programmes should be included in prospectuses, course outlines and publicity booklets.

We are aware of several different initiatives, across a wide range of subject areas being undertaken in particular higher education institutions geared to developing and promoting organised work experience within degree programmes. It would seem that further subject-specific surveys of organised work experience could play a very useful purpose in helping to provide a much clearer and comprehensive picture of the nature and extent of organised work experience (in all its forms) across the higher education sector than can be obtained from currently available published statistics on student numbers.

4 Organised work experience external to programme of study

4.1 Definitions

- 4.1.1 A variety of different forms of work experience are captured within this category - all of which are external to any specific academic programme of study. Some can be seen to overlap with some of the examples included under the *ad hoc* work experience category (see section 5). We recognise there are problems of definition. Does organised simply mean arranged, or in this context does it imply a more structured or designed experience aimed at improving (and making more explicit) the learning that might be derived from the work experience? The main difficulty lies in distinguishing between those work experiences which are organised to the extent that help is given in finding the opportunities, and those where the work experience is to some extent structured to maximise its benefit to the participant, particularly in terms of learning from the experience.

We acknowledge that there may be other forms of structured activity (outside of the programme of study) geared to undergraduates which have some relevance to work. Examples include traditional short courses (usually of a few days' duration) offered by organisations outside a higher education institution designed to enhance participants' personal skills or to introduce them in some way to the world of work. However, as these activities do not involve work experience as such, they are outside the remit of this study.

- 4.1.2 Given the range of activities that might fall within this category, we have chosen to group these activities bearing in mind the following factors: the extent to which the higher education institution, or another organisation, is involved in making the opportunity available; and whether or not explicit support is provided to help the student recognise the learning gained from the work experience. (The question of whether or not the learning derived from the work experience is explicitly recognised in the form of some credential might be a subsidiary factor.)

Thus, we can present the activities in this category of 'organised work experience external to programme of study' in a two-dimensional typology as shown in the table below.

Table7: Typology of organised work experience external to programme of study

	Support for learning	Limited support for learning
<i>Higher education institution involvement* in making the opportunity available</i>	<p><u>Sub-category 2</u></p> <p>Examples:</p> <p>Several universities – work-based learning or work experience modules external to specific programmes</p> <p>York Award</p>	<p><u>Sub-category 3</u></p> <p>Example **:</p> <p>Business Bridge;</p> <p>Sheffield Plus;</p> <p>Several universities’ – ‘job shops’;</p> <p>London Guildhall University – Qualify for Employment project;</p> <p>University of Warwick– Mature students’ employability;</p> <p>Wolverhampton University – Workwise summer placements;</p> <p>Millennium Volunteers</p> <p>Students into Schools</p>
<i>No higher education institution involvement*** in making the opportunity available</i>	<p><u>Sub-category 1</u></p> <p>Examples:</p> <p>STEP</p> <p>CRAC Insight Plus</p>	<p><u>Sub-category 4</u></p> <p>Examples:</p> <p>Student Volunteering UK;</p> <p>Community Service Volunteers;</p> <p>Millennium Volunteers;</p> <p>Workable – vacation placements for disabled students (includes industry specific schemes);</p> <p>AISEC –work abroad programmes;</p>

* Involvement of higher education institutions may, for example, be in linking students to opportunities providing a basis for reflecting on learning, rather than necessarily providing the opportunities directly.

** Examples of activities in each sub-category are provided in Appendix 1

*** For example, the Millennium Volunteers projects may be organised through further and higher education institutions, voluntary sector and local government organisations.

4.2 Availability of information and data

- 4.2.1 There seems to have been no comprehensive survey undertaken of the established activities in this category of work experience since that reported in the study by Harvey, Moon and Geall (1998). Nor is there a national database that lists all the activities that might be included. The NCWE, which was established partly to become a centre of expertise and source of advice and knowledge, does not appear to have succeeded thus far in becoming a 'one-stop-shop' for information about this type of work experience. The Catalogue of Work Experience Initiatives published by NCWE in 1999 is a good starting point but it mixes a range of different kinds of initiative, includes information about traditional sandwich placements, and is not up to date. (It is understood that NCWE intends to up-date the catalogue in the near future.)

Relevant initiatives have been reported upon from time to time through publications from funding bodies (HEFCE, DfEE) or, for example, the recent special issue of the Higher Education Digest published by the Open University (CHERI, 2000). Moreover, individual development projects or networks of them have often tried to bring their work to the attention of a wider audience. However the cataloguing of all the related initiatives during the last 10-15 years has been on a piecemeal basis and perhaps much knowledge has already been lost. Consequently, information about what is happening has been gained mainly from personal experience and informal networking. Nevertheless the following is a reasonably comprehensive list of the kinds of activity in this category although, as with the other categories, it cannot satisfactorily establish the full extent of activity without more detailed work. Nor has it been possible to obtain (in many cases) estimates of the numbers of undergraduates likely to be involved in particular activities.

- 4.2.2 The nature of funding arrangements within higher education, and indeed the nature of higher education itself, has meant that over recent years there have been many attempts to introduce activities external to academic programmes *per se* which have turned out to be short-lived or simply to replicate what has gone before. Even those that have established themselves still involve only a very small proportion of the full-time undergraduate student population. These realities about the way in which innovation occurs in higher education also inhibit what is possible within a limited investigation such as this one. There is an inevitable bias towards those activities that are well established and have a high profile, and those that are currently receiving development funding and consequently are able to disseminate and publicise themselves.

In the following sub-sections we provide some detail of the sorts of current activities falling within our four sub-categories of organised work experience external to programme of study.

4.3 Categories of organised work experience external to programme of study

- 4.3.1 Sub-category 1: Support for learning/ no higher education involvement in making the opportunity available

The first sub-category embraces the best-known example of work experience schemes in this area, the STEP programme (Shell Technology Enterprise Programme). It has managed to thrive for 15 years because of its ability to generate ongoing funding and because it is recognised as a popular and valuable model to students and employers in small and medium-sized enterprises (SMEs). It successfully straddles the sometimes

conflicting objectives of student learning and employer assistance. It is an eight-week programme, involves pre- and post placement activities and annually places about 1100 undergraduates in SMEs. Successive evaluations have shown that both the SME employers targeted and the student participants derive benefits from the programme (see Westhead and Storey, 1998; Westhead, Storey and Martin, forthcoming).

There have been many attempts to integrate more closely the structured element in these programmes with the work experience itself, with the overall aim of transforming the latter from mere experience of work into a more meaningful learning event. All too often they have been short-lived, failing to survive when supporting funding has come to an end. One such was introduced by Minerva training in Dundee where an attempt was made to improve the STEP programme by recognising in a more formal way the learning acquired during the placement. In 1999 14 students engaged in the STEP also qualified for an OCR (Oxford, Cambridge and RSA Examinations) Diploma for Management and Enterprise but funding was not forthcoming beyond then.

Although most of the examples we have identified are well-established, a significant new development is awaited from CRAC (Careers Research and Advisory Centre) with the launch of its INSIGHT PLUS programme. This involves a partnership of some major employers (including Marks and Spencer and Pricewaterhouse Coopers) the National Union of Students and NEBBS Management. It aims to integrate the established INSIGHT into Management course with an accreditation scheme for work experience.

Another new development is the recently-announced government funding to the Association of Graduate Careers Advisory Services to help with pre-recruitment training, structured work experience and mentoring for ethnic minority students.

A further high-profile example in this area is one of the schemes within the Pricewaterhouse Coopers Student Insight and Development programme. The overall programme is open to sixth formers as well as undergraduates, and aims to introduce potential recruits to the business and assist the company's recruitment process. Their summer vacation scheme comprises an eight-day induction period followed by an eight-week structured course within the company, involving work experience. Last year, there were 3500 applications for 170 places available.

Clearly then the motive that drives a particular activity can affect its nature and whilst most schemes try to 'sell' themselves on the basis of the benefits gained by all the participants there are sometimes conflicts between the needs of employers and students. This equation can also be affected by the source of funding for a project and where its main objective lies.

4.3.2 Sub- category 2: Support for learning/ higher education involvement in making the opportunity available

In the first sub-category the initiatives are organised in the main by agencies external to the higher education institutions themselves. In this second sub-category, the initiative is clearly driven from within a higher education institution. As a result there is greater interest in the students and their needs, and how the work experience might fit with the wider undergraduate experience. There is also an emphasis on the structure of what is being provided even though the work experience element is external to the students' chosen programmes.

A well-known example in this sub-category is the York Award. This is based on a personal development programme run by the University of York for its students, which emphasises employability skills and requires work experience for successful completion. The scheme has been running since 1998, and currently has 600 students registered upon it.

This sub-category is at the heart of the problems and challenges concerning work experience in higher education. Here there is an acknowledgement that the higher education institution should in some way be involved in helping students to explicitly recognise the learning they might derive from work experience, and yet the activity is separate from the mainstream curriculum. Higher education institutions look to provide structure and even certification. Projects in the DfEE series of development projects throughout the nineties seemed to indicate that there is often reluctance on the part of students to participate in activities designed to help them 'expose' the learning derived from work experience. For many students it seems that the work experience itself is sufficient.

In the current round of funded initiatives there seem to be a number targeted at enhancing the employability of particular sub-groups of undergraduates, although the level of support for learning within the particular initiatives varies. For example, the Impact project at the University of Bradford (funded through the DfEE Innovations Fund) enables four universities in the region to work together to provide employability help to minority ethnic students. The initial intention was to assist students to gain summer placements with major employers in the region. However, the emphasis has now shifted to providing short workshops and seminars accompanied by mentoring and work shadowing activity.

4.3.3 Sub-category 3: Limited support for learning/ higher education involvement in making the opportunity available

In this sub-category the emphasis tends to be on what a student can do for a company through a placement and/or project with less regard to helping the student to identify the learning benefits to themselves. A common model is one that facilitates short work placements during which students complete a project identified by the employer. Effort is put in to finding work opportunities for students. Often there is a careful matching process to ensure that the student has the skills to complete the project and to find placements that provide the most benefit to both sides. In a programme run by London Guildhall University (funded through Single Regeneration Budget/ City Fringe Partnership) the university is co-ordinating summer work placements for women undergraduates of Bengali origin (from any higher education institution) who are resident in Tower Hamlets (a deprived area of London). Similarly the emphasis in the DfEE Innovations Fund project at the University of Warwick is on using work experience as a way of enhancing the employability of its mature students. Depending on the scheme, some organised effort may be made to make explicit the learning gained by the student (for example, through the provision of web-based support materials and workbooks) and there may or may not be academic involvement. The placements may be paid or voluntary, in large or small organisations and based in the UK or overseas.

A good example is Business Bridge on Merseyside. Here a consortium of the University of Liverpool, Liverpool John Moores University and Liverpool Hope University College establishes 'bridges' between students and SMEs. These are placement opportunities during which the student carries out a project for the employer. The emphasis is on improving business/economic performance rather than student learning, although support is offered to students to help them maximise the

learning potential of the work. Business Bridge is similar to 'Sheffield Plus' at the University of Sheffield. Business Bridge has been operating for six years and between April 1999 and December 2000 743 new bridges were successfully set up. In these examples the emphasis is on technology transfer or to demonstrate to potential employers (especially SMEs) what a valuable asset a graduate employee would be. There is little or no structure in the sense of arranging the experience to ensure the maximum learning benefit to the student.

The increasing trend during the nineties for students to seek out work opportunities during term-time gave rise to the growth of organised initiatives designed to provide them with appropriate services for finding jobs. Many careers departments had previously offered facilities for local companies to advertise vacancies. Now though, there are some 80 student employment services in operation across higher education institutions in the UK. These have arisen from initiatives within particular departments, the careers services or enterprise units in universities, with varying degrees of support from the National Union of Students. The growth of technology has helped their expansion.

The services range from a simple 'job centre' activity where vacancies are advertised through notice boards, circulars, e-mails or on the web and students then apply directly to the employer, to a more sophisticated 'agency' style service where, through the use of databases, students can be matched against specific vacancies. The services are geared to current students and recent graduates, and may operate on a regional basis. For example, as its name suggests, the recently launched NorthWest Students and Graduates Online aims to help students and graduates (and businesses) in the North West of England. The activities listed on the web-site span promoting work experience opportunities, advertising graduate jobs, providing a recruitment service, linking employers to research and higher skills business support at the region's higher education institutions, and linking academics to resources which enhance student and graduate employability, and to research opportunities with employers.

The site has 5500 students registered and attracts 50000 'hits' per month. A selection of student job shops shows that at Reading University over 1000 students registered last year and almost the same number of vacancies was advertised. Sussex University advertises approximately 300 vacancies each week and place between 3500 and 5000 students each year. At York University the job shop has been running for only 18 months and had already dealt with 508 different employers and over 2000 vacancies.

All this activity could benefit from more detailed analysis and those involved are aware of the need to generate more detailed information about the nature of the vacancies, the kinds of students involved, to what extent students are filling more than one vacancy and so on. But as with so much activity in this category of work experience there is no centrally held data.

4.3.4 Sub-category 4: Limited support for learning/ no higher education institution involvement in making opportunity available

This sub-category embraces activities such as the international organisation AISEC's Work Abroad programme whereby UK students are sent abroad to gain work experience. It also covers volunteer organisations such as Community Service Volunteers, Millennium Volunteers and Student Volunteering UK (which operates through student unions in higher education institutions): the latter estimates that almost 100 higher education institutions are currently active in this area, and that 15,000 students are involved in voluntary work.

The motivation for involvement may differ from a specifically financial interest to the wider and ill-defined idea that 'experience' is valuable and worthwhile. And of course an individual student's capacity to undertake voluntary work (as opposed to paid employment) might well depend on their financial circumstances.

It is difficult to establish to what extent some of these schemes offer structured support for learning in addition to the help given in finding work opportunities. For many of the activities, there is no centrally held data on the numbers of undergraduates involved in the activity. Further, there are no figures readily available to indicate what proportion of students might take up the chance of attending preparatory courses or using available learning materials.

4.4 **Conclusion**

Although considerable public attention has been drawn to initiatives of the sort described in this section, little is reliably known about the overall numbers of students benefiting from them. However, bearing in mind the numbers known to be participating in particular schemes and programmes, a reasonable estimate is that, as a proportion of all undergraduates, numbers are small in the first two sub-categories, that is the organised work experience external to programme of study with support for learning. This raises a number of questions.

First, are numbers low because of a lack of capacity on such schemes or because of a lack of student interest in participating in them? There is evidence from some of the schemes mentioned above to support the latter conclusion. In which case, the scope for extending them would appear to be quite small. However, for certain high profile schemes, run by organisations other than higher education institutions, demand for places seems to outstrip supply.

Second, are students being rational in their apparent unwillingness to participate in schemes of this sort? The answer to this question rests fundamentally on employer views about the 'value added' of these kinds of work experience, compared in particular to the *ad hoc* experiences of work which are the subject of the next section.

Third, a feature of most of these schemes is the attempt to make more explicit what has been learned from work experience. Greater explicitness might be of value to both graduates and employers. But does the certification or recognition of work experiences of this sort hold sufficient credibility in the labour market, either to impress employers or to motivate students? If it does not, it seems likely that students will continue to seek work experiences that maximise short-term financial gain. Learning may still take place, but its nature is likely to be ill-defined and not always recognised either by the graduate or by the employer.

5 Ad hoc work experience external to programme of study

5.1 Definitions

- 5.1.1 The term '*ad hoc* work experience' is being used to define work that is undertaken by higher education students during during term-time, or in the short and long vacation periods. The work may be paid, or may be unpaid (for example, in the voluntary sector). The work is not planned at the outset as part of a taught programme of studies, nor is it organised in the sense of being designed at the outset as a work experience process that integrally encourages reflection on experience.

But there is a sense in which *ad hoc* work experience can become (in due course) part of an individual student's programme of study, that is, where the student uses their experiences of paid employment and/or voluntary work as a way of gaining some academic credit. For example, The Millennium Volunteers Project at the University of Northumbria at Newcastle enables psychology undergraduates already working in the voluntary sector to integrate their voluntary work with their academic studies. However, it is not known how widespread this practice might be within that institution, or within other higher education institutions.

Moreover, a number of higher education institutions have now developed frameworks for the explicit recognition of, and support for, learning derived from *ad hoc* work experience (see for example Houghton and Bagley, 2000; Sanderson, 2000; Sidhu, 2000; Bibby, Jones, Marsland, 2000; Collins and Watton, 2000). Typically such frameworks include some element of induction; on-going support during the period(s) of work experience; opportunities for reflection and evidencing learning prior to presentation of 'evidence' for assessment and recognition of that learning. However, as the most recent round of DfEE development projects on work experience found, the students themselves seemed reluctant to engage in the complete sequence of processes offered within these frameworks. Thus, they may fail to make the most of the opportunities available to have the learning derived from their *ad hoc* work experiences explicitly recognised (in the form of academic credit, for example).

5.2 Data sources available

- 5.2.1 In recent years, a number of institutionally-based (and other) student surveys have been undertaken to try and gauge the level of part-time term-time and vacation working amongst the higher education student population. (Appendix 2 details findings of a number of recent surveys.)

The incidence of *ad hoc* work experience might well vary between higher education institutions. However, we can obtain a UK-wide picture of the level of *ad hoc* work experience from data on higher education students' experiences of employment in the recently published 1998/99 Student Income and Expenditure Survey (SIES). The SIES survey is based on a nationally representative sample of full-time and part-time students who, in 1998/99 were actively studying on designated undergraduate courses (including HND and Cert Ed course) or on PGCE/Initial Teacher Training course (although the numbers on PGCEs was small). Students on sandwich placements and language students on an optional or compulsory year abroad were excluded. As such, the survey findings provide a reasonably sound base from which to gauge overall levels of activity (with the exception of sandwich students, and those abroad on language placements), albeit on a UK-wide basis. (However, 84 per cent of institutions in the survey were from England.). It is unclear whether, in responding to the survey, students would be referring only to *ad hoc* work experiences (as defined

in this study) or whether they might be referring also to other forms of work experience. It is unlikely that they would be referring to organised work experiences planned as part of a programme of study. But there is a possibility that in replying to questions about vacation-time working (and summer vacation in particular) some may have been referring to activities that fall within our category 'organised work experience external to programme of study'. However, as we know, overall numbers involved in this category tend to be small. Thus we can say that the SIES findings provide an important source of information concerning the levels of student participation in (primarily) *ad hoc* work experience, on a national basis.

5.2.4 Given the overall SIES survey was concerned with student finances, the section on students' *ad hoc* work experiences covers only paid employment (undertaken during short and long vacations, or during the term-time), and does not include instances of unpaid or voluntary work. As such, the data might slightly underestimate overall levels of work experience external to a programme of study amongst students.

5.3 Key findings from the 1998/99 SIES survey in relation to (primarily undergraduate) full-time students, are as follows:

5.3.1 *Overall incidence of paid employment:* the survey indicates that just over 60% of full-time students had worked during the 1998/99 academic year, with 30% having worked for the same employer throughout the year.

5.3.2 *Term-time employment:* 46% of full-time students were employed during term-time, working on average 11 hours per week. Those most likely to work during term-time lived at home with their parents (69%); those least likely to work during term-time were students with children (40%).

The survey notes some changes in patterns of term-time working since the previous survey. The 1995/96 SIES survey found that 50% of students were working in term-time (compared with 46% in 1998/99). Also compared with the 1995/96 survey, the number of hours students from social classes I and II worked has fallen by 9%, while they rose by 15% among students from social classes IV and V.

5.3.3 *Short vacation working:* The survey indicates that in 1998/99, 51% of full-time students were employed during the Christmas and Easter vacations, working on average 17 hours per week during these short vacations. First and second year students were slightly more likely than third year (and above) students to work during these short vacation periods.

5.3.4 *Summer vacation working:* over 80% of full-time students (in their second year or above) had worked over the previous summer vacation. In the 1995/96 survey the comparable figure was 71%. Young students (classified as those aged under 25) were more likely to work than mature ones (85% compared with 67%). And around 85% of single childless students worked, compared with about only one half of students with children. There were no great variations, however, in the work behaviour or earnings of students from different social classes.

5.4 **Propensity to undertake paid employment during term-time**

From both the SIES national survey and at least one institution-specific survey of part-time term-time work (University of Northumbria at Newcastle, 1999) there seems to be some evidence that full-time students from less well-off backgrounds/lower social class are more likely to do part-time term-time work than those from better-off families/higher social class. The SIES survey found that full-

time students' propensity to work during term-time increased as their social class declined. 54% of students from social classes IV and V worked, while only 44% of students from social classes I and II did. And this tendency was especially strong among women aged under 25 years.

The University of Northumbria at Newcastle survey also found that the former group worked longer hours than the latter. Living at home also seemed to be a factor in determining which groups of students were most likely to undertake part-time term-time work. The University of Northumbria at Newcastle survey found that students from the local area and living with their parents/guardian were twice as likely to engage in term-time paid work than all other students. This finding accords with 1998/99 SIES survey finding that those most likely to work lived at home with their parents.

These findings on propensity to work, taken alongside the findings concerning changes over time in the average hours worked per week by different groups of students (section 5.3.2 above), tends to suggest that less well-off students are having to work more, while those at the other end are working less.

5.5 **Impact of term-time work on studies**

Given the current interest in all forms of work experience undertaken by undergraduates, and in particular the recognition that the prime motive for students to undertake *ad hoc* work experience is for financial reasons, some recent surveys have also tried to establish to what extent term-time working impacts on undergraduates' academic performance. The DfEE-funded Northumbria study (see above) considered students' self-reported impact of term-time working, and found that just over two fifths of students felt their term-time work had an adverse effect on their academic performance. This proportion rose to just over half among students working more than the median 12 hours per week. The same study also examined the performance in 1999 examinations between those who had and those who had not worked during term-time. The findings suggested there was a negative effect on academic attainment, with students in work, particularly males, achieving slightly lower scores than students not in employment. However, a survey of undergraduates from across eight UK universities (split between students on hospitality degree courses, and those on non-hospitality courses) found that over half the students did not consider that their academic performance suffered because of their part-time and vacation employment, and a further quarter were undecided (Hort and Rimmington, 2000).

The nationally representative SIES survey also considered the impact of paid employment on academic performance. Students were asked if paid work (during term-time and/or vacation periods) had affected their university work and studies: nearly two fifths of full-time students thought it had had a negative impact while nearly one tenth thought their paid work had had a beneficial impact.

5.6 **Conclusions**

Ad hoc work experience seems to be part and parcel of the full-time undergraduates' life. Almost two thirds of students now work during the academic year: and the majority (80%) work during the summer vacation.

Undoubtedly, the main reason for working is financial considerations, but at least some institutions are now offering the opportunity for students to explicitly recognise the other, less tangible gains that might come from *ad hoc* work experiences.

However, recent survey findings suggest that there is an increasing interest in the impact of (particularly) term-time working on students' academic performance. The impact might be both positive and negative, but given some of the recent findings about propensity to work amongst different groups of undergraduates, it is important that further work is done in this area.

6 Overall findings and conclusions

The overall aim of the study was to estimate levels of work experience among the full-time undergraduate population in England. To some extent our work has been hampered by the lack of available data. Furthermore, where data sources have been found it is likely that each source uses its own definitions and so the data is not readily comparable. Any further study of levels of participation in work experience would benefit from the adoption, across the higher education sector, of clear and 'universally accepted' definitions of different types of work experience.

From the recent SIES survey we know that the proportion of full-time students engaged in paid employment during the academic year 1998/99 was 60%. We also know, from HESA statistics for that same academic year, that at least 18% of full-time undergraduates were on programmes involving organised work experience (namely sandwich programmes and first degrees with eligibility to register to practise, or with qualified teacher status). Thus it would seem that the vast majority of the full-time undergraduate population is gaining some form of work experience during the academic year. But what is still unclear is just what proportion of these undergraduates are taking up the opportunity to make more explicit the learning derived from the work experience.

Higher education institutions should be encouraged to monitor, on a regular basis, not only the range of types of work experience being undertaken by their student population, but also the levels of participation (to identify trends) and also a way of sharing practice across the institution. This might be particularly important for those institutions that make claims about enhancing the employability of their students, although work experience might be only one (of many) ways in which employability might be enhanced.

However, given recent findings about the propensity of different groups of students to undertake work experience (especially during term-time and short vacations) there needs to be more work done to investigate the impact of such activity on the student's overall academic performance. Further work should also be undertaken on students' reasons for participating (or not) in different forms of work experience.

Our study was limited to the nature and extent of full-time undergraduates' work experience. And yet, from the latter years of secondary school and through post-compulsory education (16-19 year olds), young people are likely to be engaged in some form of work experience, before joining the labour market 'proper'. If there is a desire to encourage all students engaged in work experience whilst studying to make more of those opportunities, as a vehicle for personal development and learning, then it would be beneficial to develop a coherent approach to learning support for work experience (and an integrated approach to recognising explicitly the learning gained) across the age ranges.

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List of abbreviations

CHERI	Centre for Higher Education Research and Information
CRAC	Careers Research and Advisory Centre
CRQ	Centre for Quality Research
DfEE	Department for Education and Employment (now the Department for Education and Skills – DfES)
HEFCE	Higher Education Funding Council for England
HEFCW	Higher Education Funding Council for Wales
HESA	Higher Education Statistics Agency
NCWE	National Centre for Work Experience
SIES	Student Income and Expenditure Survey (SIES)
SME	Small and medium sized enterprise
STEP	Shell Technology Enterprise Programme
UCAS	Universities and Colleges Admissions Service

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Chart 1. Work experiences of graduates (1995 cohort)

Appendix 1: Examples of organised work experience external to the programme of study, by sub-category

Sub-category 1 – No higher education institution involvement / support for learning

Name	Brief Description
<p>Careers Research and Advisory Centre (CRAC) Insight Plus Programme</p>	<p>Launched in 2001, building on Insight into Management programme (which last year comprised 12 courses with an average of 60 students on each). Insight Plus will integrate existing Insight into Management with an accreditation scheme for casual work experience.</p>
<p>Pricewaterhouse Coopers Student Insight and Development Programme</p>	<p>The PWC Experience Vacation scheme is an 8 week structured course, involving work experience, and 8 days' induction. 170 vacancies offered annually to 3500 applicants.</p> <p>(PWC Experience also offers a 2-day course around the country about the various entry routes to the business. 12 courses with 20 students on each. Also, 45 vacancies offered each year to sandwich students.)</p>
<p>Minerva Training</p>	<p>Delivered STEP for 4 years. Obtained funding from Local Enterprise Council to expand the STEP experience by one week and facilitate NVQ accreditation (in Administration and Management). 14 students accredited in year 2000 but no further funding forthcoming.</p>
<p>Shell Technology and Enterprise Programme (STEP)</p>	<p>The best-known work experience scheme delivered through 65 agencies. Comprises an eight-week programme, involving pre- and post- placement activities. Received 6000 applicants in 2000, and places about 1100 students each year.</p>

Sub-category 2 – higher education institution involvement / support for learning

<i>Name</i>	Brief Description
Napier University Work Based Learning module	Napier University was an early example of developing systems to allow academic credit for experiential learning. Module offered as an elective, but 50/60 students take module each year at level 1 and 30 students at level 2.
University of Central Lancashire Learning from work module	An elective, level 2 module which aims to foster employability skills.
University of East Anglia Work-based Learning Unit	A 20 credit unit offered to second and third year undergraduates as a 'free choice' option.
University of Exeter Independent work experience module	A centrally funded and accredited module available at level 2 (15 credits).
University of North London Work experience module	A 5-week module, available to all students (except those on programmes involving professional practice). Currently with 640 registrations of interest and some 180 participants.
University of Wolverhampton Independent Learning in the workplace	The elective level 2 module (15 credits) is incorporated in to the university's module framework.
York Award	A personal development programme for York University students, incorporating work experience. 600 students currently registered.

Sub-category 3 – Higher education institution involvement / limited support for learning

Name	Description
<p>Anglia Polytechnic University <i>Student Employment Office</i></p>	<p>This agency handles 2500 vacancies each year. About 2000 students are registered with 500 'active' at any time. About half of those approached about jobs are interested but the number placed is 20-30%.</p>
<p>Business Bridge</p>	<p>A consortium of Liverpool University, Liverpool John Moores University and Liverpool Hope University College to establish 'bridges' between SMEs and students for placement to conduct projects. The emphasis is on business /economic performance (rather than student learning) and this is similar to Sheffield Plus and other 'live project' schemes. 743 new bridges set up between 1/4/99 and 31/12/00.</p>
<p>Business Bridge DO IT</p>	<p>Consortium of Liverpool John Moores University, Liverpool University, Liverpool Hope University College, St Helens College, Liverpool Community College and Chambers of Commerce to provide group based solutions to business problems. i.e. to extend the Business Bridge model into teams and cross-sectoral institutions (a DFEE Innovations Fund project).</p>
<p>City University <i>Student Employment Service</i></p>	<p>Established 18 months ago. In that time 1570 students registered, 2552 positions handled. Estimated 1000 jobs filled.</p>
<p>Glamorgan University <i>Careers Centre</i></p>	<p>250 vacancies a year. 140 students placed (but of course some individuals might fill more than one job through the year).</p>
<p>University of Northumbria at Newcastle <i>TEMPO (Student employment service)</i></p>	<p>2477 students registered last year. 554 vacancy cards displayed, some with more than one job. 1047 job offers made. In addition 646 vacancies from Newcastle local Job Centre. Most jobs are bar-work but many in sales/marketing and retail.</p>

<p>NW Work Experience Bank</p> <p><i>(University of Manchester and UMIST Careers Service and partner organisations)</i></p>	<p>Now called NW Students and Graduates Online 5000 students registered. 3000 vacancies registered.</p>
<p>University of Reading</p> <p><i>Job Shop</i></p>	<p>In first year 2000, advertised 946 vacancies of which 369 were part-time sent from the local Job Centre and 101 were voluntary. 2468 visits to the Job Shop of which 1375 were revisits. Analysis of jobs shows only 28% were traditional shop/bar work jobs. Rates of pay for their 'specialist' jobs range from £8 - £12 per hour up to £20.</p>
<p>University of Sussex</p> <p><i>Student employment office</i></p>	<p>Advertises 300 vacancies each week. Places 3000 – 3500 students each year. Big demand for course-related work but some look for experience outside their subject. Local companies are trying to accommodate student timetables to expand their pool of candidates.</p>
<p>University of Warwick</p>	<p>This DFEE Innovations Fund project aims to provide more flexible work experience opportunities for mature students who have domestic responsibilities. Some might not want payment but relevant career-related experience, so it's aimed at employability, transition back into work etc. Target is 20 this year plus 20 mentoring partnerships. There is an intention to produce workbooks for those wanting them and to offer workshops.</p>
<p>University of York</p> <p><i>Unijobs (student employment service)</i></p>	<p>Since October 1999 dealt with 508 employers with 2047 vacancies. Known placings for 764 students but there are more. On average 800 students look at website daily.</p>

Sub-Category 4 – No higher education institution involvement (or indirect involvement only) / limited support for learning

Name	Description
<p>AISEC Work Abroad Programme</p>	<p>International organisation with 100 UK students sent abroad each year and approximately 600 students involved in supporting the programme. Structured training/conferences available for the latter.</p>
<p>CSV (Community Service Volunteers) Learning Together</p>	<p>A nationwide student tutoring programme aimed at raising the aspirations and achievements of young people. Higher and further education students volunteer to work alongside teachers for a set period (e.g. one morning per week for 10 weeks) helping pupils with their studies and encouraging them to go on to further or higher education.</p> <p>Each year about 5,000 students from over 180 further and higher education institutions volunteer.</p> <p>Individual higher education institutions have set-up their own specific schemes, e.g. Middlesex University's Voluntary Community Service Programme set-up in 1998 involves undergraduates working as mentors to pupils in local schools. Some have linked activity to a credit-based module: e.g. the University of Newcastle's 'Students into Schools' set up in 1993 - 700 students participated this academic year in a 10-credit module. 550 of those actually claimed the credit.</p>

Millennium Volunteers (MV)	<p>UK-wide initiative for 16- 24 year olds who want to volunteer for the benefit of others. MV projects involving practical work experience are run by a wide range of organisations (local government, voluntary sector, further and higher education institutions) and are funded by the DfEE. Approximately 8,000 young people have been involved thus far, but no figures collected centrally on different categories of young people involved (e.g. undergraduates).</p>
Student Volunteering UK (previously The National Centre for Student Volunteering)	<p>A national charity working with a network of Student Community Action (SCA) groups based within higher education student unions. All SCA groups are managed and directed by student volunteers. Most volunteering undertaken on a weekly basis and is project-based. Approximately 95 HEIs active. Within these it is estimated that 15000 students engage in voluntary work. Of those 100 students have been awarded recognition certificates.</p>
Workable	<p>Charity with regional centres set-up to help disabled undergraduates and postgraduates find sponsored work placements, during vacations, as part of sandwich courses, or on graduation.</p>

Appendix 2: Findings from some recent institution-specific surveys relating to higher education students' employment

Scope and date	Term-time working, %	Vacation working, %	Working during academic year	Other findings	Reference
<p>University of Northumbria at Newcastle, full-time undergraduates (879 responses);</p> <p>Spring 1999 survey of term-time working.</p>	<p>37%;</p> <p>median weekly hours - 12;</p> <p>economic sectors:</p> <p>34% in retail;</p> <p>31% in catering.</p>	<p>Not asked.</p>	<p>54% had worked at some time during academic year.</p>	<p>students living with parent twice as likely as others to work term-time (58% compared to 29%).</p> <p>students from less well-off backgrounds more likely to work, and to work longer hours.</p>	<p>Students in the labour market-nature, extent and implications of term-time employment among UNN undergraduates. DfEE Research Report, RR215. Barke, Braidford, Houston, Hunt, Lincoln, Morphet, Stone, Walker, 2000.</p>
<p>University of Central Lancashire, full-time undergraduates (1500 surveyed);</p> <p>Spring 1999 survey</p>	<p>57%; +4% in unpaid work;</p> <p>almost half working 16 hours per week or more;</p>	<p>Not asked</p>		<p>84% of those working had one job; 16% had two or more jobs;</p> <p>impact on academic life</p> <p>15% positive (improved time management);</p> <p>26% negative (reduced time spent studying).</p>	<p>Learning from Work: making connections between work and study. Houghton and Bagley, 2000.</p>

Scope and date	Term-time working ,%	Vacation working, %	Working during academic year	Other findings	Reference
University of Manchester and UMIST, full-time students graduating in 1998. Summer 1998 survey	14%;	43% (inc. 8% course related);	66% gain work experience during undergraduate period. economic sectors: all major sectors, inc. admin/public services 16%; education/social work 12%; retailing 11%	Students have more opportunity to gain work experience in their first and second years; summer vacation between first and second year are particularly important times to gain work experience, albeit often of a non-degree related nature. 98% had gained work experience prior to university.	Students' Work: an audit of the Work Experience of Students, 1998.
Leeds Metropolitan University, second level/year full-time and sandwich students. 1999 survey.	54%; most working between 10- 20 hours per week; economic sectors: over 50% in retail; only 7% in call centres.	Not asked		Stronger pattern of stability in student employment than expected.	Working for Skills, Bibby, Jones, Marsland, 2000.

Scope and date	Term-time working ,%	Vacation working, %	Working during academic year	Other findings	Reference
<p>Eight UK universities, full-time hospitality and non-hospitality students (1444 responses, 57% hospitality students).</p> <p>Spring 1999 survey</p>	<p>34% term-time only</p> <p>Hours /week:</p> <p>Hospitality students 22.3 hours on average;</p> <p>Non-hospitality students 18.5 hours on average;</p> <p>Within hospitality sector, 30 hours/week average ;</p> <p>Non-hospitality sector – 18.5 hours/week average</p>	<p>30% vacation only;</p> <p>Hours / week</p> <p>About 30 hours/week for both types of student</p>	<p>37% worked both term-time and vacation;</p> <p>80% had worked; during past 12 months</p>	<p>Majority (93%) worked ‘because they needed the money’;</p> <p>Three fifths agreed that they also worked to gain skills and experience.</p>	<p>Results of a survey investigating part time and vacation work undertaken by higher education students: with particular reference to the hospitality industry, Hort and Rimmington, 2000.</p>

Scope and date	Term-time working ,%	Vacation working, %	Working during academic year	Other findings	Reference
<p>University of Central England in Birmingham.</p> <p>Full-time undergraduates (487 responses).</p> <p>February 2000 Time and Funding Survey.</p>	Not asked	Not asked	<p>64% undertook paid work (excluding placements). The majority of students (20.2%) work between 6 and 10 hours per week. A slightly smaller proportion of students (18.6%) work between 11 and 15 hours per week, whilst 17.3% indicated that they work between 31 and 40 hours.</p>	<p>Over two-fifths (42.3%) of respondents indicated that they felt the quality of their academic work has suffered as a result of paid employment. Just over one-fifth (22.6%) have missed taught session(s) through paid work, and 17.2% have found it difficult to participate in group work.</p> <p>As a result of paid work, over half (50.5%) of students report that they have less time for study, along with 47.8% who have less time for leisure, and 35.9% who have less time for their family.</p> <p>Many students indicated that paid work has provided opportunities to develop a number of skills, including communication skills (40.5%) and organisation skills (28.5%). Earning extra income and meeting people outside university were also considered opportunities brought about through paid work, for 54.6% and 34.1% of students respectively.</p> <p>Over two-fifths (43.9%) of respondents report that their financial circumstances have a bad impact on their academic work.</p>	<p>University of Central England, (forthcoming), Student Time and Funding.</p>

Scope and date	Term-time working, %	Vacation working, %	Working during academic year	Other findings	Reference
<p>University of Central England (2830 students overall, 1396 full-time undergraduates (FT/UG)</p> <p>Annual Student Satisfaction Survey</p>	<p>Overall 51.4% of FT/UGs worked while studying. Those in receipt of part-time earnings has risen above 50% for the first time in years 3 and above.</p> <p>.</p>	<p>Not asked</p>		<p>Almost half of full-time students affected by the new funding arrangement and 55% of those not affected now work part time.</p> <p>A small proportion (3%) attempt to work full time while undertaking full-time study.</p> <p>61% of FT/UGs who work during term time are more likely to report that working while studying has a negative impact on academic work. This is an increase since last year.</p>	<p>The 2000 Report on the Student Experience at UCE</p>