Review of the Graduate Apprenticeship scheme

A report to HEFCE by the Enhancing Student Employability Co-ordination Team (ESECT)

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Summary

We were commissioned in July 2003 by HEFCE to evaluate the Graduate Apprenticeship (GA) initiative.

We looked at evidence available in the public domain. We examined the websites hosted by higher education institutions providing GAs and annual monitoring forms provided by HEFCE. We interviewed key personnel from 48 higher education institutions (HEIs), representatives of four of the National Training Organisations (NTOs) active in the field, 15 employers and 12 other interested parties. Our focus was upon the HEI-employer link rather than on student perceptions. We also reviewed evidence from other initiatives in which work-based learning figured prominently.

Our main conclusion is that HEIs and employers found merit in the GA approach. Some GAs directed at niche markets have had notable success and appear durable. However, the resource-intensiveness and level of funding of GAs raise questions about the general viability of the approach in the longer term, given other developments relating to employability. These include foundation degrees and work to enhance the employability contribution of more traditional undergraduate programmes.

The main points we make are:

- ▶ The sources we have used do not allow us to review GAs with the rigour being applied to the evaluation of foundation degrees (FDs).
- ▶ The general idea was thought to be sound, although this observation was seldom costed: it was rare for informants to consider whether a good idea was also value for money.
- ▶ They were introduced with haste at a time of some turbulence. Delays were sometimes reported in accreditation, which then left too little time for advertising and recruitment.
- Graduate apprenticeships were valued because they helped to develop dialogues between employers and higher education (HE).
- ▶ There was some, rather anecdotal, evidence that GAs helped in gaining employment. It is an open question whether other approaches would have done as well or better.
- There were cases where the completion of GA projects benefited employers and students.
- Some GAs were designed to cater for niche needs.
- ▶ Many schemes had few students. Questions of viability arise.
- ▶ The lack of concerted central sponsorship and publicity was associated with reports of low levels of awareness and understanding of GAs.
- It was hard to identify a GA 'brand': diversity, partly born out of the need to respond to (local) employer requirements, militated against the development of a brand image.
- ▶ GAs were offered to students doing diploma courses, to those taking an honours degree and to those with degrees, some of whom were already in full-time work.
- ▶ Some employers coming to terms with national vocational qualifications (NVQs) and the national qualifications framework in general, were confused by or did not want the extra complication of GAs.

- Arrangements for work-based learning were variable. Not only did patterns of provision differ, but it appears that arrangements for quality assurance, mentoring, accreditation and assessment did as well.
- Doing a GA whilst in employment was a struggle for many.
- As with other schemes that seek employer participation, GA schemes found that small and medium enterprises (SMEs) could be hard to reach. SMEs were liable to be concerned about the loss of employee time spent mentoring GAs.
- GAs were not necessarily aligned with the requirements of professional bodies.
- ▶ There were difficulties caused by the displacement of NTOs by Sector Skills Councils (SSCs), which limited the support available for GA development. It is not clear how far SSCs will be in a position to support any future GA development.
- ▶ There were different arrangements for developing students' 'employability skills'. Where this was done by putting students through a level 3 NVQ there were often difficulties because of the extra expense and workload.
- ▶ There is no evidence by which we can judge the quality of arrangements made to enhance employability skills by means other than NVQ provision.
- ▶ The GA was an idea ahead of its time in addressing employability, but research evidence disturbs the idea that employability means having 'employability skills'.
- Informants with national policy perspectives were seldom well-informed about GAs. Nevertheless, they tended to be sceptical about their sustainability.
- ▶ It is not clear that many GAs will continue once the development funding is spent.

These findings document and amplify points raised by earlier evaluation reports (CDELL), n.d.; 2001). Writing at a time when government White Papers have committed it to building stronger bridges between education and the workplace, we are able to relate such points to new initiatives, notably foundation degrees, the Higher Education Academy and to our work as a fixed-term co-ordination team for enhancing student employability.

Our sources suggest that GAs are in many respects 'niche' qualifications, meeting specific employer demands in specific sectors and areas. Those words were recently used by Little (an ESECT principal) and colleagues (2003: 16) to summarise their analysis of vocational higher education's contribution to meeting employer needs. We have also raised questions about the relationship between GAs, vocational higher education in general and the higher education's role in promoting employability.

Finally it should be noted that this is a report on a particular scheme – Graduate Apprenticeships. Evaluative comments relate only to that scheme. They should not be read as an analysis of the wider concept of apprenticeship learning. This has recently attracted considerable attention from researchers, who increasingly appreciate the degree to which professional learning happens through practice, in the workplace. An extrapolation is that some aspects of professional learning could largely – but not exclusively – be sited in the workplace. This has interesting, even radical implications for the organisation and delivery of many areas of the higher education curriculum and, if adopted, would affect the learning of all students in those areas. This, though, is not a report on the desirability and feasibility of such an approach. It is an analysis of the Graduate Apprenticeship scheme.

1. The context

It is not only in England that government takes an interest in employability, although the term is seldom used outside the UK. Terminological differences notwithstanding, governments around the world are concerned that higher education promotes attainments that will help graduates to contribute effectively to knowledge societies, be confident citizens and generally enjoy the wider life-long benefits associated with higher education.

There are other economic reasons for enquiring about higher education's contributions to employability. Since students are often being expected to pay a greater share of the rising costs of their higher education, they, their parents and their elected representatives have a strong interest in knowing how higher education contributes to their employability. Employers also have a direct interest in graduate employability: the more employable the graduates, the greater a firm's competitive edge is likely to be. Some commentators have argued that the considerable growth over the past decade in the number of new graduates has exacerbated problems because England now produces too many graduates. This view is challenged in three recent reports (Purcell and Elias, 2002; CIHE, 2003; HEPI, 2003) and by unpublished work by one of the ESECT team (Bowers-Brown). Yet, even if we do not have 'too many graduates', there is no doubt that employability and graduates' success in the labour market are issues of considerable concern to governments, students, employers, parents and higher education.

However, some employers are critical of various aspects of undergraduate programmes, and some students find difficulty making the transition from higher education to satisfying jobs. There is also some concern that students are not attracted by some economic sectors, although recruitment could be improved if these sectors could 'reach out' to undergraduates and make better arrangements for the transition from study to paid work.

The Graduate Apprenticeship (GA) scheme, which has received 'pump-priming' funding from HEFCE and DfES, is one approach to meeting some of these challenges. Employers and NTOs¹ work with higher education to design programmes to embed 'employability skills', provide authentic work experience, add further qualifications and prepare the graduate apprentice for a smooth transition into the graduate labour market.

In reviewing the evidence of the GA scheme's impact we are primarily interested in what the sector can learn from it. The GA has strong advocates and we notice many favourable comments from past students, employers and NTOs/SSCs. However, the data show that GAs have been a niche product. While many higher education institutions have learned a great deal from running them, it is often reckoned that the particular shape of GA schemes needs an extension of funding, or funding levels above the norm. Some employers and sectoral interests may be able to invest in supporting particular GAs, but public funding has now run the three years for which pump-priming funding was made available.

So, in identifying the features of GA schemes that seem to have worked, we have two aims in mind:

- ► To provide feedback about effective practices to those institutions and sectors that can continue to run GAs.
- ► To identify good models of workplace learning and the more general enhancement of employability that could be extended to other provision.

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¹ NTOs have been supplanted by Sector Skills Councils. A minority of the planned SSCs are fully operational at the time of writing.

2. Graduate Apprenticeships

The development of GAs

In 1998 the government Green Paper *The Learning Age* set out for consultation the government's agenda for turning the United Kingdom into a knowledge economy. Paragraph 3.31 refers to the

Four pilot studies of new Graduate Apprenticeships to be designed jointly by National Training Organisations and universities or colleges. We want to see continuing links between higher education and employers to ensure that suitable courses are available for postgraduate students in the years ahead.'

In the Graduate Apprenticeships Newsletter of June 1999 (published by the DfEE) the rationale behind Graduate Apprenticeships, which were envisaged to be for 'graduates, undergraduates and diplomates', was explained. They were to:

- ▶ Integrate study at degree or diploma level with structured work-based learning.
- Provide a tailored preparation for employment in specific sectors of business or industry.
- ▶ Provide an attractive route to achieving a higher level qualification while gaining work experience.
- ▶ Be particularly attractive to small employers who may not in the past have considered recruiting a graduate.
- ▶ Be a useful route into the labour market for students on broadly-based, academic degree programmes or who have non-vocational degrees.
- ▶ Provide work experience. This could include working in vacations while studying; work during a sandwich year; or working full-time after graduation.
- ► Ensure the quality of the work experience by use of National Vocational Qualifications or key skills units.
- ▶ Be created by partnerships between NTOs and HEIs.

At this stage the issues of extra costs were not finalised. Later it was decided that these would be met either by the employers or, for a limited period, by fee remission (HEIs could bid to HEFCE for funds to cover some extra costs).

This Newsletter identified seven NTOs (and equivalents) which were piloting the scheme:

- 1. Chemical Manufacturing and Processing National Training Organisation.
- 2. Electronics and Software Services National Training Organisation.
- 3. Engineering and Marine Training Authority (EMTA).
- 4. Management and Enterprise Training Council.
- 5. Rail Industry Training Council.
- 6. Steel Industry National Training Organisation.

7. Sport Recreation and Allied Occupations (SPRITO).

The concept of frameworks emerged during these pilots. It was planned that each NTO would develop a framework to guide the subsequent development of individual GA schemes. Frameworks would differ somewhat from NTO to NTO, and local circumstances would mean that there would be variance between schemes sharing the same framework. Frameworks required HEIs submitting schemes to give details of:

- ▶ The partnerships used and list of partners.
- ► The delivery models.
- Who was consulted.
- ► The potential progression route(s) envisaged (e.g. from modern apprenticeship to degree to postgraduate diploma to GA).
- ► The core components including NVQs; key skills and any mapping of national occupational standards to the learning; workplace learning; underpinning knowledge (usually sector specific); the higher education award to which the GA would be linked.
- ▶ Roles and responsibilities of the HEI, the student and the workplace/employer.
- Guidance for delivery e.g. the inclusion of projects; how elements will be assessed; how achievement will be recorded.
- ► How the framework would be promoted.
- ► Equal opportunities provision.
- ▶ Training agreements.
- ▶ Employer guides.
- ▶ Mentoring and support network guidelines.

A National Steering Group was set up which issued guidelines for framework design for use by NTOs and their partners. The frameworks were created in partnership with NTOs and groups of HEIs who wished to work with the NTO/SSC. Employer representatives should be included at the planning stage.

HEIs were invited to tender for *developmental* funding in a circular letter issued by HEFCE to the heads of HEFCE-funded further and higher education institutions on the 4th September 2000. £5 million was made available to develop frameworks and was distributed as development funds. The letter specified the use of development funds was to be for: generating demand; project management; framework creation; delivery arrangements (e.g. HEI-specific guidelines; liaising with employers; supervising students).

HEIs could also apply to HEFCE for additional student numbers and for fee remission for eligible students (either postgraduates or those employed by an SME). The fee remission was used to pay for the cost of the tuition from the HEI or the cost of the key skills or NVQ qualifications or both. It had been anticipated that models of delivery would incur no additional expense in paying for NVQ qualification, but this was not always the case.

In March 2001 bids for development funds were tendered to HEFCE via an assessment panel drawn from the Graduate Apprenticeship National Steering Group (GANSG). Seventeen bids were rejected as they did not meet the eligibility criteria, or had not involved the NTO, or the NTO felt it had no capacity to support the GA development. (Graduate Apprenticeships Funding

Allocations Report HEFCE 01/41: 2). Other GA development bids were given a lower level of funding than requested.

The situation today

The majority of ongoing GAs are operating from adaptations (in respect of local demand/circumstances) of the frameworks developed with the NTOs/SSCs. However eight GAs appear to be ongoing which do not mention an NTO/SSC, or mention that they received little support or help from one. (The quality of information supplied makes this a provisional estimate.)

Validation of a GA is via the GANSG which had a membership consisting of some of the pilot NTOs, DfES, HEFCE, QAA, Standing Conference of Principals and the University Vocational Awards Council (UVAC). The frameworks were approved or sent back for adjustment. This sometimes caused a delay which led to marketing problems.

UVAC strongly supports GAs and offers a kitemark scheme for the frameworks (although GANSG is responsible for the approvals process). The UVAC Web Site (http://www.uvac.ac.uk/) describes its kitemarking thus:

'The UVAC kitemark process is designed to recognise and accredit the standard of the Graduate Apprenticeships delivered by institutions. Institutions with accredited programmes will be eligible to display the joint UVAC and relevant Sector Skills Council recognition mark on all certificates and programme-related materials. The kitemark is obtained for identified individual Graduate Apprenticeship programmes and is valid for three years following successful accreditation. The accreditation lasts for 3 years.'

Cost of accreditation services

The cost of accreditation was an issue raised by some interviewees. There were discounts available to members and for multiple submissions.

One of the programme leaders we interviewed welcomed the kitemarking scheme, saying that:

'We are also being approved by UVAC. We have got the UVAC kitemark for national best practice GA programme. One aspect ... was to put in place a Quality Assurance scheme. Anyone who wants to run a GA programme has the option of applying for a kitemark – a quality mark.'

Development funds have now finished. The hope was that schemes would be sufficiently robust, well-established and well-supported to flourish in their own right. Certainly we hear plenty of reports of valued developments. However, 36 of the 79 GA schemes in this review will not continue in the longer term due difficulties of funding and/or duplication of learning experiences and evidence requirements. Some (29) continue but face funding difficulties. About 20% have been subsumed within vocationally orientated degrees, where they provide a way of identifying and recognising skills, knowledge and understanding gained during work placements and sandwich years.

3. Review questions and their sources

A summary of our review questions and their sources is on pages 10 and 11.

HEFCE supplied us with a set of 76 Annual Monitoring forms, completed by leaders of GA schemes. Fifty websites of higher education institutions that had developed GAs were also examined to enrich our archive of documentary data. This work was done mainly in August 2003.

Interviews were conducted with 48 GA scheme coordinators from HEIs and with five representatives of NTOs. Fifteen employers that have had a graduate apprentice working for them were also interviewed. Initial contact was usually made through e-mail or by letter although some employers were contacted by phone as there was limited time available. Although some of the contacts were no longer responsible for the GA scheme, they were usually able to provide contact details for the person who had taken responsibility. The majority of respondents took part in a telephone interview, although some were interviewed face-to face at their request. This work was done in September 2003.

We also contacted a dozen key informants, people with an overview of higher education developments, and asked about their knowledge and experience of GAs. This work ran through August and September.

We did not talk to students directly as part of the primary data collection process because we felt it more appropriate to focus on operability from the supplier side, and the perceptions of employers about the efficacy, suitability and cost of the GA scheme. Furthermore, in the available time frame (during the long vacation) it would not have been possible to contact students, even if institutions had been prepared to provide home contact details. Also much work has already been done on the benefits of work placements and work-based learning. In particular we have drawn on a long history of research into effective workplace learning as well as recent work on the formative evaluation of the foundation degree scheme.

That said, we did accumulate student comments from the documentary sources. Unsurprisingly, these comments are complimentary. We present them to illustrate the positive side of the GA initiative and we have no reason to believe that they conceal depths of dissatisfaction. In any case it would be a considerable undertaking to establish their representativeness.

Table 1. Sources of questions addressed in the review

Source of the review questions	HEFCE's review specification, paras 11 & 12	HEFCE's GA monitoring forms	HEFCE spreadsheet	HEI websites	ESECT	Other sources
Review questions	-					
Are the NVQs and key skills elements separate awards or are they embedded in the HE award?	✓					
Is the work-based element delivered during the degree, a sandwich element, a placement, or after graduation whilst in employment?	√					
Is the degree element specific to an employment sector or is it general?	✓					
Is the student's main activity employment or full-time study?	✓					
Are the GAs local schemes with NTO/SSC approval or national schemes promoted by the sector body?	✓					
Are students charged any fees for GAs?		✓		✓		
What aspects of employability are covered?		✓		✓		
Do the HEIs, through liaison, management, and co-ordination help to create local networks of employers who are ready to work with higher education?		√		√		
Does the GA have mentors within the workplace and tutors from the HEI who visit the workplace?		√		✓		
Is there any support from and involvement of professional bodies with the development of the GA?		√				

Source of question	HEFCE specification	GA monitoring forms	HEFCE spreadsheet	HEI websites	ESECT	Other
Review question	opoomounom	io.i.i.c	oproducinos	Wobolioo		
Is there a perceived market need for a GA?		✓				
Are employers reluctant to participate in the scheme due to financial costs of loss of employee time or funding the employee?		✓			✓	
What do employers see as the main function of the GA scheme?					✓	
Does the GA scheme meet the White Paper 21 st Century Skills objectives for publicly funded training? Is it employer and learner needs led; shaped by the skill priorities of the sector, region and locality; using ICT to deliver and assess learning; giving deliverers the maximum discretion to decide how best to respond to needs?					√	White Paper 21 st Century Skills
Do GAs add value to HE provision in terms of employability?	✓				✓	
Do GAs enable students to be employed more readily within their chosen sector at a suitable level?	✓				✓	
Do GAs add value to HE provision in terms of progression pathways?					✓	
Do students who enrol complete their GAs? If not, why not.					✓	
Are GAs financially sustainable without further government subsidy to students or for development?					✓	

4. Findings from documentary sources

The quality of these sources

All 50 of the websites of those institutions participating in the GA scheme have been examined from the perspective of a student wanting to do a GA. Of those, only eight actually have the scheme mentioned in the HEFCE documentation advertised on their sites and could be located within a reasonable time. For the rest, it was hard to distinguish between GAs and other activities. Many of the HEIs had subsumed the GA qualification into the 'sandwich' part of their undergraduate degrees (e.g. The London Institute). Others made it a part of a Master's degree, or used the GA frameworks to provide a structure and learning outcomes for work placements. Several had developed a 'generic' framework for GAs which formed part of the Master's qualification or the first year of a postgraduate diploma (e.g. Kingston has developed an e-skills module). Almost all had postgraduate certificate courses running but not always in the subject areas/faculties that the GA was in.

A search was also done of the site for the Universities and Colleges Admissions Service (UCAS). Although there were some passing references to GAs, they seemed unlikely to encourage students to look for more detailed information. Such data as could be gathered from this source were tabulated and reviewed.

The information about GAs on HEI websites, tabulated in Appendix 1, is scarce and of varying quality. A person currently in work who is interested in doing a GA would find it difficult to discover what is available. Some HEIs in the Annual Monitoring Forms submitted to HEFCE said that they have not created a web presence for their GA because of the cost and uncertainty about the future of GAs. We consider that the shadowy web presence of GA schemes has militated against the development of a brand image².

Data from our studies of websites were considered as we analysed the Annual Monitoring Forms, and have influenced our thinking about the key themes emerging from our studies of documentary sources (page 15, below).

All of the GA Annual Monitoring Forms provided by HEFCE were reviewed. These forms were not as useful as we had hoped: despite repeated prompting from HEFCE, some institutions only provided financial information. Sometimes they said that their GA did not succeed, but they failed to complete the self-assessment section which would have helped to understand better the factors associated with success and failure.

The limitations of these data are illustrated by the numerical data presented in Figure 1, below. It might be supposed that the simple question 'How any students are registered for year X?' could meet with a simple numerical response but this is not so. Figure 1 is at best a snapshot based on the data that are entered on the Annual Monitoring forms. However, the returns to HEFCE have not been of a consistently high quality. Some contain bare financial information, while others have 20 page appendices which cover what they are doing very thoroughly. The number of courses on the graph add up to 76, rather than the expected 79, because there are no data from some of the programmes. Some of the institutions which have not said that they have students registered for 2003 in their figures, say in the text that they are anticipating student numbers of up to 50. And some GAs have only just been launched. Figure 1 then is a best attempt, using the data provided as they stood in August 2003.

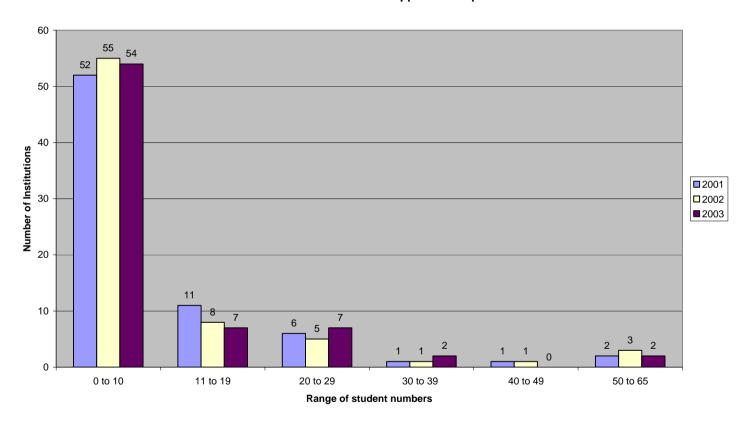
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² We note, though, UVAC's work to promote GAs as a national brand, both on the web and in other ways.

Notwithstanding problems of data quality, it has been possible to see some themes emerging about the reasons for the continuing success of a GA or the reason why a GA has failed to continue or to be developed.

Figure 1. Frequency of student numbers registered on Graduate Apprenticeship Schemes (from HEFCE returns)

Students on Graduate Apprenticeship



Themes in outline

Successes

Without exception, GAs were thought to be a good idea. It was accepted that the GA should form part of a progression pathway and it was appreciated that a successful graduate apprenticeship would signify to an employer that the GA graduate had 'employability skills'.

Better links with employers

The GA has either helped to initiate a dialogue between the HEIs and employers or increased the strength of links already in place.

Success in the graduate labour market

Many GA reports claimed that the students were enabled to find posts more readily – particularly in the e-skills and cultural heritage sectors.

Differing views of 'employability'

There has been considerable debate about what exactly constitutes 'employability skills' and ESECT regularly points out that the research is very clear that employers are interested in far more than 'skills' (Knight, 2003). The GA schemes claimed to promote a wide range of achievements. In a sense this diversity does not matter much because the schemes were negotiated with employers, NTOs and SSCs, and it is only to be expected that there would be some variations between sectors. Some attainments that feature regularly in the research literatures were missing from some schemes, yet it did seem as though most embodied a view of employability that is compatible with ESECT's description of it as:

'A set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations.' (Knight, 2003: 4)

Differing organisational forms

A variety of organisational forms was used to promote these 'employability skills'. In some cases the GA framework was used within a degree programme i.e. at an undergraduate level. These formally specify a pedagogy and an assessment structure for placements and sandwich years — for example the Hospitality GA at Birmingham University, which used the framework produced in partnership with the Hospitality Training Foundation NTO. Others used the GA as a 'bolt-on' post-graduation qualification — for example the Arts and Cultural Heritage GAs at Brighton and Leicester used the framework developed in partnership with the Cultural Heritage National Training Organisation. Another example of this organisational style is the Professional Dance GA at the Northern School of Contemporary Dance which used the framework developed in partnership with Metier.

Despite differences in organisational forms, there were reports from students and employers that these GAs were very useful and that the partnerships with employers worked well. One

³ The point is not trivial because the techniques used to promote skills mastery are not the same as those to foster attitude change or to influence self-theories, or to encourage reflection.

Leicester student said, 'It has encouraged me to stretch myself in ways I may not have done otherwise', and another that the programme had led to 'a more definitive and strategic approach to my work-based projects and appreciation of following a more planned course of action'.

Workloads

Students who have completed a successful GA are very positive about the benefits of it in terms of employability, enabling a smoother transition into the workplace from study, and self-development. However, being in full time work and completing a GA has a similar effect to that of studying for an OU degree in that the combined workloads have seemed at times to be overwhelming (a word used quite often in quoted student comments).

To embed or not?

Programme designers responded differently to the problem of whether to embed the development of 'employability skills' in the programme or to tackle it through a discrete qualification such as an NVQ.

While NVQs provide employers with a qualification to prove the possession of a set of 'skills, knowledge and understanding' they are often cumbersome and time consuming for employer, assessment and student. For example an Administration NVQ level 3 requires 5 units to be completed, each one containing evidence check lists. There are approximately 350 'tick boxes' which have to relate to the work-based case studies written by the candidate (student). The student must then collect evidence to support their case studies and be observed by an assessor for parts of the case studies. Very careful planning of which NVQ units are used has to be done to minimise overlap and repeat of some elements, due to the precise and inflexible nature of the NVQ and difficulty of mapping any form of credit transfer for small parts of the NVQ units. Where this is not possible it leads to students repeating the recording of their achievements. It also costs money to get an NVQ award and funds were not always available to cover those costs.

Our interview data are consistent with the documentary evidence. One employer complained that the LSC was not willing to support level 3 NVQ provision within the GA scheme. Another was critical of the attempt to accredit employability skills through NVQs, saying:

'I think there are problems when it comes to actually accrediting skills, particularly in the vocational skills through the NVQs. [If we had gone] outside for the NVQs that would have made the work load for students unmanageable, untenable ... If you are going to maintain integrity of the components that are validated by different awarding bodies. you are caught between a rock and a hard place. How do you do sufficient justice to each of those without compromising the quality of the qualification? There is an additional cost element if you then add the skills bit on. Because of our profession you only need a postgraduate qualification really, there is no recognition within the industry of people needing these extra skills.... So if we altered the fees to cover the skills based element we wouldn't get any take up. If students had to pay or if they opted to do the degree with its other component NVQs and key skills, I think they would simply go for the main focus, which is the degree. That has for them the most currency value. Not only that but it is a very, very intensive programme and to do these three components together is extremely hard. The other side of it is that the programme does rely on an awful lot of goodwill from the institution. For example the NVQ units require people to go off site, do some inspection visits and so forth.'

Another, in a different sector, said:

'If you're comparing it [the GA] with a good conventional sandwich course there is very little difference apart from a little bit of extra accreditation.'

The case for embedding was set out by another, who began by complaining about the cost of providing NVQ certification and continued:

'Employers in this sector are busy people who have just about got used to the NVQ system (despite complaints about how cumbersome and time consuming it is) – they are unwilling to engage with yet another qualification on top of this. There are already progression pathways for Veterinary Nurses in terms of specialist diplomas in areas such as anaesthesia which can open the doors to careers in research, pet food industries and adult and public education. As the NVQs were run in parallel with the degree and the professional assessment by the Royal College of Veterinary Surgeons, things were being repeated and students were having to do things two or three times. In the case of this degree we have tried to embed the key skills and so hope that students with this degree will be seen by the profession as having a 'licence to practise' in effect. This will mean that we no longer have to engage with the staff and resource intensive NVQ system.'

However, if the development of such 'employability skills' is embedded in the degree, there is no qualification on paper to present to a potential employer. The issues then become those of trust (employers have to trust that the degrees really do promote these skills); the reliability of assessment (are the judgements made sound and robust?); and of context (is the culture of higher education very different from that of the potential workplace?)

Liaison issues

Cultural differences between higher education and employment were often said to need delicate and time consuming negotiations. Where an 'anchor person' was appointed to liaise with the employers, the HEI, academics and students, liaison usually went well. Many of the less successful GAs did not have dedicated liaison staff, although the HEI might have been fortunate enough to have a very strong and helpful NTO/SSC such as SPRITO or ETMA to assist them and their partners in creating a viable framework. These organisations have the ear of employers but also links within HEIs and the world of education. However, we have remarked previously that NTOs were in the process of converting to SSCs and were often too preoccupied to concentrate upon GA framework development.

Employers' priorities

Employers have priorities that may not coincide with what higher education would like them to do. For example, some employers were concerned about the loss of employee time or about the resources needed to mentor students in the workplace. This was particularly the case where employers were SMEs or micro industries. In a few cases this issue did not arise, where the paid or unpaid employment of placement students enabled a firm to complete certain projects while also enabling the student to achieve the work-based elements of the GA (e.g. some eskills areas).

Other employers complained that GAs were introduced just as they had come to grips with NVQs, and what could be expected of a person with a certain level and type of NVQ. These employers said that they did not have the resources, time or inclination to become familiar with GAs.

Start-up difficulties

GA funding was introduced at a time of turbulence in the system. Also, as has already been noted, there was often little support for the HEI from its NTO/SSC because they were in transition. There were some notable exceptions, for example SPRITO, EMTA, LANTRA, CHINTO, METIER, Hospitality Training Foundation, National Textile Training Organisation and the Polymer NTO. Sometimes the consequent delay in accreditation meant that there was little

or no time to advertise the GA amongst students or in the prospectus. Consequently, some monitoring forms report problems in recruiting of employers, whose participation was vital.

Continuation difficulties

All higher education institutions' efforts — creating a framework, negotiating with employers, training or briefing workplace mentors, tutors visiting the workplace, employing an anchor person, in some cases commissioning specialists to create interactive course materials and web HEI/student dialogue facilities, advertising, training extra NVQ assessors — were felt to be threatened if there was to be no continued additional public funding for GAs.

Those institutions with successful GAs had usually appointed a co-ordinator or liaison person who worked with employers, SSCs/NTOs, students and academics – an anchor person. This person or others involved in the GA within the HEI expended considerable time and money in advertising and promoting the GA to both employers and students. Costs such as printing brochures and holding meetings were often mentioned.

All bar one of the institutions that were eligible for fee remission felt that GAs are not sustainable without a continuation of this funding. The only institution disagreeing was unique in that the students were given work experience with firms which had short projects that needed completion. Thus it was more of a symbiotic relationship. Those who could not apply for fee remission were often concerned about the extra costs involved in entering students for NVQ qualifications. The study of the Annual Monitoring Forms concluded that many institutions felt that the GA could not continue without fee remission and other funding.

For example, one institution's Veterinary Nursing GA framework employed a specialist to create an interactive site so that the students could keep in touch with their tutors and do course work. Since many of the students did not have access to a computer and would be far from campus some laptops were purchased for their use. An anchor person was appointed, who put a great deal of time and effort into negotiation with employers. As funds are not continuing the GA will not be run in the forthcoming academic year. However, it appears to be one of the most successful of those submitting monitoring reports in August 2002.

There were also costs to the NTOs and successor SSCs.

However, there were frameworks and individual programmes which had acquired outside sources of funding from, for example, the European Social Fund or other more local initiatives. This money was often used to fund a co-ordinator/liaison person, to cover NVQ costs, or for promotional purposes. However these outside funds were often in the nature of a one-off payment and could not solve long-term funding difficulties.

Profile problems

There was evidence that some felt that the GA brand was not sufficiently developed, nor sufficiently promoted by central funding bodies. For example, there was a view that GAs would have had a higher profile and more credibility with students and employers had there been more central government promotion of the GA idea through employers' federations, Chambers of Commerce and SSCs (although they were just being formed).

The diversity of organisational forms and differences in interpretations of 'employability skills' shows up in GA provision that is a patchwork of key skills, National Occupational Standards, NVQs, elements relevant to specific work areas and other local provision. In some cases these elements are well aligned in coherent courses, in others they are embedded and in others arrangements look disjointed. The work-based learning element is also fragmentary – some of it is done on placements, some within the workplace, some through employer-initiated 'live' projects and some on more artificial projects. With the plethora of qualifications facing an employer (particularly the SME and micro industries who are short of time and resources with

regard to HR capacity), the GA lacks a 'brand identity'. The possession of the qualification needs to signify achievements that are understood and valued. The problem is that the meaning of a graduate apprenticeship appears to vary from HEI to HEI, and from framework to framework, despite the vigorous efforts of UVAC to help the sector develop a coherent brand image. And, as we have already observed, it is very much a niche product.

For example, SPRITO was one of the pilots of a framework in 1999. The Sport, Recreation and Allied Occupations framework was intended to encompass that area of degrees and expertise. Two of its HEI partners have followed the structured framework and in this sense a standard is in place for these. SPRITO intended to work with a further 5 institutions. Of these 2 have no students (submission of Annual Review to HEFCE 2002); one appears from the documentation supplied to be doing a different GA called Coaching and Instruction, with a countrywide student base but its start was delayed due to funding problems; another appears to be doing a different GA called Sport Management and Enterprise with another SSC; and the fifth institution appears not to have appointed a co-ordination/liaison person for GAs and found it impossible to obtain placements from employers for its GA so it does not have any students either.

This lack of standardisation can be viewed as a strength, insofar as it represents a response to specific employer needs. Yet the price is uncertainty about the meaning of a graduate apprenticeship.

Factors that appear to promote a successful GA

Analysis of the Annual Monitoring Forms suggested that four sets of factors are associated with the more successful GA schemes.

- ▶ Strong, existing links with employers in the locality, combined with an existing culture of visits from tutors and other liaison people.
- ▶ A defined role within the HEI for a person to liaise with employers an anchor person. This person is the named point of contact. The role must involve managing, promoting, recruiting, troubleshooting and explaining.
 Other work-based learning activities within the institution, such as placements, HNDs etc., have often already led to the creation of these posts, and industry links have already been developed. Where they have not, there are significant challenges for departments wishing to run GAs.
- ▶ Strong links and support from non-employer partners such as NTOs, LSCs and professional associations. Often these are built on existing links for example links beween one institution and the Veterinary Nurses Association. Where they are not, the task of designing and maintaining GAs is significantly more challenging.
- A market need for a GA. GAs can work well where they complement in-house company or sector-specific training.

Factors that appear to inhibit GAs

Three sets of factors were identified from the Annual Monitoring Forms.

- Lack of help and support from NTOs or from the newly formed SSCs. There were often transitional difficulties as the one turned into the other.
- ▶ Reluctance of employers to participate due to: the hidden costs of the employee working on the GA and possibly being at the HEI during work time; direct costs of future GAs, with employers having to contribute (in some cases) to the costs of NVQ elements; perception that the GA gave no added value to the company or to the efficacy of the employee. (This

	latter view is not borne out by the comments and experience of the successful employers and students.)
•	A lack of market demand for the qualification. There are cases where the market is already well-supplied with graduates.

5. Findings from our informants

Interviews with programme leaders, employers and NTO/SSC representatives

Throughout September 2003, the Centre for Research and Evaluation (CRE) at Sheffield Hallam University conducted interviews with scheme directors at HEIs, NTOs and also with employers. The interviews were conducted in order to find out more about the scheme from those people who have direct involvement.

The majority of interviews were conducted over the telephone. A small number were conducted face-to-face at the interviewees' request. Initial contact was made through an e-mail or letter to the coordinators of the GAs at both the institutions and the NTOs. HEIs were then asked to provide contacts for the employers during the interview.

A standard set of questions was used for HEIs and NTOs and a separate standard set of questions for employers. The findings, reported below, are organised around these questions.

Contact was made with 83 coordinators from HEIs and NTOs. There were problems with the original list of names that had been gathered through web-based research. A number of contacts were no longer responsible for the scheme; where possible new contacts were provided, and contacted accordingly.

There was reluctance on the part of some respondents to provide employer contacts. Several reasons were given, including that they did not have the contact details to hand, concerns over data protection, and not wanting to cause any problems in the relationship. Respondents were encouraged to forward employer contact details to CRE by e-mail or to contact the employer directly and ask them to participate. However, in a short time scale only 15 employers were able to participate. A total of 53 interviews were conducted with NTOs/SSC colleagues and with higher education staff.

Summary of findings

The GA is in some ways similar to other schemes that have been running for many years, such as the sandwich placement; and in other ways to the recently developed foundation degrees. Nevertheless, there are positive factors identified by those who are directly involved in coordinating, developing and delivering the schemes, that are unique GAs. There is overwhelming support for the programme: it is seen to be highly beneficial to both students and employers.

Although some institutions view the NVQ as a positive way to accredit the skills that are learned in the workplace, others see it as a hindrance, particularly in relation to funding. There is a consensus that the NVQ requires a lot of additional resources.

Graduates are expected to complete three levels of assessment and both HEIs and employers feel this is highly demanding, both for the students and those delivering the scheme.

Due to the different structure and recruitment procedures involved in the GA, there are different views in response to the questions surrounding the key purpose of the scheme and how it is shaped.

The importance of finding the 'right' student is crucial to whether the scheme is successful. Employers want candidates who are committed to the profession. There is some concern from respondents in HEIs about the relationships with employers in the initial stages of building the relationship. However, once the relationship has been established, partnerships generally work well.

Interview findings

Thinking about the Graduate Apprenticeship scheme, what would you say is its key function?

There are numerous opinions regarding the perceived key function of GAs. The variation is often dependent on the structure of the GA in the institution delivering the scheme, that is, whether it is offered to people who are already working in the industry on a part-time basis, or provided to full-time students. Those offering the course to people already working in their desired sector indicate that the scheme should improve academic and vocational skills:

'It's really to facilitate people that are in industry to develop their skills both academically and with a vocational level to such an extent that they are extremely employable by the end.'

Whereas those offering the apprenticeship to students who are subsequently found work placements see the scheme as an opportunity to develop key skills and employability. The key objective is to support students in their transition from education to work:

'I think it's planning a clear pathway into the industry and providing them with the skills and experience to make them employable.'

'Its main advantages are to support the graduates when they leave. It's important, particularly in the jewellery field, because when they leave they are on their own. It's a big shock from being a student to suddenly being out in the world. That was one of the strong things that came through from our original research. The positive experiences of the few that we have got, are that the support network is there, being able to come back, use the facilities of the university and then obviously liaising with employers to try and gain employment for them.'

'The transition from training to work: it is better for graduates to know what is required in the professional world, e.g. demands of training. Basically hands-on training in a safe environment, learning all aspects of working relationships.'

Some respondents feel that the aim is to provide employers with bespoke graduates who have the necessary skills to work in the desired sector:

'My understanding is that it's designed to provide students with a learning programme that is more relevant to the needs of the industry they are working in or going to work in. And the reason we spend so much time doing the competencies with the students is to make them more useful to the employer, more able to hit the ground running and contribute to profitability as soon as they can.'

Generally it is considered that the key function is of benefit to both employer and student:

'Well there's probably several functions. One is to try to integrate the workplace more fully with academic courses and that's, if you like, from our direction. And the other one, I think, was to try and make employers, particularly small employers, perhaps aware of the potential role of graduates in taking their businesses forward. So essentially...we're people who would help their business. So I think it's that sense of HE integrating with the workplace that's the main thrust of the whole thing.'

The GA is also recognised as a scheme to help graduates who do not have a relevant degree for the field in which they are seeking work. GA helps these graduates to transfer to work in the field of their choice:

'I don't know overall but certainly from the point of view of the pilot that we were involved in, three of the partners certainly identified that there were a number of

graduates who came to work in the hospitality industry from non hospitality degree backgrounds and ended up working in fairly low level jobs without structured management training etc. We thought that this was a good opportunity to take those people who might have made the choice to go into the industry but without the necessary vocational core qualifications, to do some catching up to enable them to fast track into management. And that's how the scheme, the framework, has developed what we had in mind really.'

Ensuring that the graduate has a high level of academic skills as well as work-based training was thought to be of high importance:

'Its key function I would say was to combine academic rigour I suppose with some skills-based training. In our case we only do postgraduate apprenticeships so we combine the postgraduate Masters qualification with the fact that the students are able to develop their skills at the same time in the workplace.'

'To make higher education provision more industrially relevant by giving students a better, more coherent, package of education and properly certified training.'

The overall aim seemed to be two-fold, offering students the chance to improve sector-specific skills whilst achieving a higher education qualification. This naturally is of benefit to both the industry and the student.

The White Paper 21st Century Skills has various objectives for publicly-funded training. Would you say that the Graduate Apprenticeship meets the following four objectives and if so how?

1. Employer and learner-needs led?

Depending on their institution, respondents again differed in their opinions regarding the direction of the GA. There are organisers who believe the course is either employer or learner led, some believe that it is both and others believe it is neither employer- nor learner-needs led. There seems to be a concern over the involvement of employers in leading the GA. In some cases HEIs have developed the scheme and advised the employer of what is required from them; whereas others have taken a partnership approach and have taken guidance from the employer as to what it is they require.

However, the majority of organisers do see the GA as both employer- and learner-needs led:

Because they are actually working, the graduate is still learning and is putting those theoretical skills into a practical environment, and there is also good transferral of skills from the graduate into the company. Also the grounding skills of work and business are passed through to the graduate so there is a good learning exchange.'

There is an indication that it is often difficult to get employers involved. This was for several reasons. Some respondents were of the opinion that employers feel additional training is not required. Others cited poor relationships between industry and higher education. More specifically at one institution, the interviewee said:

We are asking for a big commitment from our students because the work-based learning element of the graduate apprenticeship is actually going to be voluntary; they don't have paid positions, mainly because we felt that this was probably the best way to get employers on board. Employers will be paying us £1,000 per student which will go towards the NVQ assessment and the industry awareness certificate, things like that. So in essence the employer is paying for the service, so the idea is that our students will actually undertake approximately 6 hours or so of voluntary work per week for a period of up to 12 months, so it will run from their second year and will start to go into their final year which is where we will link their dissertation with their employment

projects. So I'm hoping it will be learner/student-needs led, but I think we are asking quite a lot from our students so, we will wait and see how it goes.'

This particular scheme differs from the majority of projects, in which students are paid a salary for the work component of the scheme. Payment may be a factor that clouds employers' opinion of the scheme, as one respondent claims:

'The employers are slow and don't realise the benefits enough beyond economics and I think that now is our biggest bugbear and hardest challenge.'

Although there were some claims that employer involvement is difficult to achieve, in other sectors the claims were more affirmative:

'All our projects are negotiated very strongly prior to the actual apprenticeship taking place. The best ones have all been where the employer has identified a project of some sort which needs doing and they haven't had the internal manpower to be able to do that. We have had to match very carefully our students' wishes with the projects and it's very definitely satisfying both of those two groups.'

One opinion differed from the majority of responses claiming that the GA has been implemented through a top-down approach:

'I'm not sure it is either employer or learner-needs led. It does satisfy both learner and employee needs to some extent, but it was a government initiative rather than an employer initiative or something students were demanding.'

2. Shaped by the skill priorities of the sector, region and locality

Although there is a consensus that the skill priorities of the sector are a factor in shaping the GA, the region and locality were less involved. At some institutions it was claimed that the relationship with the NTO helped in shaping the apprenticeship to meet the needs of the sector. NVQs are seen to be qualifications that are sector-specific and therefore by nature contribute the element of skill priorities required by the sector to the GA scheme.

Although the majority of respondents do not feel that sector, region and locality are fundamental in shaping the GA, at one university it is considered paramount that all three contribute to its development:

'They have to be otherwise it won't work. In a sense to try and illustrate this at the moment we are linking GAs into another regional project called Graduate Forge. Again it's with regard to student placement and problem solving but it's specific to the automotive industry. The steering group for this project is actually chaired by West Midlands Managing Director of an automotive company, it's done through the automotive skills task force. At the moment we are doing some initial research as to how those organisations' master engineers have received their training and what it is that they specifically want. They have to tell us what they want so we can formulate new skills for the GA framework, absolutely based on their needs and on their requirements.'

It was stated at one institution that the region and locality were not the primary concern, rather the skills and competencies of the students. One institution sought the help of the Learning and Skills Council to shape the scheme to meet the regional agenda, but the LSC was unable to assist.

3. Using information and communications technology (ICT) to deliver and assess learning

Information and communications technology (ICT) is used where it is thought to be appropriate rather than as a specific objective. In the majority of cases where ICT is used to deliver and

assess learning it is done in conjunction with traditional teaching approaches rather than as the sole method.

'In our own case, I have to say that the engagement with online learning materials hasn't been as good and as positive as we hoped it might be, because we experienced quite a drop-out rate. Our postgraduates on the Graduate Apprenticeship are actually doing online learning primarily. We found they struggled with that, which is one of the main reasons we don't currently run it.'

There are exceptions:

'In our case, definitely, because all of the formal learning is delivered via a website. The students then apply that learning in the context of the workplace, so both elements are assessed.'

However, the majority of courses do not use ICT to deliver and assess learning.

4. Giving deliverers maximum discretion to decide how best to respond to needs

The majority of respondents feel that deliverers do have maximum discretion to decide how best to respond to needs. Owing to the nature of the relationship between the HEI, NTO and employer, a number of institutions feel that the delivery is not completely up to its own discretion. However, others feel that delivery is down to interpretation and, regardless of partner involvement, flexibility is not a problem. Yet others see the partnership as being the deliverer rather than the HEI exclusively:

'It must meet the need of the student or candidate, it must meet the need of the employer and it has to meet the need of the academic institution as well. We have developed a learning contract that formalises particular training and again that contract is not set in stone. It can be varied by agreement at the appropriate times but it's an initial starting document that formalises that training, but all three parties have to sign up.'

Would you say that Graduate Apprenticeships add value to higher education provision, especially in terms of student employability and also as a progression pathway?

The overriding response to whether GAs add value is that they do. There are thought to be some similarities with foundation degrees which causes confusion amongst employers, and people question what a GA actually is. Well-established sandwich courses are also compared with GAs, both of which are valued for the work-based element:

'The only students to pick up on GAs were sandwich placement students. What we found was that the sandwich placement actually gave them the employability skills, so the Graduate Apprenticeship was a useful way of formally accrediting those skills. It would be doubly useful for full-time graduates because they obviously quite often graduate without any work/employer-based skills.'

A few of the respondents state that the industries the students go into are areas in which it is easy to find employment regardless of whether students have gone through a GA. Others feel the scheme is beneficial because of the difficulty students have in gaining work after graduation.

How many of the GA students from last year are now working within their desired sector? How many are currently employed at below £15,000? How many are unemployed?

When graduate apprentices were already in full-time employment, scheme organisers were unsure about the rate the students were being paid, but they were able to identify the area to which students had progressed. Many courses had been running for only two years and therefore the students had not yet progressed to full-time employment. There are some positive stories surrounding students who have done well through the scheme and have found work in the sector of their choice. However, very few were able to give specific details.

'We had 11 students. Four have work with companies, three are freelance ... A lot of the work tends to be on a freelance basis, even people who are working, classed as full time, are often on contract. There is lots of mobility in this area of work. I would think most of them are earning less than £15,000 as the profession is not particularly well paid. It is likely the remaining four students are unemployed.'

Do Graduate Apprenticeships have a significant potential student market? And of those who do enrol, how many complete the scheme?

Generally, GAs do have a significant potential market. The value of work-based learning is seen to be crucial in making graduates more employable. However, the lack of funding and the introduction of foundation degrees are factors which could result in a decrease in the uptake of GAs.

'I think the market may be significant if the funding was continued, but the DfEE statement that they had no intention of providing any further funding was really the nail in the coffin, so the assumption that the employers would pay the fees is flawed. If students had to pay or if they opted to do the degree with its other component NVQs and key skills, I think they would simply go for the main focus, which is the degree. That has for them the most currency value. Not only that but I think you should also realise that it is a very, very intensive programme and to do these three components together is extremely hard. The other side of it is that the programme does rely on an awful lot of goodwill from the institution, for example the NVQ units, that requires people to go off site, do some inspection visits and so forth, a number of things like documentation at level 4 for things like tracking of students doing NVQs which is difficult, it's is nigh on impossible to get hold of, so you have got to give that yourself. It tied up two full time members of staff to simply administer a very small group. So from a resource point of view it's not very attractive and a number of other institutions have said the same thing. It is very, very intensive in terms of resources.'

'They've all completed and the reason for that is that ours is an undergraduate apprenticeship so they have to complete it to complete their degree. We haven't had any postgraduate apprenticeships.'

'From the wide range of discussions we have had with different employers and different groups, it would be very much on a sector and regional basis. I say that because here ... the vast majority of our students are already working. The interest in this sort of scheme would be where they could identify the value in their area or occupational sector, but from talking to employers I think the value would be where students didn't immediately have the practical experiences and that is very much on a sector basis. I don't think it's across the board. Again for [our] students the reason we actually envisaged the award being within the degree programme, the opportunity for students to gain this award at the same time as their degree, because we couldn't envisage asking them to spend six years on a degree and then further study on a Graduate Apprenticeship, so there are issues of time as well I think.'

Do you think that Graduate Apprenticeships are cost effective and financially sustainable?

There is a concern surrounding the fact that the NVQ component of the GA is not funded by HEFCE. A number of respondents expressed a concern that after the initial funding from HEFCE, there would be no further funding. Some respondents feel that the employers get good value for money.

'HEFCE should fund it then it would be more sustainable. The NVQ costs, my time costs, everything costs money. It needs to be managed by the right people and you also have to choose the right candidate. Properly managed it can be very successful. HEFCE should provide some help for this because it is an excellent vehicle to do all the things talked about in the White Paper. It would be a shame if people say it's only alright because they don't have the imagination to see how it works. I would be very happy to speak to anyone else if needed because I think it's an excellent scheme.'

I've had to fight for help. They must have the administrative backing in addition to the person like myself who is a full-time lecturer. In terms of time and finance, they take large amounts of both. Whether they are cost effective I'm not sure, but I am so committed to them that actually I would say yes and we would do anything to keep them going.'

'HEFCE doesn't fund NVQs. If we are serious about work-based learning and we've still got our own higher education funding council who does not fund the recognised national training qualification, it's bizarre. A totally bizarre position for us all to be in and somehow it's problematic over funding QCA key skills. I think it's symptomatic of the fact that this is a good scheme passed over from the Department to HEFCE, which is fair enough – the Department shouldn't run these things it should promote them. But it was passed over in a generalised manner, and it wasn't ring fenced, there wasn't specific guidance to HEFCE to take it forward. For example there was a National Steering Group set up with the Department, that doesn't exist any more. There isn't a National Steering Group for GAs with HEFCE: there should be. This is the only stab we have had at sorting out the other end, in other words output rather than input and if we let this opportunity slip by then I think we will regret it.'

Employer questionnaire findings

Employers are overwhelmingly in support of the GA scheme. The candidates are rated highly and the benefits are seen to be strong.

Although some of the employers rate the scheme as 'okay' and do not think that the graduate apprentices are any different from other trainees, others believe they have a deeper understanding of the sector and are rated as excellent.

How satisfied are you with the Graduate Apprenticeship scheme?

Satisfaction levels with the scheme are high, although more so in certain sectors than others.

'It's been good, very satisfied. I think it has really helped us to bring young people on. We find it really hard to get people to go from a learning stage into working initially. This scheme has been really good in that it has provided a pool of really keen and motivated people ... and created a bit more energy. They have helped us think about how we are going to move forward and how we are going to integrate the lower end of the skill and experience level. I hope the industry will recognise it once it gets going. Locally ... quite a lot of the main outdoor training providers are involved in the scheme, so we will certainly value it if we see it on a CV in future.'

'Basically it's quite early on. The indicators are good. I am satisfied but it's only been running for a short period and I think you will get more out of the survey in a couple of years' time. It's just one step on from the sandwich schemes we have had in the past so I expect it to be successful.'

How would you rate the performance of the graduates that have been given work placements at your business?

There were a couple of employers who felt that the graduates they had employed were average, nonetheless most were very pleased:

'Very good, I am absolutely delighted with them.... Over the years I've re-employed three of the graduates that have been with me for the year.'

'Very, very good, right across the board actually. We had a six-month course rather than nine or twelve months. So there was a massive amount of pressure on them to achieve everything that the graduate scheme had to offer in six months and also have three weeks' training and pick up a role here that we don't usually take staff on unless they have had a year doing that at another centre. So they've had a real learning curve.'

'The graduates are always excellent from the universities they go to. It's a very fulfilling year for them and they come out with it, they learn a lot and we tend to recruit from that feedback. We have three graduates at the moment, two from [a named 'new' university] and they are both doing well.'

How does their performance differ from that of other recruits that have not been through the scheme?

Opinion was mixed regarding the comparison between GAs and other apprentices:

'I would say the general quality of the person you are getting is much better, they have a far more professional approach, more enthusiastic and committed and they have actually thought about it a lot deeper than other people. I am not saying this is 100% or that the people from other sources are terrible, but certainly the one we have had from the graduate scheme has been very good.'

We have had students on the New Deal Scheme who have done more, had more experience and were looking for a vocation and had more motivation than the student on the GA scheme.

Well, basically, the best way of comparing that is to a sandwich student I always feel that someone who has been through the scheme, when we take them on when they have graduated after their degree, they are going to hit the turf running. They are going to be much more useful to us. They are straight into a proper role rather than having to develop them for probably up to six months.'

'It doesn't [differ]. It is much the same as other trainees.'

Is the scheme of benefit to your area of business?

The majority of respondents feel that the GA scheme is of benefit to their area of business, and speak highly about it:

'I think definitely so. You are getting people who are actually interested in our area – because we are quite specialist being an outdoor centre and then an outdoor centre for

people with disabilities. To get somebody who is willing to learn all the hard skills and have all the soft skills as well is quite a coup really.'

'Certainly, any environment where a person is learning more about the Internet and technologies used is beneficial to us as a company.... We try to actively encourage learning and expanding knowledge.'

'Absolutely, I hope it continues. We are a charity and it is difficult for us to teach. We like to take people on training schemes and we have had various training schemes over the years which included various government schemes, but they all seem to die a death after a couple of years. They get changed and quite seriously. This one was brilliant because of the support which comes from the university. Recommend it and hope it continues.'

What would you see as the key strengths of the scheme?

Practical experience in the workplace and getting a foot in the industry at the same time as gaining the theoretical knowledge in the HEI are seen to be the key strengths for the students. Some employers also stated that the support they got from the university and the commitment of the student was a key strength in the scheme that benefits the company.

'I think it's quite flexible in that we were given a choice of a couple of people to work with and I think the people who come in are normally quite flexible themselves and take on different types of tasks. And you can structure the timetable to suit both the company and the graduate. If things change during the year placement then you can adapt accordingly. In our case, the qualifications were suited to the type of work we were looking for, so it was good to have someone with a degree already rather than spend a lot of time training someone from scratch.'

'The main strength is for them to get the practical experience and linking what they have learned in academia with what they are going to be doing if they choose a career for example in the construction industry which I work for. They are picking up what they are going to be doing for their career basically and that's very useful and that's the main thing – them getting an understanding of what the work place is going to be like.'

Can you identify any weakness in the scheme?

The weakness in the scheme related to the amount of work involved in the NVQ for the students and on occasions for the employer:

'The NVQ. The problem – paperwork, vocabulary, time it takes, it's not seen as relevant by the industry. Not seen as a valid qualification. I personally think it's a quite good qualification but within the industry it's not seen as having any value. The problem is that all the money is tied to the NVQ. When we had the initial meeting about whether or not this whole thing would go ahead, quite a few of us expressed the thought that basically if there was an alternative way of funding this it would be great. The NVQ is the biggest fly in the ointment.'

'The lottery support and the NVQ. I'm not sure if it's the scheme or the way we've run it – the short length of time they have been here, definitely [is a weakness]. It should at least be nine if not twelve months. It's a shame there isn't more funding for them, it's a very small wage.'

If there was anything you could change to improve the scheme, what would it be?

Some employers feel that the time pressures for the students are too great and that rearranging the timetable could be beneficial. Insufficient time warning to recruit students as employees was also an issue. Advertising of the scheme should be less ambiguous in order to avoid enquiries from those who are not eligible for the scheme. Others did not wish to make immediate improvements:

'Again, with limited experience, I think maybe in future, or after future placements there may be other areas where we could highlight improvements, but at this stage it's working well from our point of view. It seems to work well for a small company like ours and as long as the students themselves are briefed beforehand and the company knows what to expect, I think it works well.'

'I think it's an excellent scheme and I hope it will carry on. I think it is something that has been lacking in the industry. There are degree courses in outdoor education but those people never see a group of people, they have very little practical experience and they may very well come out of their degree with very few National Governing Body qualifications. So they won't get a job because they have got very little practical experience to be employed in that role; they will need somebody else looking after them while they learn the skills. You need a bit of a combination of the practical and theoretical and this graduate scheme does that.'

Other key informants

'Other' key informants are colleagues with national and general interests in higher education; for example, key figures in employers' organisations, HEFCE, UVAC, DfES and cognate national bodies.

One said:

'[Named CEO] and the rest of us at [named institution] know little about Graduate Apprenticeships. I have contacted some of our [colleagues] in the hope that they have some experience of them. So far only one has come back, saying, 'We did look at it [GA] but it cut across our existing work with professional institutions and the added value was limited.'

A second, with significant national responsibilities for higher education, knew only that HEFCE funded them⁴. Another was 'scratching around' trying to recall whether employers, or members of the media had enquired about GAs. The lack of media interest was significant given that this informant has a prominent media profile – GAs 'haven't appeared on the radar screens'. The recruitment manager of a major retail chain first thought there had been some involvement with GAs and then concluded that she was not, in fact, familiar with them, although her firm did provide some undergraduate work placements.

The name of the scheme concerned one senior member of the policy community, who described it as an oxymoron. The diversity of GA schemes, while justifiable in some ways, had probably confused employers, who would have had trouble placing them in the higher education qualifications framework. This was associated with comments that GAs had not been well publicised at the beginning (unlike foundation degrees) and were not being nationally promoted now. Indeed, there was a view that they were overshadowed in several senses by foundation degrees. Foundation degrees embody a number of the features pioneered in GAs but are being

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⁴ The same person was not aware of the Enhancing Student Employability Co-ordination Team either.

heavily promoted. There is also a more concerted attempt to develop a coherent brand, as the recent DfES publication⁵ and HEFCE invitation to bid⁶ show.

An informant who had been involved in the development of GAs in a government agency said that their development was somewhat opportunistic and 'off the cuff'. Had there been time for measured consideration, had they actually received official support, GAs would have turned out rather differently. In this alternative past, it is unlikely that the amount of diversity that has emerged would have been permitted. The cost in terms of flexibility could have been offset by greater coherence, more prominent brand image and superior marketing.

Others considered the economics of the GA scheme, with one saying that the end of development funding was likely to be GAs' 'death knell'. While informants considered that *start-up* funding could be justified, with one exception they considered that there could be no question of such high levels⁷ of support continuing; to do so would be favouring a small proportion of English students over others. Nor was it expected that many employers would be willing to support the costs associated with GAs, especially as it was often hard to distinguish between GAs and existing sandwich programmes, on the one hand, and the new foundation degrees on the other.

We heard a concern about how the employability of *all* undergraduates could be consolidated and, more immediately, how work-based learning could be effectively made available to undergraduates and postgraduates at large. To them the GA was an interesting experiment and some schemes had secured niches. The policy priority had to be extending work-based learning, increasing the amount of work-related learning and enhancing the employability of all students. The GA scheme was seen as a source of evidence about ways of bringing these priorities to fruition.

While some of these informants were happy to accept that GAs had been good for those taking them, and that both HEIs and employers had often learnt from them, GAs were not seen as the way ahead, but as a niche product with a lack of brand recognition, over-dependent on a favourable funding regime.

Conclusions based on evidence provided by our informants

The interviews show a generally positive response to the theory of GAs. They are seen as offering students or workers the opportunity to attain higher level qualifications, sector-specific skills and work experience. They differ from sandwich placements in that they offer accreditation through NVQs for the work-related learning.

The programmes are usually employer- and learner-needs led and are most successful where this occurs. Although the schemes are shaped by the skill needs of the sector there was some uncertainty as to whether the scheme did meet the regional or local agenda.

Although many of the schemes use ICT within the course, only a few use electronic delivery of course material as the core teaching method. In one case, using web-based learning as the main method of teaching proved to alienate the candidates as the drop-out rate was extremely high.

⁵ Foundation degrees: meeting the need for higher level skills. DfES: London.

⁶ Foundation degrees: invitation to bid for additional places and development funds 2004-05. Bristol: HEFCE.

⁷ Development funds and other exceptional support may appear to be modest, but when divided amongst the number of students taking GAs they are much more significant. It would be prohibitively expensive to support all undergraduates to that level.

It is generally thought that the GA is a very demanding scheme. Students are expected to complete assessments in higher education, NVQs and a work placement.

One of our key informants was as supportive of GAs as most of those directly engaged with them (employers, NTO colleagues and higher education staff). Here the view was that:

'The Graduate Apprenticeship is currently the classic example of a successful initiative that is suffering from a lack of support and a clear steer on who is responsible for its future development.'

This informant suggested re-launching GAs as 'the key initiative to ensure higher education at honours and postgraduate level met the skills requirements of employers and delivered work-ready employees'.

This view is consistent with 21^{st} Century Skills, the recent White Paper. However, it is not the only reading, and all other key informants had reservations about GAs: none of them saw GAs as the way forward.

How is this mismatch between those involved in GAs and the other key informants to be explained? In part it is a predictable difference between those who have invested heavily in schemes that have produced heartening results and those who take a more systemic view. In part it is a difference between those who spend and those who know that funds have to be found, and who see how hard it would be find the money to up-scale GA provision. And in part it is a difference between those who appreciate the value of, usually, working with small numbers of students – see figure 1 – and those who must be concerned about mass provision.

There is also a complementary explanation. Although those directly engaged with GAs valued what had been achieved, their endorsement was conditional. They started from the position that good things had been done and then talked about the past and continuing costs. The other informants started with the costs and other difficulties. Both groups clearly believe that few GA schemes can survive without some reform and fresh succour. Those directly engaged tend to believe it to be worth doing. The others cannot see that it is feasible in terms of a fair and comprehensive response to the problem of enhancing the employability of *all* in higher education. Foundation degrees are the vehicle through which some needs will be met. There is a wide variety of other initiatives to respond to the needs of other students in higher education, many of which are usefully summarised by Harvey (2003). To our 'other' informants it is not evident that GAs have established themselves as a superior, large-scale response to the problems.

6. Evidence from other workplace learning schemes

GAs can be seen as contributors to foundation degrees' 'gene pool', which is an indicator of success. However, it remains to be seen whether foundation degrees will deliver all that is hoped. At the time of writing, QAA reviews in respect of 26 foundation degree programmes were to hand. The significance of FD programmes is that they explicitly seek a blending of academic and work-based learning (though in some circumstances 'work-based' has had to be treated as 'work-related'). The reviews have relatively little to say about the impact of work-based learning on employees' work performance, since their concerns have been the alignment of the programme with formal expectations for foundation degrees, the standards of students' performances, and quality assurance. Further work will be needed to establish the strength of the association between the components.

In all but one of the reviews available to date, the reviewers have expressed themselves as satisfied that the 'emergent' standards of student performance are up to expectations. In other words, the students' performances are generally meeting the academic and employment-related criteria that have been established for the programmes. Implicitly, then, foundation degree programmes can be expected to have a positive impact on the world of employment. A few reports state that students' work does explicitly link theory and practice, or that students' work is appropriately set in a business or organisational context. Other reports attest to employers' recognition of the contribution that foundation degree students are already bringing, or can be expected to bring, to the employment situation.

A survey of student opinion conducted as part of the Formative Evaluation of Foundation Degrees supports the general thrust of the QAA reviews, with the occasional respondent noting that their engagement in their foundation degree programme had led to either the offer of a job, or to promotion within the organisation in which they were working. This is consistent with the first part of Appendix 2, which contains a summary of some of our earlier work on the generally positive relationship between work-based learning and employability. However, it should be remembered that learning from work experiences will not necessarily just happen. Practitioners involved in work-based learning developments reiterate the need for students to be helped to anticipate what they might gain from their work experiences, and to be able to reflect on those experiences in systematic ways that can be evidenced and articulated to other people. This is elaborated in the second part of Appendix 2 which draws on essentially the same research set to identify the 'quality signals' likely to identify high quality work-based learning provision.

The sources available to the formative evaluators of the foundation degree initiative, which are richer than those available for this review of GAs, are still not sufficient for confident judgements to be made about the degree to which provision shows these research-based 'signals'. The documentary evidence, which is by no means ideal⁸, points to considerable diversity in GA provision⁹. Given such data, it is not possible to be confident that GAs have always represented good practice. There was no national design requirement that they should.

Other evidence emerging from the formative evaluation of foundation degrees bears on this question of diversity from another angle. It suggests that there are two types of link between employers and higher education that are particularly successful. The first is where there is a strong relationship in a niche market, with the employer and HEI partner both strongly engaged in the delivery of a foundation degree programme to full-time students – the most widely quoted example is Aircraft Engineering at Kingston in conjunction with KLMUK. The second is where the HEI engages with a sectoral need to upskill existing workers and, although the need may have been identified for the sector, the actual engagement is with specific employers. Examples include teaching assistants in schools and staff below the level of qualified nurse in health and social care areas. These staff engage explicitly in mentored work-based learning. It is a moot

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⁸ See section 4, above.

⁹ See Appendix 1.

point whether they are part-time or full-time students – some have certainly been given the latter label.

The formative evaluation of foundation degrees raises some questions about the diversity of GA provision. It also raises questions about the NVQ component of some GAs. In a small number of foundation degrees, students have had the opportunity to gain an NVQ level 3 award. There are questions about the extent to which the NVQ and the foundation degree cohere. For some students it seems that the NVQ may be making more demands than can be fairly accommodated within the time frame for the degree.

GAs may have influenced other work-based learning developments. Where questions are raised about these 'offspring', it is reasonable to ask them of GAs as well.

Research into good practice in work-based learning provision has identified a number of 'signals'. It is not clear that all GA schemes exhibit them, nor that there is any national requirement that they should.

7. Conclusions

Table 2 gives a summary of our answers to the review questions that guided us.

Table 2. A summary of answers to the review questions

Review question	Response
Are the NVQs and key skills ¹⁰ elements separate awards or are they embedded in the HE award?	NVQs are separate. Practice with key skills varies. Some GAs derive from programmes that had made integrated arrangements for their development and delivery. In other cases, key skills are delivered separately.
Is the work-based element delivered during the degree, a sandwich element, a placement, or after graduation whilst in employment?	We have referred to the variety of practices covered by the GA brand. Work-based learning is provided in all of these ways.
Is the degree element specific to an employment sector or is it general?	Undergraduate GAs are likely to be specifically related to an employment sector. Postgraduate practice is rather more diverse.
Is the students' main activity employment or full-time study?	Again, practices vary. There are undergraduate programmes where a commitment to workplace learning is an element of the programme of study; there are sandwich placements; and there are postgraduate GAs in which HE study is secondary to workplace activities.
Are the GAs local schemes with NTO/SSC approval or national schemes promoted by the sector body?	The seven pilot GA frameworks, worked out with NTOs and their successors, provide national guidance, although individual GA schemes are devised to suit local needs and vary accordingly.
Are students charged any fees for GAs?	There are two sets of fees to be paid: the HEI's fees and, where the NVQ qualification is offered, NVQ fees. Practice varies. HEIs have offset fee remission income against their postgraduate fees; offset it against NVQ fees for undergraduates and postgraduates; and three employers have paid the NVQ fees.
What aspects of employability are covered?	This depends upon local conditions, employers and NTOs/SSCs. However, all schemes include either key skills development (although definitions of 'key skills' vary) or lead to an NVQ, or both.
	It is not clear how well this matches with research-based understandings of employability.

¹⁰ This is now a rather dated term. The 21st Century Skills White Paper takes a much more extensive view; The Future of Higher Education refers to skills and achievements, as do the UK LTSN Generic Centre and HEFCE's Enhancing Student Employability Co-ordination Team.

Do the HEIs through linings	They are cortainly appealated with local returnity although
Do the HEIs, through liaison, management, and co-ordination help to create local networks of employers who are ready to work with higher education?	They are certainly associated with local networks, although successful GA schemes have often used existing ones. However, Aston is a good example of the creation of a network through the development of the GA. That said, by no means all GA schemes have succeeded, which implies that any networks they may have initiated would not have lasted.
Does the GA have mentors within the workplace and tutors from the HEI who visit the workplace?	Yes. Levels of support from HEI tutors vary. Some comments indicated some variability in institutions' quality assurance arrangements and expectations.
Is there any support from and involvement of professional bodies with the development of the GA?	There are some cases where professional bodies have been directly involved, over and above their role through NTOs/SSCs. This is not common though.
Is there a perceived market need for GAs?	There are enthusiastic proponents and we have heard endorsements from employers, HEIs and students. They should be set against the recruitment data summarised in figure 1.
Are employers reluctant to participate in the scheme due to financial costs of loss of employee time or funding the employee?	Some participating employers value GAs enough to make a financial contribution and will continue to do so. We note that these employers are a minority; that HEIs have sometimes reported difficulties 'selling' GA schemes to employers; and that SMEs are the hardest to involve.
What do employers see as the main function of the GA scheme?	It provides students with practical experience and gives them 'a foot in the door' with employers.
Does the GA scheme meet the White Paper 21 st Century Skills objectives for publicly funded training? Is it:	
employer and learner needs led;	Yes
shaped by the skill priorities of the sector, region and locality;	Sector, yes; locality, sometimes; region, seldom.
using ICT to deliver and assess learning;	No evidence of good, systematic use of potential.
giving deliverers the maximum discretion to decide how best to respond to needs?	Yes, but in partnership with employers and in negotiation with NTO/SSC.

Do GAs add value to HE provision in terms of employability?	The data we have indicate that GAs are good for students'
Do GAs enable students to be employed more readily within their chosen sector at a suitable level?	employment prospects. However, the data are not of sufficient quality to allow us to say whether prospects are enhanced or whether any enhancement represents value for money.
Do GAs add value to HE provision in terms of progression pathways?	Provision is diverse and the data are patchy: we have seen little evidence of progression pathways, although there are some regional exceptions — in Cumbria, for example.
Do students who enrol complete their GAs? If not, why not?	The data are not of sufficient quality to provide an answer. Our impression is that drop-outs are attributable to work-load and personal problems, on undergraduate and postgraduate schemes alike.
Are GAs financially sustainable without further government subsidy to students or for development?	With a few exceptions, no. However, HEIs and employers have learned from GAs and are likely to be able to sustain the principles in their foundation degree provision and, sometimes, in mainstream programmes too.

Sustainability

To elaborate on the last question about sustainability: GAs will only be sustainable in the long term if they are seen as viable and valuable qualifications by both employers and students. This implies greater standardisation of the qualification and greater understanding of what achievements it signifies. Then the benefits of having a GA student in your workplace or of employing someone with a GA qualification need to be advertised to employers and students by central government. From this point of view it is important to have a 'brand name' which could enable the GA to be seen as worthwhile by the student and the employer.

Greater involvement by the SSCs could improve employer/HEI liaison at the sectoral level and foster connections that might not be perceived by local employers or individual HEIs. They could be instrumental in advertising the 'brand name' of the GAs to employers and employer organisations, and give some standardisation to the provision, as they have an overview of the employer situation. However, SSCs observe that they only have funding to be active 'at the margins'.

These worries about money are general. Almost all our informants and some of the documentary evidence said that the sustainability of GAs depended on some form of premium funding. We heard concerns about the sustainability of GAs if there is no further HEFCE funding for student fees or NVQ costs; the development and refinement of current models; compensation to employers for the loss of employee time; and for trying to persuade employers, especially SMEs, that the GA is good for the long-term profitability of the firm. We also heard from those who are responsible for making system-wide improvements to higher education's contribution to employability. GA schemes have enjoyed levels of funding enhancement per student that are not sustainable. Viewing the problem from the 'centre', the preference is to look at more efficient ways of enhancing the employability of *all* students, perhaps by up-scaling some of the effective schemes such as those reviewed by Harvey (2003).

It is hard, then, to see how best GA practice might be continued now that the three years of development funding are done. Informants suggest that few schemes will survive. Others might become the seed corn from which good foundation degrees grow in response to HEFCE's invitation to bid for additional student numbers and development funding.

In other cases, knowledge will be lost. It might be said that knowledge of how to run schemes attracting fewer than 10 students has little attraction in modern mass higher education. Not only would that be uncharitable, it would also miss the point that low-recruiting schemes may still have developed novel and powerful practices. Unfortunately, there is no provision to try to harvest knowledge about such practices. If there were, UVAC, as strong advocates of GAs, would be well-placed to work with the Higher Education Academy's agents to contribute to the FINDER web portal¹¹.

We end with a basic question which seems not to have been asked. Who are GAs *for*? We observed that they were seen as a response to employer concerns about whether new graduates are properly prepared for the workplace. If this is to drive policy, it might be helpful to bring to mind evidence that transitions tend to be difficult¹². It is doubtful that all difficulties can be eradicated but some GA schemes have, according to our sources, smoothed HE-workplace transitions¹³. As such, GAs are good for the employers who have participated: they get graduates better prepared for the rigours of work. We have raised questions, though, about the cost per student place and the level of take-up to date.

If GAs are primarily for students, then it is worth reflecting on two other points:

- ► The critical issue is how the strengths of the GA scheme, and others that have contributed considerably to undergraduate employability, might affordably be 'massified'?
- A subsidiary issue is how employability is to be enhanced for students whose career thinking is inchoate, or who may be taking non-vocational programmes, or whose fate in the labour market turns out to be unexpected.

Quite a lot is now known about the general enhancement of employability. There is a lot of knowledge about specific interventions that seem to make a difference¹⁴ and there is a developed view that *programme-wide* arrangements can have a considerable impact. If GAs were a pioneer initiative to enhance student employability, then they have largely been appreciated by those directly concerned. They are not sufficient, though, to meet the more ambitious target of enhancing the employability of all students.

We can use scientific concepts and research data to describe affordable solutions to the problem of making enhanced employability an entitlement for all students. GAs, along with a number of other schemes, have contributed to that thinking.

¹¹ This is the provisional name for a joint JISC/LTSN portal service that will allow this sort of knowledge to be easily identified and accessed in many ways. It will do much more besides.

¹² This is recognised by DfES actions to improve primary-secondary school transitions and in attempts to smooth transitions between school and higher education. The psychological literature is replete with accounts of transition effects. They include analyses of the difficulties in moving from one workplace to another – they do not disappear on getting the first graduate job.

¹³ Some others, of course, took people already in full-time work and used the HE element to 'upskill' them.

¹⁴ The use of 'seems' indicates that evaluation practices in higher education are generally rudimentary. The fault lies with short-term funding and an emphasis on quick deliverables at the expense of longer-term impact.

References

Association of Graduate Recruiters, (2002), *The AGR Guide to Work Experience – an employers' guide*. Warwick: AGR.

Aston, L. and Bekhradnia, B., (2003), *Demand for Graduates: A review of the economic evidence*. London: Higher Education Policy Institute.

Bennett, N., Dunne, E. and Carré, C. (2000) *Skills Development in Higher Education and Employment*. Buckingham: Society for Research into Higher Education and Open University Press.

Blackwell, A. and Harvey, L., (1999), *Destinations and Reflections: Careers of art, craft and design graduates*. Birmingham, Centre for Research into Quality. http://www.uce.ac.uk/crq/publications/dr/index.html

Blackwell, A., Bowes, L. Harvey, L. Hesketh, A. and Knight P. T. (2001), Transforming Work Experience in Higher Education, *British Educational Research Journal*, 26(3), 269-286.

Bowes, L. and Harvey, L., (2000), *The Impact of Sandwich Education on the Activities of Graduates Six Months Post-Graduation*. London, National Centre for Work Experience and the Centre for Research into Quality.

http://www.uwic.ac.uk/uwicnet/studserv/workplacement/research on benefits of work experience.htm#Bowes

Centre for Developing and Evaluating Lifelong Learning (n.d.) *Graduate Apprenticeship Pilot Projects, Evaluation Report, Phase 1. Summary of Main Outcomes.* Nottingham: CDELL.

Centre for Developing and Evaluating Lifelong Learning (2001) *Graduate Apprenticeship Development, Second Stage Projects.* Nottingham: CDELL.

Council for Industry and Higher Education, (2003), The Value of Graduates. London: CIHE.

Harvey, L. and Blackwell, A., (1999), 'Gender bias in incomes of art and design graduates', *Industry and Higher Education*, 13(5), pp. 323–29.

Harvey, L., (2003), *Transitions to Work*. York: the Learning and Teaching Support Network. Online at www.ltsn.ac.uk/genericcentre/ > Projects > Employability > Perspectives (accessed 12 May 2003).

Harvey, L., Moon, S., Geall, V. and Bower, R., (1997), *Graduates' Work: organizational change and students' attributes.* Birmingham: Centre for Research into Quality, University of Central England.

Knight, P., (2003), *The Contribution of Learning, Teaching, Assessment and other Curriculum Projects to Student Employability.* York: the Learning and Teaching Support Network.

Little, B., (2000), Undergraduates' work based learning and skills development, *Tertiary Education and Management*, 6:2, 119-135.

Little, B. et al., (2003) Vocational Higher Education: does it meet employers' needs? London: the Learning and Skills Development Agency.

Mason, G., Williams, G., Cranmer, S. and Guile, D., (2003), *How Much Does Higher Education Enhance the Employability of Graduates?* Bristol: The Higher Education Funding Council for England.

Noble, M. and Paulucy, B., (2002), Think through the implications of work-based learning, Exchange, 2. 26-29.
Purcell, K. and Elias, P., (2002), Seven years on, Graduate Recruiter, Autumn, 22-23.

Appendix 1. Information extracted from the web pages of HEIs participating in the Graduate Apprenticeship Scheme

Course name	Institution offering	NVQ	Key skills	Employability elements within the course structure ¹	Work- based element ²	Sector specific or general ³	Work Status⁴	Partnership type ⁵	Comments
Engineering	Aston	No	Level 3 and Level 4	Work-based, employer selects National Occupational Standards (NOS) Level2	Workplace or placement	Specific or General (dependant upon what the employer selects of the NOS)	All	Local industry; Engineering Employers Federation	

¹ 'Employability' column seeks to show how employability is assessed both during and upon completion of the course.

² 'Work-based element' column will contain the words 'Degree', 'Sandwich', 'Placement', 'After Grad' (after graduation), 'Workplace', 'In house' (within the institution) or 'Cert placement' (a placement organised as part of the Postgraduate Apprenticeship Certificate). This indicates where and when the element is assessed.

³ 'Sector specific or general' means that the qualification is related to the specific sector of work or is designed to meet a general need (e.g. management). Some elements of the Certificates may well deliver transferable skills even when their aim and viewpoint is sector specific.

⁴ The 'Work status' column contains the following words to denote the combinations of work and study expected by the institution from a student on the course: 'FT Student' (Full-time Student), 'PT student' (Part-time Student), 'FT work' (in full-time work), 'PT work' (in part-time work), or Work + Study (in full-time work but also studying), 'Day release' (a day a week has been given by the student's employer for study), or Part release (part of a day has been given by the employer to the student for study).

⁵ The 'Partnership type' column contains the words 'NTO' (National Training Organisation), 'SSC' (Sector Skills Council), Local (a local scheme approved by a sector body), National (a national framework, approved of and owned by the sector skills body or another nationally recognised organisation e.g. Arts Boards), HEI (higher education institution). These are shown with plus signs to indicate the combination of organisational modes and participants that make up the partnership for this course.

Course name	Institution offering	NVQ	Key skills	Employability elements within the course structure	Work- based element	Sector specific or general	Work status	Partnership type	Comments
Professional development in Arts and Cultural Heritage	Brighton			Skills audit PDP Presentation Time management Motivation Business Taxation Legal requirements	Workplace or placement	Specific	Work + study	HEI + (Cultural Heritage NTO, East Regional Arts Board)	Fee £850 Assessment by portfolio Use of workshops and 'action learning sets'
Information Systems	Chester			Modules containing: Human- computer interaction The business of e-business	Workplace	Specific	Work + study	HEI + Employers	Modular allowing differing time frames for completion. Full-time study possible but discouraged
Management and Enterprise	Coventry	No	Yes	Work-based learning via reflection on practice	Workplace	General	Work + study	HEI + Employers	Use of residential schools, day workshops, action learning sets and ICT to reduce use of a lot of work time.
Marine Science	Hull	No	No	Aim to 'equip you	In house	Specific	FT	HEI + UNEP	Fee of £4000

Course name	Institution offering	NVQ	Key skills	Employability elements within the course structure	Work- based element	Sector specific or general	Work status	Partnership type	Comments
and Management				(students) for working life'			Student	+ Operation Wallacea + The Deep (the latter 4 are commercial and charitable concerns)	8 week taught postgraduate course
Tourism and Heritage Management	King Alfred's	No	No	During 6 month placement	Placement	Specific	FT Student	,	The GA appears to be subsumed within the placement strategy
Sport and Recreation	Luton	No	Yes	Progression pathway shown at start of degree	Workplace	Specific and General	Work + Study	HEI + NTO + SSC + National + Local	The GAs spread over faculties and courses. They are organised from a central viewpoint rather than on a course by course basis

Course name	Institution offering	NVQ	Key skills	Employability elements within the course structure	Work- based element	Sector specific or general	Work status	Partnership type	Comments
Science, Technology and Mathematics	University of Northumbria at Newcastle	Yes	Yes	Reflective practice, technology management, network technologies and e-business applications are themes within the course	Workplace or Placement	General	Work + Study or FT Student	HEI + NTO	The GA is spread over several faculties and courses. The university has organised it from a central viewpoint rather than on a course by course basis
Civil Engineering (Included as, although subsumed, the GA elements are clear)	Nottingham Trent				Workplace	Specific	FT Student	HEI + CIBT	The GA has been subsumed with in the MSc course but all the elements are there.

Course name	Institution Offering	NVQ	Key Skills	Employability elements within the course structure.	Work- Based Element	Sector specific or general	Work status	Partnership type	Comments
Hospitality	Oxford Brookes	No	No, however there is an instance on a 'good standard of English' before acceptance on the course	Assessment by Coursework but use of Distance Learning and e- mail is relied upon	Workplace	Specific	Work + Study	HEI + Employer	It is made clear that this could form the first year of a Postgraduate Diploma and/or Masters
Advanced Healthcare Practice (Social Care)	Plymouth	No	Embedded in the course	'enhance your knowledge and skills to improve clinical competence practice and service provision and enable you to develop as an autonomous practitioner within a variety of settings	FT/PT	Specific to healthcare sector	FT Student or PT Student		Assessment by projects and self- directed learning and dissertation

Course name	Institution offering	NVQ	Key skills	Employability elements within the course structure.	Work- based element	Sector specific or general	Work status	Partnership type	Comments
E-skills	Portsmouth University	readin Acces Econo Practi	ng the course of sible Environments; Fisheric ce; Learning a	st of the Postgraduated of the Postgraduated of the Society of the Society of the Postgradual of the Society of	ell be subsum ial Sciences; velopment; H	ed within th Clinical Gov ealth and Ro	iese: rernance; Di esearch Der	iabetes Manager velopment; Evide	ment; Fisheries ence Based
Communication Technology	Staffordshire University	No	Embedded	'fosters the development of transferable skills' work based learning	Workplace	Sector	Day Release	NTO + National	
Engineering	Sunderland	Sever	al Postgradua	te Certificates are	mentioned but	Graduate /	Apprentices	hips as such can	not be found
Media (E-skills)	Thames Valley University	No	Embedded	Work-based Learning; transferable key skills	Workplace or placement	Sector	Work + study or FT student	NTO + National	
Hospitality Management	Thames Valley University	No	Embedded	Work-based Learning; transferable key skills	Workplace or placement	Sector	Work + study or FT student	NTO + National + Local and National Firms	University and Workplace Mentor
Computing (E-Skills)	Thames Valley University	No	Embedded	Most skills specific to sector thus transferable within sector but not outside it.	Not clear	Sector	FT student	NTO + National	Tutors and distance e-learning

Course name	Institution offering	NVQ	Key skills	Employability elements within the course structure	Work- based element	Sector specific or general	Work status	Partnership type	Comments
Hospitality	Wolverhampton			Skills seem mostly specific to the sector, however some maybe transferable	Workplace or Placement	Sector	Work+ Study or FT Student		Modular

Appendix 2. Some notes on higher education and workbased learning

The effects of work-based learning

We draw a distinction between work-related and work-based (or workplace) learning. *Workbased* learning is taken as a subset of *work-related* learning: 'work-related' distinguishes an activity from 'pure' academic work and 'work-based' signifies that learning should be happening in a workplace. We notice that higher education institutions have made a range of work-based learning arrangements, just as there are many ways in which work-related learning happens within mainstream programmes, even in Arts, Humanities and Social Science subjects. These distinctions are not fully developed in the following brief notes.

Harvey et al. (1997) conducted more than 250 in-depth interviews in over 90 organisations with strategic and line managers and recent graduate and non-graduate employees. The respondents were strongly of the opinion that work experience made an invaluable contribution to the personal and professional development of undergraduates. Employers commented that those graduates who had undertaken a period of work experience during their degree possessed many of the skills essential for success at work: they were more mature, possessed attributes such as teamworking, communication and interpersonal skills, as well as an awareness of workplace culture.

A study based on the analysis of first-destination returns also showed a relationship between placements and subsequent employment (Bowes and Harvey, 1999). The study used data provided by the Higher Education Statistics Agency (HESA), for all degree qualifiers from all higher education institutions in the United Kingdom in 1995–96. Excluding those subjects taught on a full-time basis only, those such as teaching and nursing with a statutory work-experience element, and areas that had fewer than 20 graduates who had studied on a sandwich course, this left an operational sample of 71 subject areas with 146,648 graduates.

Graduate activity, six months after graduation, was classified by HESA into 4 major categories: unemployed; full-time employment: part-time employment and further study. Students in the 'unknown' categories (2.1%) were also excluded from the analysis.

The reliability of the database is dependent on accurate returns from institutions:

- ► The activity of graduates six months after graduation may not reflect the longer-term pattern of graduates from a subject area;
- Employment rates should be treated with caution because it was not possible to distinguish whether graduates were employed in their career of choice or in relatively unskilled positions, earning lower than average salaries;
- Any perceived advantage afforded by a particular subject or course type may not continue into the longer-term.

¹ The results of the study are based on aggregated figures, and thus are only indicative of graduate activity. HESA first-destination returns produced data that needed to be handled with due care. They were collected just six months after graduation, a period when many graduates might not be actively seeking a career. There were no data on the nature of the occupations or courses of study of those graduates who were in full-time, paid employment or further education. Although the figures demonstrated that many graduates were employed, they might not have been employed in an occupation of choice or one for which they had been trained. Similarly, those graduates who reported that they were unemployed at the 'census point' might have undertaken work since graduation or might have been purposefully unemployed (for example, to travel), or might have been pursuing alternative avenues such as self-employment. The statistical analysis, based on HESA data, is subject to the following caveats:

The percentages of graduates in part-time paid employment and unpaid employment were small and excluded from the remainder of the analysis. Overall, 57.6% of graduates were in full-time paid employment, 8.5% were unemployed and 26.3% had entered into further study six months after graduation.

Greater proportions of sandwich graduates were in full-time paid employment than those who had undertaken full-time courses. Almost 70% of sandwich graduates were employed, compared with only 55.3% of full-time graduates. Conversely, proportionately more full-time graduates had entered further study: 27.9% compared with 18.0% of sandwich graduates. Marginally more full-time (8.7%) than sandwich graduates (7.5%) reported that they were unemployed.

Sandwich students are advantaged in the labour market, at least in the early part of their careers, although the extent of this advantage is dependent on subject area: science and language sandwich graduates for instance do not enjoy a significant advantage; but most built environment, business, engineering and social science sandwich graduates do.

Breakdowns by type of sandwich course reveal that for all broad subject areas except engineering, higher proportions of thick-sandwich graduates achieve greater labour market success than thin-sandwich graduates.

Overall, sandwich graduates are marginally less likely than their full-time counterparts to be unemployed. However, in science, language and engineering, graduates are no more likely to be unemployed if they studied full-time than if they studied on a sandwich degree. Even in broad subject areas where, overall, full-time graduates are more likely to be unemployed than sandwich students, breakdowns at the subject level reveal that there are exceptions to this trend. Greater proportions of thin-sandwich building graduates, thick-sandwich marketing and financial management graduates, and thin-sandwich sociology and anthropology graduates are unemployed, than the full-time graduates who studied the same subjects.

Similarly, full-time graduates are more likely to enter further study on graduation than their sandwich peers. However, once again closer analysis revealed some notable exceptions. As with the previous activity categories, there is little diversity between the participation rate of full-time and sandwich science and language graduates in further education. There is a great deal of diversity in the participation rate of other disciplines, particularly between graduates from sandwich architecture courses, thick-sandwich environmental studies, thin-sandwich marketing and catering, thick-sandwich accountancy, chemical engineering, economics and combined studies – who are all more likely than full-time graduates from the same course to continue their education.

The analysis has not included art and design because the HESA returns provided insufficient numbers of graduates on sandwich courses to make any analysis viable. However, a recent study of the destinations of almost 2000 art and design graduates provides information on the impact of work experience (Blackwell and Harvey, 1999). The study concludes that only 29% of the sample had undertaken work placement(s) as part of their course, and this ranged from 13% of fine art graduates to 58% of fashion and textiles graduates. Of these, 59% had a total placement time of less than six weeks and only 7% had work experience of 35 weeks or more. Many respondents to the survey thought that their course provided a relatively poor level of contact with the world of work. There were insufficient work-linked projects, employment-related visits or work-experience opportunities, such as embedded placements.

A substantial majority of those who had undertaken placements of any length (70%) found them both useful and important. Only 15% thought them to have been of little use or as unimportant, and most of these were short placements. The longer the placement the more useful and important respondents considered it to be.

Work experience has some impact on the activity of art and design students since graduating. Graduates who have had some form of work experience are significantly more likely to have been, or to be currently, in full-time permanent employment than those who have had no work experience. Graduates who had work experience related to their current work are significantly

more likely to be undertaking commissioned or freelance work than other graduates. Significantly more graduates with relevant work experience have operated their own business since graduating than other graduates. Those with relevant work experience are less likely to have been unemployed and seeking work at any point since graduating than other graduates. Graduates who have had work experience that is related to their current job have higher incomes than other graduates. Graduates who had work experience regard skill development as more important for their career than those who had no work experience.

The authors concluded that 'without doubt increasing the amount of work experience linked to the programme of study would enormously benefit art and design graduates' (Harvey and Blackwell, 1999, p. 5).

The study of HESA statistics would seem to endorse this view across a wider set of disciplines. Bearing in mind the caveats relating to the first-destination returns, it appears that work experience, in the form of undergraduate sandwich placements, provides new graduates with an edge in the labour market. This is consistent with data from more recent studies, notably the recent study of 34 departments in five subjects in eight universities (Manson *et al.*, 2003²). In addition, sandwich graduates are less likely to remain unemployed or undertake further study during the first six months after graduation.

The reasons for, and the true extent of, the advantage afforded to sandwich graduates by their placement experience cannot be deduced from the HESA statistics. However, other research has pointed to the perceived advantages of a lengthy period of work experience, and in some cases correlated work experience with employment rates. The analysis of HESA statistics confirms that in many areas, the inclusion of a work experience element in the form of a 'thick' placement or several 'thin' placements do advantage graduates when seeking work. However, it is impossible to speculate, from the statistical data available, why, for example, thin-sandwich engineering graduates are more successful than their thick-sandwich peers in the early part of their career.

Indicators of quality work-based learning

Two of the ESECT team (Knight and Yorke) have considered the implications of findings such as these, concentrating on the design of good quality work experiences.

Blackwell and colleagues (2001) described four substantial studies of work-based learning, and observed that the experience was not invariably a high quality one, nor did students necessarily consider that they had learnt a lot from it. They did suggest that graduates, looking back, were more appreciative and wondered whether this might be because they, the graduates, had had the time to reflect — they saw reflection as an essential concomitant of work-based learning. They also observed that there are difficulties in assessing work-based learning, and argued that good quality work-based learning has six characteristics:

- ► Stakeholders students, employers, academic staff and employees all appreciate the underlying intentions.
- ► The quality of work experience is greatly enhanced by prior induction and briefing for all concerned; facilitation of ongoing reflection; debriefing, reflection and identification of outcomes.
- Work experience is accredited so that it is taken seriously.

² They found that the advantage that work-based learning confers in getting a job 'washes out' after three years or so. This is an interesting finding. The inference that work placements are not a very good investment is by no means the only, nor, in our opinion, the best that can be drawn. Here is not the best place to debate the matter.

- ► Low-stakes or formative assessment is used to support the process of learning from work experience.
- Students build up a work-experience portfolio.
- ▶ Students can say what they have learned, provide illustrations and, if need be, commentary.

Harvey (2003: 38) illustrates several of these points in the following example:

The University of Bournemouth provides an example of the monitoring and reflection process. Students are required to keep a logbook or diary of their placement (weekly entries) detailing activities, targets, skills used, difficulties encountered and how they overcame them, as well as what they learned. This has to be signed by their supervisor on a regular basis. Towards the end of the placement students also complete a specific assignment of 2,500 words that brings together their findings. Placement development advisors visit students *in situ* on two occasions during the 40-week placement. The advisor speaks both to the student and to the workplace supervisor, and produces a report identifying progress made from visit to visit, including learning and skills development. Finally the company is asked to complete a one-page appraisal form (matrix of skills). The pieces of work, the logbook, the personal development adviser reports provide an overall picture of the placement.

Noble and Paulucy (2002) offer complementary advice. They also make an important economic distinction between types of work-based learning. They distinguish between that which 'involves the translation of discipline-based university programmes into forms which can be delivered through the workplace', as in the case of an MBA in management practice, and that 'where the focus and context of the curriculum is primarily designed by the learner' (p. 26). This distinction, between 'batch processing' and customised provision is important for several reasons, two of which are:

- Customised provision 'requires staff to develop what may be a new set of skills, behaviours and competencies in relation to learner support. Facilitation, networking, brokerage and negotiation are all essential parts of the skill repertoire' (p. 27).
- Customised provision is expensive and probably cannot be scaled-up so that this form of work-based learning becomes part of all students' curricula.

The conclusion that dedicated higher education staff are needed to facilitate and support the development of work-based learning is predictable, as is the corollary that this need is greatest with customised, individualised placements. There are costs too for employers, as is evident from the Association of Graduate Recruiters' briefing paper (2002) for employers on providing good quality work experience. Although the AGR is clear about the direct and indirect benefits to employers, what stands out is that work experience cannot be satisfactory unless it is purposeful and well organised.

There are question, then, about the feasibility of widespread work-based learning in a mass higher education curriculum, and about its affordability, especially in its bespoke forms. There is, though, general agreement that preparation is needed if a placement is truly to be a learning experience:

Specific forms of student preparation advocated included practice in identification of learning outcomes and their articulation; practice in articulating cognitive language and concepts to other people (to gain familiarity); and practice in relating cognitive concepts to everyday and work settings to provide relevant anchoring ideas (Little 2000: 126)

Despite this agreement, Little found that there was a lot of emphasis on helping students to get placements and

... only a very few of my case studies made reference to discussions about processes of learning, the learning cycle, processes of reflection on actions and experiences, and the language used for articulating the development of higher order cognitive skills and personal transferable skills. (*op cit.*, 126)

One way of interpreting these findings is that programmes should not be taken at face value because employability is most securely promoted when elements cohere. This coherence cannot reliably be inferred from descriptions of the programme arrangements alone, although some descriptions will be conducive to greater confidence than others