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Towards a strategy for workplace learning

Report to HEFCE by CHERI and KPMG



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Executive summary

Contexts

1. Workplace learning takes many forms, occurs in many contexts and can have widely differing relationships to higher education programmes and awards. This report explores this variety and discusses the implications for the policies and practices of national bodies, higher education institutions and employers in responding to the future needs of learners and workers.
2. Substantial expansion of higher education in the UK and elsewhere has been justified largely in terms of improving economic competitiveness within the context of a growing global knowledge economy. The growth of the knowledge economy or knowledge society has also been used to justify increased investment in research, to provide a human capital justification for widening participation in higher education, and to drive a new 'vocational' emphasis in teaching and the curriculum, as well as to raise wider issues of student employability.
3. The economic expectations placed on higher education reflect both the knowledge and skills needs of workers in modern knowledge-based economies and the demands for relevance in research and knowledge creation. Thus, higher education institutions need to address the nature of their two basic functions – teaching and research – and in so doing, reconsider the boundaries between higher education and employment. In terms of teaching and learning, boundaries are becoming blurred between knowledge acquired within educational settings and knowledge acquired in other social contexts. This is equally true for learners at later stages in life (where study inevitably builds on substantial work and life experiences) as it is for younger learners, many of whom combine higher education study with substantial amounts of time spent in employment.
4. These trends have not necessarily been welcomed across higher education and there are large differences within and between institutions in the levels and experience of engagement with issues of employability generally, and aspects of workplace learning and employer engagement specifically.
5. Though workplace learning tends to be discussed primarily in terms of the employability and skills agenda, it can also play an important role in widening participation to higher education. And workplace learning sits alongside employer links relating to research and knowledge transfer activities within many higher education institutions.
6. Thus we see that workplace learning is relevant to all of higher education's major functions. At the institutional level, there is a strong argument for adopting a holistic approach to workplace learning and its relationship to the full range of institutional activities.
7. At the national or system level, considerations about a strategy for workplace learning pose two key questions:
 - should workplace learning be treated in the same way as 'widening participation' (i.e. as an objective for all higher education) or should it be treated like research (i.e. with an emphasis on excellence and selectivity)?
 - how far are these matters of concern for a central higher education policy and how far are they matters best left to individual higher education providers and employers?

The study

8. HEFCE commissioned the study to help ensure a concerted approach across the Council to future strategies on workplace learning and related matters of employer engagement¹, and to feed into the wider review of its teaching funding method. The study was undertaken between March and November 2005 by a joint research team from KPMG and the Open University's Centre for Higher Education Research and Information (CHERI). It aimed to inform HEFCE thinking on developing a strategy for workplace learning by:
 - exploring the nature, purposes and outcomes of workplace learning;
 - considering workplace learning within the broader relationships between the worlds of work and learning;
 - exploring the emerging changes in higher education which may impact on workplace learning in the future;
 - identifying structural issues that currently enable or inhibit workplace learning, and identify future opportunities.

The study was undertaken through reviews of relevant literature and published reports, semi-structured interviews with a wide range of stakeholders (including higher education providers and a number of the recently-established Sector Skills Councils), and a series of focused discussions on specific topics with members of the Steering Group and other interested parties.

Scope for greater linkages between learning and work

9. Overarching accounts of globalisation and knowledge economies tend to obscure the complexity of changing economic, political, social and cultural conditions and their effects on the relationships between education and work. It is clear from the literature that workplaces differ in terms of the opportunities they provide for employees to engage in activities likely to lead to learning and personal development. They also differ in terms of their complexity, their insularity, their power relations and the nature of their boundaries with academic contexts of learning and knowledge-production. Further, many UK workplaces must (still) be considered as being 'low-skill' and offering poor opportunities for learning. (*Sections 2.1-2*)

Changes in knowledge and learning

10. Though workplace learning can be seen as relevant to all of higher education's major functions, there is considerable variation in the extent of the recognition and acceptance of the relevance of workplace learning to the achievement of higher education goals. Theories of knowledge and learning continue to be contested. (*Section 2.3*)
11. A crucial aspect of discussions relates to questions of transferability. Arguably, forms of knowledge that are context-bound (for example, to a specific workplace context) are not appropriate for recognition as part of a higher education award. But there may be potential for transfer, and a key task for higher education could be to unlock that potential. Despite the apparent contradictions and ambiguities found in the literature, some of the changes occurring within many workplaces (and in forms of knowledge and learning more generally) seem likely to extend the relevance of workplace learning to wider groups of learners and enhance the potential links to higher education awards. (*Section 2.3*)

¹ The Government's 2003 Skills Strategy White Paper specifically asked HEFCE to address barriers to workplace learning and securing wider employer buy-in to higher education.

The terrain of workplace learning linked to higher education

12. Higher education's relevance to employment and the workplace is not limited to the incorporation of workplace learning within a planned curriculum². Higher education contains programmes at both undergraduate and postgraduate levels which, though vocationally relevant may not include any workplace learning *per se*. In fact, claims for broad vocational relevance (in terms of generic transferable skills) are probably made for most higher education programmes. But within the range of higher level work-related education we can identify a sub-set of provision that does include formally recognised workplace learning. (*Section 3.2*)
13. Workplace learning that is formally linked to a higher education programme tends to fall into a small number of main types, relating to specific stages in the life course: either as part of an individual's initial professional formation before entering the labour market; or, for an individual already in the workplace, as part of their continuing development. Table 1 lists these main types in relation to the stage in the life course in which they are likely to fall, and indicates their current state and likely trends. (*Sections 3.3–4*)

Table 1: Trends in higher education programmes involving workplace learning (WPL)

Stage in life course	Type of programme	Current state/trends
Initial formation	HE-based programme (at undergraduate or postgraduate level) with WPL module or longer placement in workplace environment	Well-established (particularly sandwich course) Funding adequate Evidence of renewed interest in some institutions Evidence of decreasing take-up by some types of learner
Initial formation	HE-based programme (at undergraduate level) with alternating sequence of taught modules and short periods of practice in relevant occupational settings	Well-established, particularly in health, social care, education Many programmes funded outside HEFCE remit
Learner in the workplace (primarily)	HE-based programme (foundation degree): some integration of taught modules with activities in actual (or simulated) work settings	Recent development. Still ongoing issues of adequate funding, employer engagement, and prevailing quality, regulatory and qualification frameworks
Learner in the workplace	Employment-based programme: negotiated between HE, employer and learner. Focus on learner's workplace activities	Still to achieve widespread take-up, though possibly increasing. Has potential to be prime vehicle for workforce development linked to HE programmes. Has potential to be top-up to foundation degrees

14. The study found that higher education institutional strategies for learning and teaching embraced a range of objectives, which in turn embraced a range of different aspects of employability and work-related learning, including links to widening participation and lifelong learning. Institutional approaches to workplace learning are diverse and reach into other institutional functions (including research and development and knowledge exchange) although these are not necessarily co-ordinated in a strategic manner. (*Section 4*)

² The initial HEFCE specification for the study identified a concern with workplace learning as part of a higher education programme, i.e. learning through work that is accredited and embedded within a programme.

15. The report identifies a number of enablers and inhibitors of workplace learning, but it is evident that these impact differently in different institutions and different departments. Further, institutions differ in the extent to which they feel able to take risks with innovative curriculum provision, including workplace learning, and to mount 'loss leaders'. *(Section 4)*

Workplace learners

16. From a learner perspective, workplace learning may be part of the initial professional formation taking place before entry to the labour market. Or it may be part of continuing professional development. In other cases, workplace learning may go unacknowledged in the workplace and unrecognised by higher education. *(Section 3.1)*
17. Workplace learning is variously valued because it is 'different from', 'similar to', or 'better than' forms of academic learning. Where there is an intention to acknowledge and recognise workplace learning, these distinctions need debate and agreement between the parties concerned, including the learner. *(Section 6.2)*
18. Notions of learner entitlements might be a helpful way of focusing discussion on the expectations of different partners (higher education, employer, learner). A learner's expectations could be expressed in terms of entitlements to advice and guidance, negotiation of a planned programme of study, support for learning and assessment, and recognition of learning. Such workplace learning entitlements are likely to vary depending on employment contexts. All parties should be clear what the learner entitlements are and how they will be met in practice. *(Sections 6.3 and 9.9)*

Employer perspectives

19. As part of the study, HEFCE was particularly concerned to investigate the views of employers. But there are few general statements which hold across employment sectors and workplace contexts and are equally relevant to learners/workers at different stages in their life course and professional development. Representative and intermediary bodies strive to provide a coherent 'employer' voice, but in practice it tends to be sectional interests that prevail. On the basis of this study (and other research) it seems that higher education and employer links are most productive at the level of the individual workplace and the individual academic department. The promotion and extension of such links poses considerable challenges at levels beyond this. *(Sections 5.1-4)*
20. In moving towards any such promotion and extension, certain aspects should be borne in mind:
 - the multiple interests and roles of individual employers, their representative bodies and intermediary organisations need to be more fully recognised;
 - the distinctions between employer and employee interests (and between both and the interests of the wider society), and distinctions between short- and long-term perspectives, need to be remembered.

Employer engagement and notions of brokerage

21. Higher education institutions currently engage with employers on a number of different levels for a number of different purposes. Policy pushes for a more demand-led supply of skills training creates an environment in which engagement with employers is expected to be the 'norm'. High level employer engagement in relation to teaching and learning is characterised by situations where the employer and the higher education provider have an equal and shared interest in ensuring high standards of education and training. This might be to support the initial formation of specialists to work in the

employment sector, to support the continuing development of these specialists and to support the continuing development of other employees. Such high level engagement can be found in a few areas (for example, higher education links with the National Health Service) but is not that widespread. (*Section 7.1*)

22. It would be unrealistic to assume that all such engagement should (or could) be at this level, but clearly current HEFCE-funded initiatives such as Centres for Knowledge Exchange and Lifelong Learning Networks are aiming to increase levels of engagement.
23. Several studies have highlighted the need for brokerage functions to facilitate providers' engagement with employers. Brokerage may be one way of starting to create more permeability in the boundaries between higher education and work, and hence to create the conditions under which workplace learning can more easily develop. Brokerage is clearly a growth area but there needs to be some co-ordination between (and critical evaluation of) the various schemes in operation or being piloted, to reduce the potential for confusion and duplication of effort, but also to take account of diversity of current practice. (*Section 7.4*)

International perspectives

24. Given moves towards greater harmonisation of higher education systems in different European countries, following the Bologna agreement, we looked in particular at the role played by workplace learning in relation to higher education in three countries in mainland Europe: France, Germany and the Netherlands. We also considered the situation in Canada.
25. In general, the policy drivers towards greater links between higher education and employment are similar to those found in the UK, but countries differ in the extent to which governments get involved. A distinction can be made between the free market model, wherein the state plays a minimal role, providing a legal framework intended to guarantee the free play of market forces; and the corporatist model, wherein the state plays a more active regulatory role and there is an assumed general consensus between the state, the unions and the employers. Canada can be seen as representing the free market model, whereas France, Germany and the Netherlands are examples of the corporatist model. (*Section 8.2*)
26. These countries vary in the extent to which they value apprenticeships and vocational training as opposed to general and academic education. The position of vocational education in the overall education system affects the role of workplace learning in higher education. Financial considerations also play a role. In Canada employers are recommending that provincial governments introduce tax credits to encourage greater employer engagement in co-operative education (especially by small and medium-sized enterprises). In mainland Europe, there are more financial resources from the state available for workplace learning, but employers complain that despite the available government funding the costs of involvement outweigh the benefits. (*Section 8.5*)
27. Though it is often suggested that the well-developed European 'dual system' of apprenticeship could be adapted in other countries, we note that these current systems are embedded in national cultures, traditions and institutional frameworks that cannot be easily replicated elsewhere. Further, notwithstanding existing legislative frameworks and collaborations based on strong notions of social partnership, there remains a reluctance among employers to invest in programmes involving workplace learning.

Funding aspects

28. Funding aspects cover a range of issues, including consideration of:
- how far, and in what ways, HEFCE could use teaching funds to encourage the development and delivery of new workplace learning provision;
 - how far, and in what ways, HEFCE's future third stream strategy could further support employer engagement, including leveraging in other funding to contribute to the infrastructure for workplace learning;
 - how concepts of learner, employer and provider entitlements in relation to workplace learning might inform any agreed 'rules of engagement' between higher education providers, employers and workplace learners, and encourage the development of sector-wide standards;
 - different models of brokerage and what funding levers would best support them;
 - current industry practices in relation to the use of levies to support the costs of workforce development and the possible scope for agreements between HEFCE and relevant Sector Skills Councils to leverage additional funding support from HEFCE.

(Sections 9.1-11)

29. We note that additional funding (to institutions) may not, in itself, increase the quantity or quality of workplace learning provision. There also needs to be a willingness on the part of employers to engage with institutions, and on the part of learners to enrol on programmes involving workplace learning. HEFCE should consult with institutions on opportunities for using the Higher Education Innovation Fund to lever in additional funding for workplace learning. Further, consideration of any special funding should be informed by an exploration, with Regional Development Agencies, of the potential for using such funds to lever in additional investment from the agencies themselves or other public subsidy.

Some conclusions and policy implications

30. Issues of workplace learning are central to the future role of higher education in the knowledge society. For the learner, the workplace is a prime source of new learning as well as a site for the application of existing knowledge. But workplace learning is not just about learning to do a job: it is about personal development and the acquisition of knowledge and skills that transcend particular settings or roles.
31. There are an increasing number of stakeholders with interests in workplace learning (including the Sector Skills Councils and the Regional Development Agencies). Higher education will need to engage with these stakeholders if it is to retain, and perhaps extend, its role in the knowledge society. But higher education has an important role to play in maintaining a long-term view, to recognise the interests and needs of current stakeholders, but also to place these within a larger vision of the future knowledge society and its needs for social cohesion as well as for economic prosperity.
32. This report shows the complexity of the contexts for workplace learning, in terms of types of learning, types and needs of learners, subject differences, institutional differences, employment sector/workplace differences. We also note that workplace learning activities cannot necessarily be viewed in isolation from other higher education activities which involve employer engagement.
33. We consider that a narrow definition of workplace learning (confined to learning derived from workplace experience which is accredited as part of a higher education programme)

is not workable. Rather a broader conception is needed, recognising higher education's role in the wider knowledge society and the increasingly parallel experience of learning and working over most of the life course.

34. Any HEFCE strategy for workplace learning (and employer engagement related to high level learning) needs to focus on structural and cultural issues in order to create sustainable conditions in which learners can access opportunities for workplace learning.
35. To provide impetus for creating greater permeability between higher education and employment, any strategy should look more to innovative forms of workplace learning, and aim to reach 'hard-to-engage' employers and their employees.
36. The report makes a number of recommendations on a series of linked issues, including the following.

(i) *Institutional approaches to learning and teaching.* In addition to specific recommendations in relation to programmes incorporating workplace learning, and workplace learners' access to managed learning environments, general recommendations include the following:

- HEFCE should expect institutional strategies for learning and teaching to make explicit reference to workplace learning and to describe how the institution plans to engage with learners already in the workplace;
- HEFCE should expect institutions to have an agreed set of 'rules of engagement', so individual departments that seek to engage with employers and workplace learners can do so on the basis of an institutionally-agreed set of standards;
- HEFCE should consider the use of initiative funds to support developments in workplace learning and employer engagement. The Council should consider how its future third stream strategy could do more to support this area, including leveraging in other funding.

Further, we note that future student financial support arrangements may discourage some students from enrolling on programmes where the duration is extended to include a period of workplace learning. HEFCE should ask the Department for Education and Skills to consider, as part of its assessment of the impact of the new student support arrangements, whether they are impacting differentially on demand for programmes with a workplace component.

(Section 10.3)

(ii) *Inter-connectedness of different higher education activities.* It is important for HEFCE to take a holistic view of employer engagement in higher education, but also to acknowledge that the detailed working-out of such engagement is often at department level, with links developed with employers specific to that subject or sector. We recommend that:

- in the short term, HEFCE considers increasing the links between existing funded initiatives (for example, Centres for Knowledge Exchange, Lifelong Learning Networks) to ensure that opportunities are realised for effecting good brokerage relationships between learning providers and learners (potential and actual) in the workplace (and their employers). Such initiatives should be reviewed, and emerging lessons shared;

- in the medium term, studies should be undertaken to gain a better understanding of how activities in relation to learning and teaching, research and development and consultancy are inter-linked, the synergies between them, and the benefits that accrue from such inter-linking.

(Section 10.4)

- (iii) *Implications for staff development.* The distributed nature of workplace learning (which implies that different aspects of the learning process will need to be shared between higher education and employment) requires changes to the role of many academic staff, especially if workplace learning is to be extended to a wider set of subjects and programmes. Within Centres for Knowledge Exchange there are developments relating to 'knowledge transfer professionals'. Discussions about skills sets for knowledge brokers are already under way in the learning and skills sector. We recommend that:
- HEFCE initiates discussions with relevant parties (including the Higher Education Academy and employer representative bodies) to consider the need for investment in relevant staff development to extend the use and improve the quality of workplace learning in the context of higher education;
 - HEFCE should engage with Sector Skills Councils to encourage staff development among employers and their employees involved in offering and supporting workplace learning opportunities.

(Section 10.5)

- (iv) *Notions of brokerage and entitlements.* There is a need for some coherence and integration between the existing and emerging brokerage schemes, so that objective and appropriate advice is given to employers and effort is not duplicated. HEFCE should initiate discussions with relevant parties (including the Learning and Skills Council, the Sector Skills Development Agency, SSDA and the Sector Skills Councils) to establish what actions are currently being taken and to identify possible scope for synergy between (and critical evaluation of) the different developments.

Further, given that within workplace learning different dimensions of the learning process may be shared across different sites and undertaken by different parties, we recommend that HEFCE works with the Sector Skills Councils to develop entitlement models (for learners, employers and providers) in different employment sectors.

(Section 10.6)

37. Finally, whilst accepting that higher education will need to engage with a range of stakeholders to retain and perhaps extend its role in the knowledge society, it should not lessen its criticality in responding to new social and economic pressures, of which workplace learning is an important part. Higher education must recognise the needs and interests of current stakeholders, but should place these within a wider vision of the future knowledge society and its needs for social cohesion as well as for economic prosperity.

1. Background to the study

1.1 The contexts

Substantial expansion of higher education in the United Kingdom and elsewhere has been justified largely in terms of improving national economic competitiveness within a framework of the growth of the so-called global knowledge economy. As well as justifying expansion, the creation of the knowledge economy or knowledge society has also been used to justify an increased (and selective) investment in research, to provide a human capital justification for widening participation in higher education, and to drive a new 'vocational' emphasis in teaching and the curriculum, most recently through the emphasis placed upon the two-year foundation degrees (FDs).³

The economic expectations placed on higher education reflect both the knowledge and skills needs of workers in modern knowledge-based economies, and the demands for relevance in research and knowledge creation to the future successful development of these economies. As such, they require higher education institutions to address the nature of their two central functions – teaching and research – and, in so doing, to reconsider the boundaries between higher education and sectors of employment. Thus, questions about workplace learning and higher education cannot be left to the margins of debates about the future of higher education. As with research so too with learning: distinctions are becoming more blurred between knowledge acquired within educational institutions and knowledge acquired within other social contexts. This is equally true for learners at later stages in the life-course (where study inevitably builds on substantial work and life experience) as it is with younger learners, many of whom today combine higher education study with substantial amounts of time spent in the workplace.

These trends have not been universally welcomed across higher education, and there are large differences within and between institutions in the levels and experience of engagement with issues of employability. This is especially the case with workplace learning, a traditional feature of courses in some subjects and institutions but virtually unknown in many others. Nevertheless, the UK Government's Skills Strategy White Paper '21st Century Skills' (2003) stated that HEFCE should address the barriers to workplace learning and secure wider employer buy-in to higher education (DfES, 2003, para 5.33) ⁴.

Although workplace learning is most frequently discussed as part of the employability and skills agenda, it is worth recognising that workplace learning can also play an important role in widening participation to higher education. Workplace learning is also part of moves towards more flexible modes of delivery and more learner-centred higher education. Workplace learning also sits alongside employer links related to research and knowledge transfer activities within many higher education institutions.

³ These new emphases of public policy are not of course limited to higher education. Economic and employment imperatives directed at higher education sit alongside a raft of other policy initiatives directed at the education/training/employment interfaces – from compulsory education, through apprenticeships to further and higher education. Taken together, these trends pose questions concerning the boundaries between different forms and levels of education and between the education and employment sectors.

⁴ In addition to the Department for Education and Skills, a number of other government departments (Department of Trade and Industry, the Office of the Deputy Prime Minister, HM Treasury) and their agencies (including Regional Development Agencies, the Sector Skills Development Agency, the Sector Skills Councils, the Learning and Skills Council and HEFCE itself) are responsible for delivering the Skills Strategy. Thus, in considering barriers to workplace learning and the scope for securing wider employer buy-in to higher education, HEFCE would need to take account of the views of a wide range of stakeholders.

An issue closely related to workplace learning is the equally large question of employer engagement in higher education activities. This has been given high priority following the publication of the government-sponsored Lambert Review of university/business collaboration (2003). That review suggested that the structures within which higher education institutions (HEIs) operate should be sufficiently responsive to encourage collaborations between higher education and business/employers.

In other words, workplace learning is about more than work and more than learning. It is relevant to all of higher education's major functions. At the institutional level, there is a strong argument for adopting a holistic view of the relationship of workplace learning to the full range of the institution's activities. At the national or system level, there are two initial strategic questions for funding councils and others to consider.

The first strategic question is whether workplace learning is an issue to be treated in the same way as 'widening participation' (i.e. as an objective for all higher education) or whether it is to be treated like research (i.e. with an emphasis upon excellence and selectivity). Or put another way, does the Government and HEFCE want more of it or to improve its quality? The answer is likely to be something of both. But the answer also has to take account of the wide variety of forms that workplace learning can take and of the contexts in which it is to be found, as well as the interconnectedness of workplace learning with so many other features of higher education policy and practice.

The second strategic question is how far these are matters for central higher education policy at all and how far they are best left to individual higher education institutions and employers. While many trends towards marketisation point in the direction of the latter, the importance of the issues to the long-term economic success of the whole society suggests a legitimate element of public interest. This is not least because the long-term interests of the individual learner – and society's interests that may depend on them – cannot always be safely equated with the short-term interests of the learner's employer.

1.2 The study

The present study was commissioned by HEFCE to help ensure a concerted approach across the Council to future strategies on workplace learning and related matters of employer engagement with higher education, and to feed into the wider review of its funding method for teaching.

A joint research team comprising the Centre for Higher Education Research and Information (Open University) and KPMG was commissioned to undertake the study. At the same time, The KSA Partnership was commissioned to undertake a complementary regional study of workplace learning in the North East of England. As a starting point for the main national study, HEFCE had defined workplace learning as 'learning through work which is accredited and embedded with a (higher education) programme', though it was acknowledged that the definition would need further investigation. The study was also to investigate the broader relationship between work and learning, and the potential for a greater integration between the two.

The study aimed to inform HEFCE's thinking on developing a strategy for workplace learning by:

- exploring the nature, purposes and outcomes of workplace learning;

- considering the position of workplace learning within a framework of the broader relationship between the worlds of work and learning;
- exploring the emerging changes in higher education which may impact on workplace learning;
- identifying structural issues that currently enable or inhibit workplace learning, and identifying opportunities for workplace learning in the future.

The study also aimed to draw on practice outside of HEFCE-funded activity, and where appropriate on international comparisons.

The study was intended to identify priorities for action by HEFCE (and possibly other stakeholders) and priorities for investment (to inform HEFCE's input to the Government's comprehensive spending review). It was undertaken during the period March to November 2005, in two overlapping phases. Phase one (primarily an information gathering and analysis phase) comprised:

- reviews of the academic literature on workplace learning and the relationship between learning and work (see Annex A for detail); analysis of relevant reports from the Quality Assurance Agency for Higher Education (QAA) (Annex B); documentation relating to current funding methods for publicly-funded higher education teaching used by HEFCE and other agencies (the NHS, and the Training and Development Agency for Schools, TDA, formerly the Teacher Training Agency) (Annex C); documentation relating to institutional bids to HEFCE for Centres for Excellence in Teaching and Learning (CETLs); reviews of current policies for and practice of workplace learning in higher education in a limited number of other countries (Annex D)
- semi-structured interviews with a range of key stakeholders, including higher education institutions, policy bodies, representative bodies relating to foundation degrees and more general higher education provision in further education colleges, Sector Skills Councils and other employer representative bodies. (See Annex E for list of organisations interviewed).

One member of the project team was concurrently leading a consultation undertaken by the Council for Industry and Higher Education (CIHE)⁵ on higher education's role in workforce development. Our own study was able to draw on this additional work, which focused on the business perspective.

During phase two of the project, we continued our analysis and evaluation, and focused on specific aspects of workplace learning that had emerged from phase one and from further discussions with HEFCE policy officers. In particular, further work was undertaken on:

- aspects of employer engagement (including the scope for developing appropriate measures; and the scope for greater involvement of higher education in employers' in-house provision for continuing development of their employees);
- notions of entitlements (and possible links to funding); and
- the specific issue of 'closed courses' within HEFCE's funding method for teaching.

⁵ The CIHE is a council of leading people from a wide range of businesses, universities and colleges. It aims to advance learning and research through fostering mutual understanding, co-operation and support between higher education and business.

Discussions of these issues were undertaken in working groups comprising members of the project Steering Group, and other interested parties (see Annex F for a list). The project also benefited from the close engagement of HEFCE policy officers.

1.3 The report

The relationship between workplace learning and higher education is complex and takes many different forms. The next section identifies a number of issues raised by a review of the academic literature on workplace learning and more generally on the relationships between learning and work. (The full literature review is provided in Annex A.)

Section 3 considers a range of different types of workplace learning and their relationships with higher education, planned and unplanned. Some types are 'designed into' higher education programmes while others have a much looser relationship. While the emphasis of the rest of this section and much of this report is on the former, the question is raised as to whether it can be justified to privilege some forms of workplace learning over others.

Section 4 looks at higher education institutional strategies on workplace learning and at the factors that 'enable' or 'inhibit' them. Section 5 looks at employer perspectives, both with regards to different types of workplace learning and learner, and in relation to strategic issues concerning links between employers and higher education.

Section 6 takes the perspective of the workplace learner, examines the expectations that different types of learner might bring, and discusses whether there are specific 'entitlements' available to them in areas such as advice and guidance, support for learning, and assessment and accreditation.

Section 7 discusses employer engagement, the forms it can take and the levels that may be appropriate to different types of workplace learning.

Section 8 reviews international experiences of workplace learning and higher education in different national contexts and traditions, drawing specifically on research and policy developments in Canada, France, Germany and the Netherlands. These are discussed in greater detail in Annex D.

Section 9 reviews some of the funding issues raised, distinguishing between the funding of different types of *existing* provision, and the funding likely to be needed to stimulate the expansion of provision and its extension into new academic and employment areas and to support the generation of new forms. Annex I considers funding issues in more detail.

The report concludes with a summary of some of the main arguments, and a consideration of the sorts of actions to be taken by HEFCE and others to enable all learners and workers to achieve maximum benefits from what they can learn in the workplace.

2. Issues raised by the academic literature on workplace learning

2.1 Introduction

A lot of expertise and experience of workplace learning exists within British higher education. But much of it remains within the confines of individual institutions and subject communities. There is also a research literature on the subject. In this section of the report, we draw heavily on a detailed review of the workplace learning literature, written for the project by Judy Harris. The full literature review is included as Annex A. Some of this raises quite critical questions for practitioners and advocates of workplace learning.

The initial HEFCE specification for the study identified its prime concern as workplace learning *as part of a higher education programme*, i.e. learning through work that is accredited and embedded within a programme'. HEFCE was also interested in learning at higher levels which was integrated with work. As we shall go on to see, it becomes increasingly difficult to place boundaries around those types of workplace learning that are relevant to higher education and those that are not.

We note there are many contradictions in the literature on workplace learning in respect of key issues of knowledge, learning and their contexts. Overarching accounts of globalisation and knowledge economies tend to obscure the complexity of changing economic, political, social and cultural conditions, and their effects on the relationships between education and work. Much of the relevant literature tends to over-emphasise the extent of changed patterns of work organisation in the UK. Further, some critics note an emphasis on individual training (and the individual's responsibility to maintain their employability) without looking at the corresponding structural measures that might increase employer demand for training and development.

One strand of a study funded by the Economic and Social Research Council (ESRC) on 'learning as work' has considered these structural questions. It developed a conceptual continuum based on 'expansive' and 'restrictive' approaches to workforce development at the level of the individual organisation (Fuller and Unwin, 2004). Although formulated with apprentices in mind, this approach seems to have much broader applicability. In essence, key factors characterising expansive and restrictive organisations are shown in Table 2.

Table 2: Organisational approaches to workforce development

Expansive learning environment	Restrictive learning environment
Opportunities for training on and off the job	Narrow range of on-the-job training
Knowledge and skills development through participation in multiple communities of practice	Restricted participation within a single community of practice
Access to knowledge-based qualifications	No access to knowledge-based qualifications
A structure for progression	No structure for progression and gaining new skills

Source: Fuller and Unwin, 2004

In other words, workplaces differ and not least in the opportunities they provide for employees to engage in activities likely to lead to learning and personal development.

2.2 The changing workplace

Traditional forms of work organisation in industrialised societies were based on assumptions that economies of scale are achieved through strict divisions of labour, with tasks broken down into constituent components, employees skilled to carry-out 'just' their set tasks, and management responsible for overseeing such processes and ensuring efficient performance (the Taylorist form of work organisation). It is argued that in many places, traditional forms are being replaced by 'high performance' management and 'high performance' work practices. High performance work organisations are characterised by (amongst other things) more complex job design, more devolved lines of responsibility, use of team-working, and mechanisms to ensure employee access to key business information (see Ashton and Sung, 2002).

High performance management (and high performance work practices) tend to be based on three related areas: production management work organisation, and employee relations. A recent report for the Department of Trade and Industry (Sung and Ashton, 2005) suggests that the level of adoption of high performance work practices is linked to organisational performance, though it is acknowledged that different sets of practices are likely to be used in different sectors to achieve different business outcomes.

The Sung and Ashton study points to a number of issues which could be important in considering what might shape a strategy for workplace learning linked to organisational performance:

- organisational leadership is important. In this respect we note that the Government is already committed to supporting leadership and management development in small and medium-sized enterprises (SMEs), as part of its drive to improve skills performance, and in particular as part of the National Employer Training Programme (see DfES, DTI, DWP, HM Treasury, 2005, para 38);
- in encouraging and undertaking training needs analysis, it is important to move beyond narrow conceptions of 'just' technical skills and consider wider 'skills sets' relevant to business outcomes
- the creation of work environments and work cultures wherein employees 'can learn all the time as part of their normal work' (notions that resonate well with Fuller and Unwin's conception of expansive as opposed to restrictive organisations) could be facilitated by some more or less formal structures which help individuals reflect on their work practices and knowledge of the workplace. In educational terms, such structures could be seen as the basis for capturing and providing evidence for workplace learning.

What then do such work settings require of higher education? References to capturing and providing evidence for workplace learning lead us to considerations of validating that learning in educational terms. Both the world of work and the world of higher education may be responding to the same agendas (of globalisation, government reforms, exhortations for heightened skills levels), but it is clear from the literature that these two worlds embody different goals, value systems, traditions and practices. Greater links

between the two will inevitably be a complex and challenging affair. We can summarise the key difficulties as follows:

- workplaces differ considerably in their potential as learning settings;
- workplaces differ in terms of the equality of access to learning that they offer;
- many UK workplaces must be considered as 'low-skill' and offering poor opportunities for learning;
- workplaces differ in terms of their complexity, their insularity, their power relations and the nature of their boundaries with academic contexts of learning and knowledge production;
- within higher education, there is considerable variation in the extent of the recognition and acceptance of the relevance of workplace learning to the achievement of higher education goals.

2.3 Changes in knowledge and learning

Are some forms of knowledge of more worth than others? Some recent discussions of experiential learning and the validation of experience as authentic and central to knowledge production tend to value experiential and personal knowledge over academic/formal knowledge. Others would retain a supremacy for the academic and formal, while accepting a wider variety of sources for its creation.

There seems little consensus in the literature about the value to be attached to workplace knowledge. In considering the varying views, we might reflect on Young's observation (2003, p.11): 'we should be cautious about replacing a curriculum based on specialist research and pedagogic communities with one based on the immediate practical concerns of employers or general criteria of employability'. For workplace learning to go beyond the immediate and the practical, Young argues that 'new forms of association, and trust andnew types of specialists' (ibid, p.12) are needed. This might imply a need for greater networking between the world of higher education and the world of work. We are already seeing the emergence of knowledge brokers, Centres for Knowledge Exchange and the like (some supported by specific HEFCE initiatives), which could be seen as an aspect of networking involving specialists. (We return to brokerage in Section 7.)

When we turn to the question of learning, we find two main dimensions to discussions. The first is characterised by distinctions between 'learning by acquisition', 'learning by participation' and 'situated learning' based on communities of practice. Learning as *acquisition* is based on the premise that knowledge exists independently of the knower but can be acquired, internalised and acted upon. Learning as *participation* emphasises learning happening in relation to others before it is internalised by the individual. *Situated* learning theories draw on concepts such as 'communities of practice' to explore workplace learning, and tend to downplay formal learning. Critics of situated learning note that not all employees in a workplace will have opportunities to be part of a community of practice, and it is questioned to what extent communities of practice exist in many contemporary workplaces.

The second main dimension in discussions of learning relates to the usefulness or otherwise of maintaining distinctions between formal and informal learning. Some argue against such distinctions because they imply that informal learning processes are inferior to formal learning. Others argue that the distinction should be abandoned because it does not

hold in practice. However, on social justice grounds, some argue for maintaining the distinction in order to grant comparable recognition to knowledge acquired through informal experiential routes to that granted to knowledge acquired through formal academic routes. This suggests a need to promote access to formal qualifications for employees so that they can have their skills validated outside of a particular employment context.

A crucial aspect of discussions about knowledge and learning relates to questions of *transferability*. Forms of knowledge that are context-bound (for example, to a specific workplace) are arguably not appropriate for recognition as part of a higher education award. But it can also be argued that there may be *potential* for transfer for many such forms of knowledge, and that a key task for higher education is to unlock that potential. In reality, it seems most plausible to argue that *some* forms of workplace learning are indeed largely context-bound while others have the potential for transfer. The trick then is to distinguish between the two.

Summarising some key points from the workplace learning literature in relation to knowledge and learning, we can see:

- theories of knowledge and learning are contested – with the traditional dominance of ‘disciplinary views’ increasingly challenged;
- workplace learning is variously valued because it is ‘different from’, ‘similar to’, or ‘better than’ forms of academic learning. (All three positions may be tenable, but probably not at the same time.) It is also the case that the literature (policy, practice and academic) seems unclear about which form of ‘valuing’ is being advocated. Some documents make reference to more than one position in the same article;
- learning that can be ‘credentialed’ assumes greater power and prestige;
- the transfer of knowledge from one context and its ‘recontextualisation’ in a different one poses challenges for *all* forms of learning;
- there is a powerful argument that publicly-funded higher education should only be concerned with knowledge that transcends the context of its acquisition.

2.4 Implications for a workplace learning strategy

The implications of the above considerations for a HEFCE workplace learning strategy are far from clear. Much of the theorising on workplace learning and related concepts, such as non-formal learning and experiential learning, [poses major challenges for traditional conceptions of higher education (HE) and indeed for the very futures of HEIs as distinct ‘knowledge institutions’. Wider literatures on knowledge societies and globalisation point in similar directions. Yet if these seem to point to, at minimum, a relaxation of traditional criteria of valid HE learning, and at maximum a complete rethink of such criteria, there are equally strong voices in the literature that suggest caution in embracing workplace learning in all its forms. And while one interpretation of the literature might be that today ‘anything goes’, this would seem to be a somewhat dangerous view for HEFCE to adopt!

Further, while the literature is complex and contradictory on many things, one important conclusion seems to be that principles of learning are quite different between academic and workplace forms – with consequences for how learning is to be supported and assessed. The implication of this might be that academic staff whose expertise is in traditional disciplinary forms of knowledge and learning should not be expected to have competence

in the support and assessment of workplace or experiential forms. On the other hand, the continued separation of expertise grounded in traditional forms of disciplinary knowledge, and expertise grounded in the applied use of this knowledge (and potential for generation of new knowledge) may in fact be a limiting factor in the development of workplace learning. A weakening of this separation would raise extensive issues of training and staff development, both from a higher education and from a workplace perspective. And they would have funding implications.

Some approaches to workplace learning restrict higher education's role to learning that is 'planned' and 'intentional'. These direct attention towards a raft of educational processes concerning the design and support of such learning as well as its recognition/validation. Alternatively, the increasing attention being given to learning outcomes would shift attention towards the assessment and recognition of learning achievements, planned or otherwise. While the brief for this study emphasised the former, at some points we feel it is important to acknowledge a wider picture of workplace learning, not limited to forms intentionally planned to be part of academic programmes.

2.5 Conclusions

The detailed literature review in Annex A presents a fuller discussion of these matters. But even from the above, it is clear that many of the claims made for workplace learning are in fact contested claims. We have not even considered the complexities of the differences between employment sectors where custom and practice – and the capacities of employers and professional bodies to support learning – vary enormously. We have though indicated some of the changes occurring within many workplaces, and in forms of knowledge and learning more widely, that seem likely to extend the relevance of workplace learning to wider groups of learners in the future and enhance the potential links to higher education awards.

One of the reasons for the apparent contradictions and ambiguities that can be found in the literature is that workplace learning is a term applied to many different learning activities and contexts. And different types pose different issues, bring different opportunities and challenges, and arguably require different policies from HEFCE. The next section attempts to 'unpack' the notion of workplace learning and to identify a range of key types.

3. Types of workplace learning

3.1 Introduction

Much of the confusion and contradiction in discussions about workplace learning and higher education may lie in the fact that people are often talking about quite different things. To illustrate the point, let us introduce the characters to be found in an imaginary 'office', all of whom are involved in workplace learning but each of whom has a very different version in mind.

Jed has just turned 20 and is doing his sandwich year in the office as part of his BA Business Studies degree. He is well supported with a local mentor and periodic visits from his university-based supervisor. His contract for the sandwich year sets out its learning objectives and how they are to be achieved. Jed is quite enjoying the experience although doesn't relish the 9.0am start time and having to wear a tie. He also thinks it is a bit more relevant to his studies than the part-time job he had all last year at the local supermarket (and will look better on his CV). The other staff in the office are used to having a 'student' around and quite like having someone there to dump some of the more boring things on. He has already done an in-house training course on databases, and is likely to get on some more training before he has finished his placement.

Jayanti is 24 and is in the office for just a few weeks as part of her postgraduate conversion course in accountancy. She spends much of her time with Joe in a kind of apprentice role which is quite technical and focused and very different from the history degree that she completed 18 months ago. She hasn't really got to know many other people in the office. She has found this with other short placements (this is her third). She is just not really anywhere long enough to get involved in office politics and relationships.

Joe has just turned 40 and hopes that this is his year for completing his MBA. There is only the dissertation to complete and since this is almost entirely based on his work in the office, he feels he is running out of excuses for not finishing it. He has had help and support from the boss. As well as paying the university's high fees and allowing time off for attending residential schools, the firm has been supportive in giving him access to confidential company files to use (suitably anonymised) in his MBA coursework. And Joe is conscious that further promotion is dependent on getting the MBA. But there never seems to be enough time. Many late nights lie ahead.

Jas is confident that he will complete his DBA this year. He will then be 'on time' (he will be 40 next June) to move up and onwards to regional office. The DBA has been a very useful source of networking (he's not sure he has learnt anything else) and Jas has now acquired a set of valuable contacts for the next stage in his career. Although he has been the boss of the office for less than five years, he is now more than ready to move on. But being boss has had its advantages, enabling him to delegate much of his workload to other people in the office (especially Joe) and so make some time for his networking activities at the university. When armed with his professional doctorate, Jas is convinced that the sky will be the limit.

Jake is 35 and has been working in the office for nearly eight years. He is desperate to leave, and is hoping that the part-time degree in psychology he is

taking at the local university will be his passport out of the office. But he certainly finds that the office provides him with a wealth of material for his coursework assignments. The contrasting personalities of those around him, the relationships that are formed between them and the different ways in which they respond to the pressures of the job really help him to understand and to apply the psychological concepts from his course. He keeps pretty quiet about his studies though when at work. Some people have funny ideas about psychologists and he doesn't really want people to know he is planning to leave as soon as he gets his degree.

Jen, on reception on Wednesday and Friday afternoons, is still only 19 and has just started the second year of her degree course in comparative politics at the local university. She is in the office because she needs the money to pay the rent and to indulge in some of the more expensive features of student life. Her parents disapproved at first (but not so much as to increase her allowance) but were then mightily impressed at the changes they saw taking place in their daughter. The clumsy schoolgirl was finally learning some social skills, learning to take orders, learning to be co-operative, would even sometimes show some initiative and responsibility. Jen is actually finding it all quite useful for her personal development plan at the university, and takes some enjoyment in explaining to her lecturers (some of whom have never had a 'proper' job in their lives) the richness of the workplace as a learning environment. She knows everything that goes on in the office, can spot impending crises before anyone and can keep clients 'sweet' better than anyone. Although she still has no idea what she wants to do after graduation, she is pretty confident that what she is learning in the office will help her to do it.

Jackie is in her early thirties and has been at the office for a number of years. She was promoted some years ago and now supervises a number of clerical staff. She left school with a clutch of GCSEs but never really bothered to do any more studying and found general office work suited her. Over the years, she has gained bags of experience; she quite likes supervising other staff and seems rather adept at tackling problems that arise in the office. To her surprise, she has discovered that she picks up the various IT packages very easily and sometimes runs in-house training sessions for other staff (like the one on databases that Jed went to). Although happy in her work she sometimes feels a bit resentful that others in the office seem to be getting ahead. She knows that some of her male colleagues are studying and she wonders if her lack of qualifications is holding her back. Having not been the 'studying-type' she is not sure that she would want to spend a long time on a course, but has heard that the local university might do some short courses. A friend also mentioned something about a 'CIPD' organisation that offered courses 'to do with people'. But she doesn't really know how she would go about finding out about these various courses, and doesn't know who she could turn to for advice and guidance.

We shall return to these seven characters later. But for the moment we can note the differences in motivation for learning, the different stages in life in which it can occur, the extent to which employers support it (or are even aware of it), the extent to which the HEI supports it (or is even aware of it), the balance between skills development and personal development, the extent to which learning receives any formal recognition, the extent and ways in which it relates to formal programmes of study in higher education, and so on.

HEFCE's initial concern, as expressed in the terms of reference for this study, was with workplace learning planned as part of a higher education programme. But as can be seen from the examples above, students may be involved in work-related learning in many different ways. A crucial question, therefore, is whether some types of workplace learning

should be privileged over others, whether some are more deserving of public support and recognition than others. Related questions concern the form that any public support and recognition should take.

3.2 Mapping the terrain of 'higher' level learning relevant to work

The first point to emphasise is that higher education's relevance to employment is not limited to the incorporation of workplace learning. Higher education contains programmes at both undergraduate and postgraduate levels which, while vocationally-relevant (for example, engineering, business studies, librarianship), may not include any workplace learning. Indeed claims for broad vocational relevance (in terms of generic transferable skills) are probably made for most higher education programmes. As recent curricular developments geared towards enhancing student employability clearly show, in order to be relevant to the workplace, learning does not need to take place within the workplace (see for example Harvey, Locke and Morey, 2002; Harvey 2003).

Certain degree programmes, accredited by the relevant professional body, may be designed to lead both to the award of a degree and exemption from certain requirements of the relevant professional body. As such, they may be considered work-related programmes but again without having a workplace learning component.

In addition, many students already in employment and studying part-time will draw on relevant workplace experiences in the course of their studies, even though workplace learning *per se* has not been designed 'in' to the programme of study. Recognition of this can be seen in the recent growth in post-experience programmes leading to higher education awards – for example professional doctorates and 'vocational' masters programmes, all with strong elements of workplace learning at their core. Such courses are based on the premise that learners, already embarked on a professional career route, will bring to the programme knowledge drawn from workplace practices and activities.

A different example is where an HEI contributes to work-related learning experiences without these experiences leading to awards of the institution, such as programmes leading to professional body qualifications, Higher National Certificates (HNCs) or National Vocational Qualifications (NVQs) at Levels 4 and 5. Higher education providers also sometimes offer short continuing professional development courses for a particular employer which may not lead to any 'external' recognition.

Finally, full-time students yet to enter the labour market 'proper' are increasingly working part-time whilst studying. Such students may well be learning whilst at work (not just new skills and competencies, but about themselves and relationships with others, and about the organisations which employ them). Most of the learning may seem to have little to do with formal education, but some institutions are finding ways of recognising learning (in higher education terms) from casual term-time and vacation employment. The introduction of personal development plans may be giving added impetus to the recognition of this form of learning.

Thus, in mapping workplace learning at higher levels, we can see that boundaries between different types of learning are not necessarily clear-cut and may be changing. However, within this broad range of higher level work-related education, we can identify a sub-set of *provision that does include formally recognised workplace learning*, i.e. learning through work that is embedded and accredited with a higher education programme. It is to these programmes that we now turn our attention.

3.3 Workplace learning as part of a higher education programme

Workplace learning in this more restricted sense is itself extremely varied. It varies according to a range of dimensions as indicated in Table 3.

Table 3: Variations in forms of workplace learning in higher education programmes

Stage in life course	Organisational form	Status within programme	Duration	Academic level
Initial formation	HE-based programme: short project within workplace*	Compulsory or optional (WPL module)	Typically 2-8 week placement within 10-12 week module. Or 2-3 days per week throughout module	Undergraduate and postgraduate
Initial formation	HE-based programme: sandwich placement	Compulsory or optional	Typically 48 weeks (or 2 x 24 weeks)	Undergraduate
Initial formation	HE-based programme: sequence of short placements in 'practice' settings alternating with taught modules	Compulsory	Can amount to 40-50 per cent of overall programme	Undergraduate and postgraduate
Initial formation or already in workplace	HE-based programme (foundation degree): sequence of activities in real (or simulated) work settings central to programme	Compulsory	QAA guidelines indicate 'no minimum expectation...sufficient length and quality to ensure student attains learning outcomes.'	Undergraduate
Already in workplace	Employment-based programme: individual's work situation at heart of programme	Compulsory	In a sense, continuous throughout programme	Undergraduate and postgraduate

Note: increasingly HEIs are also devising modules which accredit learning derived from students' casual and voluntary work.

Much of the variety relates to whether courses are geared towards learners yet to enter the labour market 'proper' (for example, the use of the word 'placement' tends to imply a learner going 'in' to a workplace environment for a specific purpose and specific period of time); and those geared towards learners who already have a job (a job which is the underlying focus for all or part of their higher education programme). In the former, the overall programme is part of the learner/worker's *initial professional formation* and arguably a 'student identity' predominates. In the latter, the overall programme is part of the learner/worker's *continuing personal and professional* development and arguably an 'identity as worker' predominates.

These distinctions relate to different stages in the life course and they can become blurred. An example is foundation degrees, where some learners are not yet in work but are looking to gain relevant employment following completion of the course, whereas other learners are already in employment and are using the course as a way of developing their knowledge and skills.

The employment status of the learner is but one of many dimensions of workplace learning within higher education programmes. Other dimensions include:

- *the focus of the overall programme* - ranges from discipline/subject-specific focus through a general or specific vocational focus, to individual's personal and professional development linked to wider organisational needs;

- *the control and content of the curriculum for workplace learning* – may be determined by the HEI with employer input, or by a regulatory body with institutional/employer input, or by a combination of the employer, the learner and the institution;
- *learning objectives* - likely to be a combination of the development of high level generic skills, consolidation and extension of subject knowledge and skills, new understandings of business and practice, plus career tasting and development of specific practitioner skills (depending on the overall programme);
- *the nature and status of assessment* - ranging from formative to summative, and from implicit to explicit (involving credit points, a separate award by the HEI, units towards an NVQ or a separate award by an external body);
- *support for learning* – ranges from support by the HEI only, to joint support by the institution and employer, to primarily employer plus other learners.

3.4 The current state of workplace learning in higher education and likely future trends

Workplace learning as part of a higher education programme involves a number of players: the individual learner, their workplace/employer, and an external educational authority that recognises the learning as being valid in higher education terms. But such players are part of much wider networks of stakeholders, and workplace learning is of importance across a wider social and economic arena and over a longer timeframe than the one in which the learning takes place.

Certain players, however, are strategically placed to determine the extent and effectiveness of workplace learning, and their actions may constitute ‘enablers’ or ‘inhibitors’ of workplace learning.

Our discussions with higher education providers and other relevant bodies (see Annex E) and reviews of relevant literature (see Annex B for a review of QAA reports) aimed to identify both internal and external enablers and inhibitors of workplace learning. ‘Internal’ dimensions were those for which an HEI itself held overall responsibility and control. ‘External’ dimensions were those for which an institution had less direct control but which were nevertheless an important part of the environment in which they operated and to which they had to respond.

As noted above, there are several different dimensions to workplace learning linked to higher education programmes, and it can take many different curricular forms. In order to consider the current state and likely future trends (including enablers and inhibitors) of workplace learning, we identify and consider just four main types as shown in Table 4.

Table 4: Main types of higher education programmes including workplace learning

Stage in life course	Type of programme
Initial formation	A: HE-based programme (at undergraduate or postgraduate level) with workplace learning module or longer placement (up to one year) in workplace
Initial formation	B: HE-based programme (at undergraduate level and post-graduate level) with alternating sequence of taught modules and short periods of practice in relevant occupational settings
Learner in the workplace (or in HE)	C: HE-based programme (foundation degree). Some integration of taught modules with activities in work settings (real or simulated)
Learner in the workplace	D: Employment-based programme, negotiated between HE, employer and learner. Focus on learner's work role and links to HE

For each type, we consider the main issues arising from the experiences of the HEIs we visited, and from the trends in developments in the labour market.

3.4.1 Type A: HE-based with work placement

These types of programme are well-established at undergraduate level, though precise figures are difficult to come by as official data sources do not capture information on learner take-up of workplace learning modules. Data on programmes classified as 'sandwich' are more readily available (wherein learners spend up to a year in a single work placement, or in some cases a period of six months in two separate placements). Currently sandwich students comprise about 7 per cent of the undergraduate student population (HESA, 2005, table H). Successive studies have shown that sandwich placements are associated with positive employment outcomes, at least in the short term (Bowes and Harvey, 1999; Mason et al., 2003).

The majority of HEIs (and the 'umbrella' placement organisation) considered that HEFCE's current funding for sandwich placements was adequate; although, as institutional managers are not constrained in how they distribute HEFCE funding internally, it was not clear how much funding was being allocated to placements.

From our review of recent QAA reports (see Annex B) it seems that most higher education providers adhere to the QAA's precepts of the 'code of practice for the assurance of academic quality and standards' concerning placement learning. The QAA views good employer links plus employer involvement in the organisation of placements as essential for effective placement learning. Moreover, it notes that placement provision is usually high quality where there is significant institutional commitment, with well-organised placements geared to effective experiential learning (which could be understood as effective learning from the experience of doing a job of work whilst on placement).

From our interviews with higher education providers we found some evidence of a decline in the take-up of sandwich placements. Whereas in some programme areas, the sandwich placement had traditionally been a compulsory part of the programme, increasingly it is now optional and there is a perception in some institutions that fewer students are choosing to take a sandwich placement. There seem to be a number of reasons for this, including perceived difficulties of 'fitting-in' the placement with other commitments such as term-time work and family responsibilities, and the perceived costs of extending the total duration of study by one year.

A student's decision of whether or not to seek a sandwich placement may also depend on future career options. For example, psychology students seeking to become educational psychologists may choose not to do a sandwich placement since they know that they will

need to undertake further study on completion of their first degrees, and that learning derived from a sandwich placement will not 'count' alongside that further study.

Some institutions anticipate that the introduction of variable top-up fees will also reduce student take-up of year-long placements. But we found evidence of other institutions maintaining their long-standing commitment to sandwich provision, or seeking ways to make more explicit their commitment to such provision through, for example, creating a centralised placement unit funded. Of course, there might only be sufficient funds to mount such a centralised structure where student numbers opting to take up placements continue to be buoyant. Such diversity of institutional approaches may 'fit' with an increasing stratification of higher education: in this instance, an increasing divergence in opportunities for students to gain access to, and take-up of, sandwich placements.

Consideration of sandwich programmes also demonstrates the implicit (if not explicit) functional connections between, for example, an institution's learning and teaching and its research and development activities. This might involve any or all of the following features:

- an institution/department puts effort into establishing and sustaining a network of employers who offer placement opportunities for students;
- students apply for/take up placement opportunities;
- tutors visit students on placements and at the same time develop good relations with employers, identify potential areas of common interest which may lead to joint research and development activities (either at the employer site or at the institution), or consultancy activities geared to employer needs;
- good and regular employer contact ensures vibrancy and work-relatedness of the taught curriculum (including 'cases' for company-sponsored business projects);
- the institution/department builds up notions of 'preferred supplier' status with a cluster of employers;
- student subsequently secures employment with the same employer (surveys show employers use 'placement' as a recruitment tool); institutional reputation is enhanced through graduate employment statistics;
- a network of alumni used to source new placements (and possibly open doors for students who may previously have had difficulty in securing a placement).

Although the above might be viewed as a 'virtuous circle', it is not without its downsides from the higher education perspective. For example, the costs of maintaining high specification 'plant' within the university to equip students going out on placement to use similar equipment at the employer's site may well be a drain on institutional resources. The institution may of course view this as a necessary cost to be set against the benefits to be derived from sustaining productive links (actual and potential) with major employers.

The above refers to higher education providers sustaining links directly with (some) major employers, and some institutions have been working on such links over several years. A more recent development is that of Sector Skills Councils (which represent employers' interests in specific industries) becoming more engaged in taught course provision in higher education. The following is an illustration of this kind of development.

Skillset (the Sector Skills Council for the audio visual industries) is currently piloting a UK-wide endorsement scheme of degree-level animation courses. The scheme was introduced

in spring 2005 in response to the industry's 'concern over the lack of some basic, but crucial, technical and production skills displayed by recent graduates' (SSDA, 2005a). In addition to meeting specific curriculum design criteria, higher education providers running endorsed courses will be able to draw on a range of support services (co-ordinated by Skillset) which include work placements for students, work placements for tutors, tutorials and master classes for course leaders, provision of work-generated resources for use in the taught programmes, and mentor support for students. Currently six degree courses have been endorsed by Skillset.

In similar vein, e-skills UK has recently launched an industry-backed endorsement scheme for IT management for business degree-level programmes. This provides kite-marking for specific degree programmes and e-skills UK will (like Skillset) co-ordinate a range of support services geared towards creating enhanced links between industry and higher education learners. Currently five degree courses have been endorsed by e-skills UK.

Though in their infancy, such endorsement schemes involving undergraduate provision may represent one way of creating a sustainable partnership between higher education providers and industry, and better links between higher level skills and knowledge and work.

In other areas, demands from a specific industry (and more general businesses) have led to the development of postgraduate programmes which involve work placements. Though higher education providers may be keen to develop such programmes, current teaching funding may not cover the 'up-front' costs of development. Other HEFCE-funded initiatives (such as the Higher Education Innovation Fund) have been used to cover the potential risk involved in developing these programmes, since although there was a potential demand, the development of the programme still required significant up-front costs, for example to establish a network of local placement providers, and develop new curricula) before enrolments were secured.

3.4.2 Type B: HE-based with alternating taught modules and short placements

These types of programme are well-established and primarily found in initial teacher training and health and social care (e.g. nursing, midwifery and allied health professions). As such, they tend to be funded by agencies other than HEFCE, such as the Training and Development Agency for Schools (TDA) and the National Health Service (NHS). We consider specific aspects of TDA and NHS teaching funding methods in Section 9. Periods of 'placements' in practice situations are a compulsory part of the overall higher education programme and the programme itself is designed and delivered in close collaboration with the relevant public sector employers and their overarching agencies. Currently, subjects allied to medicine (including nursing) account for 15 per cent of all undergraduate students, and initial teacher training accounts for about a further 2 per cent.

In both education and health, the employer and the HEI provider have an equal shared interest in supporting the initial formation of specialists to work in those occupational settings, and links between initial formation/pre-registration education and the subsequent labour market are strong and professionally controlled. (Further consideration of this type of higher education and employer relationship is given in Section 7.)

QAA reviews (undertaken on behalf of the Department of Health) note areas of good practice as: active involvement of healthcare professionals in curriculum planning, effective use of link lecturers/tutors to support (workplace) mentors and practice facilitators in delivery and assessment of practice-based learning, and effective collaborations between academic and clinical staff to provide good student support and to assess students effectively. The QAA has also noted the effective use of virtual learning environments, library and ICT resources.

3.4.3 Type C: Foundation degrees

The foundation degree is seen as a key enabler of workplace learning. In a sense, the development of foundation degrees provides a substantial test-bed for a raft of issues pertinent to the development of workplace learning opportunities more generally. They are, though, a recent addition to undergraduate provision. Foundation Degree Forward (FDF), the organisation set up to support the development of foundation degrees, estimates that in 2004 some 38,000 students were enrolled on foundation degree programmes, representing about 2 per cent of the undergraduate student population.

A number of Sector Skills Councils have now developed generic foundation degree frameworks for specific employment sectors.

The development and implementation of foundation degrees (intending to meet both widening participation and workforce development needs, and individuals' own lifelong learning needs) brings to the fore certain aspects of policy and practice of relevance to other forms of workplace learning.

Some of the higher education providers interviewed had chosen not to engage in any significant way with the foundation degree initiative ('we are a research-led university...'); whereas others (both research-led and those with strong local/community links) had, with their further education partners, taken a strategic decision to embrace the concept wholeheartedly, and were ceasing to offer HNDs and replacing them with foundation degrees. But it should be noted that some foundation degrees have floundered where there turned out to be a lack of real demand from employers, and/or initial demand has not been sustained. Some of the courses for full-time students seem less successful than those for people already in the workplace. And higher education providers reported starkly contrasting positions in relation to the ease/difficulty of securing sufficient numbers of appropriate work placements for full-time foundation degree students. Other providers considered the wholesale replacement of HNDs with foundation degrees was not warranted, since certain industries/employers still wanted HNDs. We should also note that in some employment sectors, such as like early years education, foundation degrees are part of a deliberate government push to professionalise certain work roles.

Notwithstanding these generally enabling features of the foundation degree initiative, a number of issues are seen as inhibiting current developments. Several of these are pertinent to other types of workplace learning. The following records some of the main points raised by those interviewed about the Foundation degree initiative.

- *Aspects of engagement*

Historically it may be that staff in further education colleges had closer links to employers, especially at local level, than staff in HEIs. Some argued that there needed to be more interaction between further and higher education staff, so that each gained confidence and expertise in engaging with employers and negotiating aspects of provision. However, the prevailing conditions of service for each group of staff may militate against such interaction.

Engagement with employers is still seen as problematic, though in certain employment sectors overarching workforce development plans create positive environments in which foundation degrees should flourish (see Section 7 for discussion of employer engagement).

There seems to be a need for brokerage functions, particularly between higher education providers and SMEs and micro-businesses, so that there is constructive and

sustained dialogue about course provision meeting both employers' and their employees' short and medium-term needs for education, training and development.

Providers considered that engagement with learners in the workplace needed to be underpinned by effective 'managed learning environments'. But in some further education colleges particularly there was insufficient resource to operate these environments.

- *Aspects of prevailing quality, regulatory and qualification frameworks*

The overarching frameworks for assuring quality were not always seen as conducive to developing innovative provision. Those staff closest to these developments, usually in further education colleges, have tended to experience external quality processes as 'inspection regimes' rather than more collegial/peer 'developmental' reviews of quality.

It was felt that a national credit accumulation and transfer framework might encourage more flexible ways of learning, in terms of time and place, and hence encourage notions of lifelong learning.

- *Aspects of funding*

Those interviewed believed that a credit-based system of funding teaching would allow much more flexible approaches to learning, and that there might be scope for exploring further notions of employer buy-in through funding discrete elements of foundation degree programmes.

It was felt that a more coherent approach to funding provision (both recurrent funds for teaching and capital funds for equipment) at the 'boundaries' of further and higher education could assist notions of progression; but we should also note that for an individual learner 'progression' may not be linear. It was also felt by some that foundation degrees might benefit from funds going directly to further education colleges (rather than via the validating HEI).

Although HEFCE's new method of allocating additional student numbers (on a regional basis) was regarded as more appropriate than the previous method, the current 10 per cent premium for foundation degrees did not adequately reflect the cost of partnerships and employer engagement, nor the cost of developing appropriate honours degree top-ups. Moreover, as with any premium allocation forming an element of an institution's overall funding contract with HEFCE, funding is allocated as part of a block grant for institutions to distribute according to their own priorities.

3.4.4 Type D: Employment-based programmes

These types of programme depend to a large extent on negotiations between the higher education provider, learner and employer about the shape, content and level of a programme necessary to meet both the learner's needs and the needs of the employing organisation. As such, they typify (in theory at least) flexible, learner-centred higher education. Though the learner's workplace activities form the basic focus of the programme, the overall programme may comprise a blend of specific workplace activities, assessment of the learner's existing knowledge and skills, taught modules drawn from existing higher education provision, and in-house training and development. As such, these types of programme be the prime vehicle for workforce development linked to higher education awards, and could be used as top-ups to foundation degrees. They also have the potential for sustained interactions between higher education and employers, as a result of which boundaries between higher education and work may become more permeable.

But the nature and extent of negotiation needed between the higher education provider, the learner and the employer to create an acceptable programme requires a set of skills which 'traditional' academics may not possess. The complex brokerage skills required to establish an agreed programme of activities and provide ongoing support to the learner provide but one example.

Such programmes are not identified separately in official data sources so it is difficult to estimate the numbers of students involved in them, though we note the rise in professional doctorates which are likely to be of this type.

Where frameworks for such programmes are designed against a backdrop of sector-specific workforce development plans, and the programmes themselves retain a clear discipline focus, then there is likely to be acceptance of such programmes by the relevant sector (for example, in meeting continuing professional development needs of teachers). But some providers offering wholly workplace learning programmes commented that such programmes were not recognised in certain countries outside the UK, and this lack of recognition could pose problems for learners in terms of subsequent progression, in the workplace and/or in further educational endeavours.

3.5 Some general issues

Current QAA codes of practice still seem to be predicated primarily on on-site established curriculum design and delivery. Anything deviating from these 'norms' are seen within institutions as having to jump through additional hoops. Providers noted that innovative workplace learning programmes are sometimes seen as risky developments which need 'time and space' to develop their own distinctive features aligned to higher education standards and benchmarks, and to gain more general acceptance (both within their own institution, and beyond). A QAA code of practice that covered concepts of workplace learning wider than 'just' placements would serve as useful guidance in the development of such programmes.

Some institutions also considered that the current level of funding for wholly workplace learning programmes (currently price groups Band D within the HEFCE funding method, see Annex C for details) did not adequately reflect the real costs of negotiating and maintaining such programmes, and there was a lack of willingness by employers to fund all (or part) of such programmes for their employees.

The needs and experiences of the seven learners with which we started this section illustrated the enormous range of forms that workplace learning can take, even within a single workplace. All of this suggests the need for developments that are bottom-up, reflecting first-hand experiences of individual teachers, learners and employers' representatives. Many of the institutions we visited recognised this and, while generally supportive of workplace learning initiatives, took the view that departments were best left 'to get on with it' with only minimal control exerted at the institutional level. That said, institutions did have overarching strategies for their engagement with employment and employers and these could imply some limits to approaches to workplace learning.

4. Institutional strategies on workplace learning and employer engagement

4.1 Enabling factors

Individual faculties, departments and schools within institutions experience different sets of drivers for workplace learning, both external and internal. Externally, such drivers may relate to long-standing traditions of initial formation in specific professional occupational areas, to specific employment sector custom and practice, or to new initiatives on a national or regional and sub-regional basis. Internally, such drivers may relate to institutional mission, to student recruitment policies or to wider questions of employer engagement and knowledge transfer.

Workforce development initiatives in particular industries have created environments (supported at sub-regional level) in which employers have been looking to HEIs to work in partnership to deliver appropriate programmes and pathways for employees at various levels of the organisation. Some higher education providers have been seeking better ways of engaging with regional workforce agendas, even though an employer's main office might not be located in that region, and have suggested that certain regional agencies might be funded to develop and sustain employer networks 'on behalf' of higher education in the region.

Other drivers towards more workplace learning have included the current HEFCE-funded Lifelong Learning Networks initiative. This was seen by those who had chosen to engage with the networks as focusing higher education providers' attention more on workplace learning for progression purposes, and this was likely to 'rub-off' into other areas. However, some pre-1992 universities commented that Lifelong Learning Networks and foundation degrees were 'not our niche... we already have an oversupply of well-qualified young applicants'.

Some institutions considered that drives towards a more market-oriented system of higher education would encourage a more explicit focus on vocational dimensions of higher education provision and, within that, more explicit links to workplace environments through workplace learning.

It is evident that most institutions are quite heavily dependent on HEFCE teaching funding grants to finance their internal operations (wherein 'every little bit helps'...be it premiums for part-time students or for foundation degrees). But some institutions have a strategy to reduce their dependency on HEFCE funds and hence to spread their financial risk. Such levels of dependency might affect the extent to which an institution has the scope (and confidence) to take risks with curriculum innovations, including workplace learning, to free-up staff time to adopt more entrepreneurial approaches, and to establish links with their local/sub-regional communities, and hence develop innovative offerings. They might also affect whether an HEI has the potential to mount 'loss leaders' by the use of cross-subsidies.

There now seems to be a bewildering array of potentially relevant funding streams (regional, national, international) to support higher education/employer interactions, either by supplementing funds for existing activities or funding new ones. It may be that this then needs more staff within higher education to have an entrepreneurial eye to see the potential of seeking new sources of finance and/or supplementing existing sources in order to bring about specific developments.

Notwithstanding some of the specific initiatives referred to above, it was considered that the level of public funding for higher education meant that general engagement with employers was becoming increasingly important as a means of generating revenue.

4.2 Inhibiting factors

Against such potentially enabling factors, we note a number of general inhibitors to the development of workplace learning. These are pretty much irrespective of the form the workplace learning takes.

First, current funding models are seen to work against flexible provision (of workplace learning, and of higher education programmes generally) and as such do not 'fit' with actual patterns of learner experiences. For example, part-time work-based learners faced with changing work situations, relocations and the like might need to suspend studies part way through a year of study. Currently, institutions consider they would be financially penalised for such non-completion.

Second, there are specific (but not new) issues relating to higher education within further education colleges, including the issue of public funding for non-prescribed higher education courses, which can be a key element in progression pathways for workplace learners. [We note that the DfES/HEFCE/Learning and Skills Council (LSC) Joint Progression Strategy group is continuing to discuss these funding boundary issues.]

Third, certain institutional performance indicators, such as like completion rates, seem to work against notions of learner flexibility and learners completing parts of an overall programme at times/stages which make sense to them. Such stages might not necessarily fit neatly into pre-set academic cycles.

Fourth, given the distributed nature of sites of learning for programmes in which workplace learning is a core part of the programme, it seems that virtual/managed learning environments (VLEs) are often an important feature of such programmes. But resources (especially in further education colleges, but arguably also in workplaces) may be inadequate to fully exploit VLEs. Current funded initiatives in this area include the managed learning environment programme funded by the Joint Information Systems Committee (JISC); and the newly-established Centres for Excellence in Teaching and Learning, many of which aim to develop ICT and VLE supported learning. But there seems to be a need for better co-ordination between these activities to encourage coherent, joined-up approaches and practical applications, and wide and effective dissemination of lessons learned from current, publicly-funded initiatives.

Fifth, many providers considered that the current student support systems for part-time students (for whom workplace learning could be a significant route to the development of high level skills and knowledge) had been poorly thought through, and there could be a reduction in the numbers of such students in the future. [It was not then known to what extent the Government's most recent announcements relating to financial support for part-time students might ameliorate the current situation.] Additionally, the introduction of variable top-up fees in 2006 was seen as impacting disproportionately on the very groups of potential students being targeted for foundation degrees.

Sixth, QAA codes of practice still seem to be predicated primarily on on-site delivery, and established curriculum design and delivery: anything deviating from these 'norms' are seen by institutions as having to jump through additional hoops.

Seventh, some higher education providers noted a lack of good and efficient brokerage between providers and business, and a lack of quick access to up-front funds to meet the costs of feasibility studies to bring on board potential backers for collaborative endeavours with business (see Section 7 for further discussion).

Finally, some providers offering wholly workplace learning programmes commented that these programmes were not recognised in certain countries outside the UK. Such lack of recognition could pose problems for learners in terms of subsequent progression (in the workplace and/or in further educational endeavours). [We note that the proposed European Qualifications Framework for Lifelong Learning does include specific reference to workplace learning: alignment of national frameworks to the proposed European framework might go some way to alleviating this problem.]

4.3 Higher education’s perspectives: some general conclusions and recommendations

HEIs’ strategies for learning and teaching embrace a range of objectives which in turn embrace different aspects of employability and work-related learning, including links to widening participation and lifelong learning. Workplace learning that is defined as learning derived from workplace activities and assessed and accredited as part of a higher education programme represents only one aspect of workplace learning. Furthermore, institutional approaches to workplace learning are diverse and reach into other institutional functions, including research and development and knowledge exchange, although they are not necessarily co-ordinated in a strategic manner.

Curricular approaches to workplace learning tend to fall into a small number of main types. In Table 5 (which is reproduced in the executive summary) we list these main types in relation to the stage in the life course they are likely to fall and indicate their current state and likely trends.

Table 5: Trends in higher education programmes involving workplace learning (WPL)

Stage in life course	Type of programme	Current state/trends
Initial formation	HE-based programme (at undergraduate or postgraduate level) with WPL module or longer placement in workplace environment	Well-established (particularly sandwich) Funding adequate Evidence of renewed interest in some institutions Evidence of decreasing take-up by some types of learner
Initial formation	HE-based programme (at undergraduate level) with alternating sequence of taught modules and short practice in relevant occupational settings	Well-established, particularly in health, social care, education. Many programmes funded outside HEFCE remit
Learner in the workplace (primarily)	HE-based programme (foundation degree): some integration of taught modules with activities in actual (or simulated) work settings	Recent development. Still ongoing issues of adequate funding, employer engagement, and prevailing quality, regulatory and qualification frameworks
Learner in the workplace	Employment-based programme: negotiated between HE, employer and learner. Focus on learner’s workplace activities	Still to achieve widespread take-up, though possibly increasing. Has potential to be prime vehicle for workforce development linked to HE programmes. Has potential to be top-up to foundation degrees

There is an implicit (if not explicit) functional inter-connectedness between institutions' teaching and learning, research and development, and widening participation activities. These may all on occasion involve, to a greater or lesser extent, higher education's engagement with employers. Practice varies considerably between institutions, reflecting factors such as institutional mission, location and historic links with particular employment sectors.

The distributed nature of workplace learning implies that different aspects of the learning process will need to be shared between higher education and employment. This raises large issues for staff development if workplace learning is to become common beyond its traditional strongholds.

We have identified a number of enablers and inhibitors of workplace learning but it is evident that these impact differently in different institutions and different departments. We note some evidence that the diversity of approaches may fit with an increasing stratification of higher education within the UK. For example, an 'elite' sector of sandwich course providers may be developing at a time where the sandwich principle is under pressure in some of its traditional homes. Institutions also differ in the extent to which they feel able to take risks with innovative curriculum provision, including workplace learning, and have the potential to mount 'loss leaders'.

Specifically in relation to higher education programmes incorporating workplace learning, we recommend the following short-term and medium-term actions:

- *HE-based programme with workplace module or longer placement:*

short term – ensure DfES review of student support arrangements looks at impact on differential take-up of sandwich programmes;

medium term – commission study of HESA data to track longer-term trends in take-up by different types of learner.

- *HE-based programme with alternating sequences of taught modules and short practice placements:*

short term – consider what lessons, if any, might be drawn from other agencies' funding arrangements.

- *HE-based programmes with some integration of taught modules with work activities (foundation degrees):*

short term – review funding arrangements, consider further research and development in light of QAA reviews;

medium term – consider more explicit focus on brokerage process; ask QAA to ensure appropriate higher education input to Sector Skill Council frameworks for foundation degrees.

- *Employment-based programme, negotiated between higher education, employer and learner:*

short term – review funding arrangements, ask QAA to review current guidance on placement learning to incorporate other forms of workplace learning;

medium term – encourage further development and commission evaluation.

In respect of access by workplace learners to effective 'managed learning environments', we recommend that in the short-term HEFCE should ensure that its current e-learning strategy captures this dimension. In the medium-term, HEFCE should ensure that other e-based teaching and learning funded initiatives (including those in the newly-funded CETLs) are reviewed, and lessons for workplace learning identified and disseminated.

More generally, we recommend that:

- HEFCE should expect institutional strategies for learning and teaching to make explicit reference to workplace learning and to describe how the institution plans to engage with learners already in the workplace;
- HEFCE should expect institutions to have an agreed set of 'rules of engagement' so that individual departments that seek to engage with employers and workplace learners do so on the basis of an institutionally-agreed set of standards;
- in the medium term, HEFCE should commission specific studies in order to gain a better understanding of how higher education's functions and activities in relation to teaching and learning, research and development and consultancy are inter-linked, the synergies between them and the benefits that accrue from such inter-linking;
- recognising the distributed nature of workplace learning, HEFCE should initiate discussions with relevant parties (including the Higher Education Academy and employer representative bodies) about the need for considerable investment in relevant staff development.

Finally, it will be important that the lessons from fundamental research into the nature of learning and the factors that promote it are recognised and applied to workplace learning. The relevance of several projects in the ESRC Teaching and Learning Research Programme is noted in this respect. We commented in Section 2 that the research literature on the effectiveness of different forms of workplace learning is at best ambiguous in its conclusions. Today's political pressures and the enthusiasm of advocates for particular approaches to workplace learning should not be taken as adequate evidence for their effectiveness. On the one hand, today's fashions can become very unfashionable tomorrow. On the other hand, the strong trend for people to combine learning and working throughout the life course needs to be recognised. Thus, our final recommendation in this section is that HEFCE takes the 'long view', does not necessarily privilege those forms of workplace learning which have the strongest advocates today, but considers how all forms of relevant learning in the workplace can be given appropriate public recognition by higher education.

5. Employer perspectives

5.1 Introduction

As part of this study, HEFCE was particularly concerned to investigate the views of employers on workplace learning at higher skills levels and the potential for closer links between higher education and work. There are of course a large number of long-established professional bodies that develop and maintain recognised standards of competence within their own professions, whether or not there is a linked licence to practise as a professional in the relevant field of employment. In cases where registration with the professional body is based on degree-level education, and further professional development, there are already close links between higher education programmes (which may include workplace learning) and the relevant professional body. However, such professional bodies do not necessarily represent the general views of employers.

The study attempted to capture the views of employers through some of their representative bodies, especially particular Sector Skills Councils. These employer-led organisations have a UK-wide remit to reduce skills gaps and shortages, and improve productivity and business performance in their specific employment sectors. As such they should be well-placed to provide an employer perspective on links between higher levels of learning and work. We were also able to draw on parallel discussions that were taking place under the auspices of the CIHE⁶. We concentrated on four Sector Skills Councils: Construction Industry Training Board (CITB) Construction Skills; e-skills UK, covering IT and telecoms industries; SEMTA, covering engineering and science industries; and Skillset, covering TV, broadcasting and media industries. Each of these was in the process of developing Sector Skills Agreements in relation to education and training needs for their sectors and sub-sectors. As such, they should have already considered their sector's education and training needs at higher levels.

However, in many employment sectors the Sector Skills Council is just one of a number of bodies that represent employers' views and have links with higher education. For example, in the construction industry, there are a number of professional bodies liaising with higher education, and CITB-Construction Skills is a major sponsor of a specific programme, 'Accelerating Change in the Built Environment' that seems to be the main route for developing higher education and industry engagement initiatives (rather than CITB-Construction Skills itself)⁷. In engineering, the Engineering Training Board liaises with higher education, as do a number of professional bodies. Moreover, Sector Skills Councils are a fairly recent addition to the education/training/employment landscape in the UK, and a priority for most of them has been to address issues of skills gaps and shortages at lower, rather than higher, levels of education and training. Thus it is probably premature to expect all such bodies to have well-established links and understandings of the range of educational and training provision at higher levels.

Whereas higher education providers may think of workplace learning in terms of particular types of academic programmes leading to specific qualifications, employers may well perceive higher education offerings (including those that include elements of workplace learning) in a different manner. Thus the sandwich placement may be viewed as a potential early-recruitment process rather than a learning opportunity. The fact that an employee's work on a specific business project has been recognised in academic terms may be of secondary interest to the employer. Of more direct interest to the employer is the fact

⁷ This programme is also funded through HEFCE, as part of The Construction Knowledge Exchange.

that, as a result of the project, new more efficient and effective working practices are now in place.

It is useful to consider employer perspectives on workplace learning in terms of initial formation, and continuing development for those already in the workplace.

5.2 Initial formation at higher levels

Sector Skills Councils noted there was a need for greater understanding between the councils themselves and higher education providers (and HEFCE) about industry's needs for higher level skills and knowledge and how such needs might best be met and by whom. That said, recent developments suggest that certain Sector Skills Councils are taking an active role in creating better links between educational and training provision aimed at developing higher level skills and knowledge in relation to the perceived needs of their industries.

As noted earlier, two Sector Skills Councils are piloting endorsement schemes for degree programmes. These entail the council becoming much more involved in initial programme design and include a range of support activities designed to effect closer links between higher education and the world of work in specific industries. Further, a number of Sector Skills Councils have now established foundation degree frameworks, and both e-skills UK and SEMTA are piloting models of 'higher apprenticeships', building on advanced apprenticeships, and extending the workplace learning elements of the apprenticeship to higher levels of education.

Some Sector Skills Councils are working towards improving the provision of management-focused and more technical NVQs at Level 4, and reviewing how such work-focused awards could be part of degree programmes. Such actions may lead to some expansion of workplace learning opportunities at higher levels, but we should note that other similar initiatives undertaken in the fairly recent past failed to become established⁸. It may be that with more overt employer backing (as evidenced by Sector Skills Councils now taking a lead in this respect) these newer developments might succeed.

As noted earlier, in more established sectors of employment, professional bodies have long been involved in accrediting relevant degree courses. But for some Sector Skills Councils, professional bodies' practices seem slow to accept workplace learning.

5.3 Continuing development for those already in the workforce

National surveys of employers continue to show that employers do not make great use of higher education to meet training and skills needs (see, for example, CBI, 2005a). However, recent work undertaken by the CIHE (and others) shows very clearly that higher education is playing a role in meeting workforce development needs at intermediate and higher levels (see for example, Connor, 2005). HEFCE's own regular surveys of higher education's interactions with business and community organisations also provide evidence of engagement with workforce development activities at higher levels (Higher education-business and community interaction survey, HEFCE 2005/07). CIHE's recent report,

⁸ The 'graduate apprenticeship' schemes, launched in 2001/02 and funded by HEFCE, were intended to include scope for achieving higher level NVQs within an overall taught programme leading to a higher education qualification. About 80 such schemes were devised, but a review undertaken in 2003 (commissioned by HEFCE) found that almost half had been abandoned; three-quarters of the remaining 40+ schemes faced funding difficulties, and a fifth had been subsumed within existing vocationally-oriented degrees (Bowers-Brown et al., 2003).

which uses the term workforce development to denote 'the demand-led nature of the learning, emphasising that it is geared towards the specific skill needs of the business and employees' (Connor, *ibid*, p.8), identifies a number of different models of workforce development involving higher education:

- as part of a higher education programme, where the employee studies part-time and has workplace learning accredited;
- as part of a company workforce development programme where some elements are delivered by an HEI and accredited towards gaining a higher education qualification, or where company-designed training is subsequently given a credit-rating by higher education (which the employee can count towards a higher education qualification);
- the assessment by higher education staff of NVQs at Level 4 or 5, or of learning for awards accredited by professional bodies;
- non-accredited learning delivered by higher education, where the employee and/or their employer is not interested in accreditation *per se* or where accreditation is not seen by the employer to merit the time and cost necessary to go through the required processes.

(based on Connor, *ibid*, p.9)

As Connor notes, the extent to which work activities are incorporated into such learning can vary, and hence the boundaries of workforce development and links to higher education may not be clear-cut.

5.4 Employer engagement with higher education at strategic levels

Given the limited experience of higher education of some Sector Skills Councils, it is not surprising that they expressed difficulty in engaging with HEIs at a strategic level (rather than engaging with a large number of disparate providers and/or specific numbers of providers that may be 'clustered' on a regional or sub-regional basis). Concerns were also expressed about the difficulty of developing a knowledge base in relation to the quality of higher education provision and its relevance to any particular sector's needs, given the range and diversity of provision. The new government initiative involving the creation of Skills Academies (in part seen as developing the notions of Centres of Vocational Excellence) may in time create a 'route map' to good quality higher level skills development linked to employers' needs, but currently most Skills Academies are focusing primarily on lower, rather than higher, level skills.

Sector Skills Councils considered that a further inhibitor to workplace learning was created by the unco-ordinated nature and wide range of local, sub-regional and regional initiatives, and different funding streams available through such initiatives, which employers found confusing. Further, at a national level, discussions on educational providers' roles in workforce development still tend to separate out the further and higher education roles, whereas arguably from an employer perspective such separation is of limited relevance. However, some of the new HEFCE-funded Centres for Knowledge Exchange (see Annex G) do explicitly refer to working with local further education partners and enhancing further and higher education collaboration to support local employers.

A linked issue is the long-standing difficulty of trying to engage small businesses in activities geared towards enhancing the skills levels of existing employees. Part of the problem stems from having insufficient time and resource to identify skills gaps and to find out about the possibilities of using public funding to pay towards training and development.

Recognising these difficulties, one particular Sector Skills Council, SEMTA, has recently launched a pilot scheme, the 'national sector brokerage project', in partnership with the DfES, Jobcentre Plus and the European Social Fund. The project is aimed at engineering SMEs in England and plans to help such firms address the skills needs of their employees. It has been introduced following the publication of SEMTA's Sector Skills Agreement which showed that half of the industry's workforce would need upskilling in the next five years (SSDA, 2005b). However, it is interesting to note that the SSDA's web pages carrying news of this development fail to refer specifically to higher education as a possible provider to meet the workforce development needs of the engineering sector. Rather, the project 'will also help inform agencies such as the Regional Development Agencies...the Learning and Skills Council and Regional Skills Partnerships on the workforce development needs'. Whilst accepting that regional skills partnerships should also involve higher education providers, there is a sense that the lack of specific reference to higher education creates a perception of 'boundaries' between different levels of provider (in this case further but not higher education) and hence a sense that workforce development needs may not extend to higher levels.

5.5 Conclusion

In considering the perspectives of employers, we can perhaps rather lamely point to their diversity and ambiguity. It is difficult to find general statements that hold across employment sectors and workplace contexts and are equally relevant to learners/workers at different stages in their life course and professional development. Representative and intermediary bodies strive to provide a coherent employer 'voice' but inevitably struggle from being at least one step removed from both the employer and the learner. On the basis of the present study and of other research, it seems that higher education and employer links are most productive at the level of the individual workplace and the individual academic department. But the promotion and extension of such links poses considerable challenges at levels beyond this.

In future, it would probably help if:

- complexities and ambiguities of 'boundaries' were acknowledged, for example between further and higher education levels;
- the multiple interests and roles of individual employers, their representative bodies and intermediary organisations were more fully recognised;
- the distinctions between employer and employee interests and between short-term and long-term perspectives were remembered;
- the distinctions between the above and the long-term interests of the whole society were also remembered;
- and finally, that the entirely understandable and legitimate advocacy and promotional activities of particular interest groups be subject to the kind of rigorous independent scrutiny and evaluation that might be regarded as especially appropriate to activities linked to higher education.

6. Workplace learners

6.1 Introduction

We know from a variety of sources that most (60 per cent or so) full-time undergraduate students undertake a substantial number of hours of paid employment each week while they are studying. The proportion among part-time students is even greater. Furthermore, all workers are learning while at work, and not just new skills and competencies. They are learning about themselves, about their relationships with others, about the organisations that pay their wages, about the clients of those organisations, and so on. Workplace learning is about more than work. Most of it has very little connection with formal education, 'higher' or otherwise.

In the brief for this study, HEFCE indicated that its prime concern lay with workplace learning as part of a higher education programme but also that it was interested in learning at higher levels that was integrated with work. This suggests quite fuzzy boundaries. Workplace learning that is *currently* part of a higher education programme is surely only a sub-set of a larger body of workplace learning that *might*, with benefit, form part of such a programme. Some HEIs are already finding ways of recognising learning from more casual term-time employment, while others (a majority) are much more cautious in this respect. But even where institutions have developed frameworks to recognise and give credit to such learning (and learning derived from other external activities, such as community-based and voluntary work), the number of learners that use such frameworks remains very small (see for example, Little et al. 2002).

6.2 Questions from a learner perspective

From a learner perspective, we can ask a whole series of questions about workplace learning. For example,

- At what stage in the life course does it occur? (Do the learners already have employment experience(s)? Are they developing new occupational competencies? Are they enhancing existing ones?)
- Does the learner see themselves as primarily a student or a worker or do both have equal importance?
- Does the learner's employer know about the learning?
- Do the learner's teachers (if there are teachers) know about the work?
- Do the learner's teachers and employer know about each other?
- Is this workplace learning going to help the learner do their present job better or is it to help them obtain a different or better job?
- And, fundamentally, is the workplace learning explicitly linked to a higher education programme – as part of one or as an admission route into one?
- Even if not part of a formal programme, is it nevertheless possible to gain some recognition for the learning?

It may not be possible to provide general answers to many of these questions because the answers may depend on the individual circumstances of the learner. In Section 3 of this report, we attempted to represent something of the variety of types of workplace learning by presenting pen-portraits of seven employees all working in the same office and all (in their different ways) engaging with workplace learning. For some (Jed and Jayanti) this was

part of their initial professional formation taking place before entering the labour market, i.e. before getting their first 'proper' job. For others, it was part of their continuing professional development. This could be (as in the case of Joe and Jas) about progressing within an existing employment context, or it could be about (as in the case of Jake) 'escaping' that context by acquiring knowledge and credentials that would be the basis of a career change. The workplace learning of Jed, Jayanti, Joe and Jas would all be publicly recognised through a higher education award. But there are many other cases (Jen and Jackie in our examples) where workplace learning goes unacknowledged in the workplace and unrecognised by higher education. (It may not be irrelevant that Jen and Jackie are women.)

What these illustrations tried to show was that, depending on a person's circumstances and motivations, the answers to questions about workplace learning such as those posed above will differ. In the case of learning that is planned to be part of a higher education programme, such 'individuality' suggests that prior negotiations (which in some cases will be detailed) need to take place between learner and 'provider' (both higher education provider and workplace) before embarking on activities geared towards achieving learning that can be evidenced and assessed. Even where workplace learning is not planned as such, there is a case for access to advice and guidance on how recognition of such learning might be achieved, and possibly form the initial stages of an individual's plan for continuing development and access to formal education and training.

We noted earlier that workplaces differ considerably in their potentials as learning settings and in terms of the equality of access to learning they offer. The status the learner has in the workplace may affect how he or she is viewed by others in the workplace, how he or she fits into existing workplace cultures and structures, all of which may determine access to learning opportunities. For example, a student moving in to the workplace for a set period of time to undertake specific tasks may be treated differently from a learner already in the workplace with a defined role and position but who, for the purposes of the higher education programme, needs to gain access to a wider range of tasks and wider set of staff.

We also noted that workplace learning is variously valued because it is 'different from', 'similar to' or 'better than' forms of academic learning. These are distinctions that may need debate and agreement between the parties concerned, including the learner. And in designing and delivering programmes involving workplace learning, HEIs need to address key issues relating to transfer of knowledge from one context to another. The goal and achievement of such transfer is something that needs to be explicit to the learner.

It might be reasonable for HEFCE to expect institutions to address these issues in their learning and teaching strategies, including the question of whether individuals can claim some form of recognition for learning derived from workplace experiences which have *not* been planned in advance as part of a formal programme.

Given these complexities what might a learner expect, both from an HEI and from an employer?

6.3 Learner expectations

Aspects of learner expectations and entitlements were considered in the second phase of the study. In some ways, the term 'entitlement' was seen as problematic in that it conveyed notions of a learner's right to things provided by others. This would imply notions of obligation on these others. In sectors of employment where formal frameworks for workplace learning were already in place, as part of initial formation or continuing professional development, such notions would be more acceptable (and already be written

into the relevant frameworks). However, use of the term 'entitlement' more widely does help to focus discussion on different partners' expectations.

This study suggests that a (potential) learner in the workplace might expect to receive or have access to:

(i) in terms of advice and guidance:

- some prior advice and guidance on how and what they might learn from their workplace experiences;
- advice and guidance about the potential level of that learning (and hence potential access to funds to support that learning);

(ii) in terms of negotiating a planned programme of study:

- some prior assessment of current knowledge and skills, against which intentions for personal development and explicit learning gains might be negotiated, taking into account organisational needs where applicable;
- agreement between workplace and higher education provider that these intentions are realistic and achievable, and fit with the learner's current aspirations;

(iii) in terms of support for learning:

- identification of what support for learning will be made available, by whom and through what medium. This might include a distributed network of people, including workplace mentors and institution-based tutors; and a distributed network of materials, including web-based resources;
- guidance and assessment to inform progress throughout the learning period;

(iv) in terms of assessment and recognition of learning:

- agreement between workplace and higher education provider on assessment criteria and who will be doing the assessment, how and when;
- recognition of learning gains both publicly, in the form of academic credit and/or a higher education qualification, and within the workplace.

Many of the above expectations will be covered by current practices (for example on learner support and guidance, on personal development planning and progress files) guided by the QAA's codes of practice and the like. However, these are more likely to be geared to full-time students going in to the workplace, and for whom workplace learning is part of initial formation, rather than to people already in the workplace, for whom workplace learning may be part of continuing personal and professional development, or a route to accessing higher education.

In particular, the QAA's code of practice for the assurance of academic quality and standards has a separate set of precepts concerning placement learning, covering amongst other things approving placements, student responsibilities and rights, support and guidance. The phrase 'placement learning' reinforces notions of a student going out into the workplace. The QAA is embarking on a review of these precepts and we suggest that its review takes a broader standpoint, to embrace interests of learners already in the workplace.

With regard to learners already in the workplace there are some specific aspects which merit further consideration.

First, although techniques for assessing and accrediting an individual's knowledge and skills gained through prior experiential learning may be long-established in higher education, it still tends to be a marginal activity for most HEIs, and tends to be used primarily for granting individuals some measure of 'advanced standing' to existing programmes. A recent review of the accreditation of prior experiential learning (APEL) in the UK noted that outside the UK APEL is used in a much wider sense and is high on the educational agenda. That same review elaborated a model capable of moving beyond existing narrow conceptions of APEL for 'advanced standing', towards recognition of learning for developmental purposes at work (see Garnett, Portwood and Costley, 2004). Such broader notions may suggest a fruitful way forward and merit further development, including consideration of the implications for staff development.

Second, we note earlier in the report (Section 3) that current qualification frameworks are seen as inhibiting more flexible forms of provision and more flexible ways of recognising learning achievements which may not be 'worth' a full qualification but are 'worth' credit points. Much development work has already been undertaken on establishing a national credit framework for higher education.⁹ Arising from the Government's most recent White Paper on skills, 'Skills: getting on in business, getting on at work' (DfES, DTI, HM Treasury, DWP, 2005), HEFCE has been asked for advice on how to move to a national credit framework by 2010.

Consultations on proposals for national credit arrangements are currently under way.¹⁰ Beyond specific considerations of national credit frameworks and qualifications frameworks, we also note that consultations on the development of a common European Qualifications Framework for Lifelong Learning are taking place¹¹ (Commission of the European Communities, 2005). The framework as currently drafted contains specific reference to learning in the workplace and as such could be an enabling device to ensure that national qualification frameworks (and within those, national credit frameworks) do embrace workplace learning.

From the above we can see that some of the more technical aspects (relating to guidance and credit and qualification frameworks) that underpin certain features of learner expectations of workplace learning are already being moved forward by higher education providers and relevant agencies. However, it would be desirable for Sector Skills Councils, with their remit for improving productivity in the workplace, (and the discussions between employers, trades unions and other stakeholders about how to bring about such improvement) also to be considering issues relating to learner entitlements.

6.4 Equitable access to workplace learning

A recent study for HEFCE on the demand for flexible and innovative types of higher education (SQW and Taylor, Nelson Sofres, 2006) noted that both current and prospective students saw benefits in higher education programmes that involved some element of

⁹ For example, the work undertaken by the joint credit consortia of England, Wales and Northern Ireland at the request of the QAA.

¹⁰ Consultations on how England can develop a more coherent approach to credit to support student progression both into and within higher education is currently being undertaken jointly by Universities UK and the Standing Conference of Principals (UUK, 2005).

¹¹ It is proposed that a European Qualifications Framework consists of three elements: common reference points, described in terms of learning outcomes and levels; tools and instruments to address individual needs (including an integrated European credit transfer and accumulation system for lifelong learning); and common principles and procedures (focusing on quality assurance, validation, guidance and key competences).

workplace learning (be it work experience, placements with employers, or accreditation of employer training). Learners located primarily in higher education, and for whom higher education is part of their initial professional formation, may be able to opt to transfer into the workplace for a specific period, as part of their overall programme of studies. We found that some higher education providers sensed a decrease in the numbers of students choosing to take on year-long work placements; whereas others were noting an increase, and were deliberately changing internal structures to meet this increase and to encourage the take-up of placements. These institutional differences reflect differences in emphasis and mission but also in student populations.

At one level, workplace learning for higher education students is a matter of choice, both for the individual and the higher education provider. But given the benefits that can accrue, both for the individual and the higher education provider, there are also issues of equity. One reason put forward for the decreasing take-up of placements by certain groups of students is linked to tuition fees and student support arrangements. Not only are some students choosing not to extend their programme of study by a further year but, for some, it is difficult to fit a year-long placement around other commitments, including regular term-time employment.

Further, many higher education providers consider that current financial support arrangements for part-time students act as a barrier to learning at higher levels, and will become even more of a barrier in the future. The Government's recent announcement of additional funding for part-time students may help to address this problem.

Learner support arrangements are not directly within HEFCE's remit. But HEFCE should try to ensure that the forthcoming DfES review of student support arrangements considers the extent to which current arrangements act as a barrier to the take-up of workplace learning of various types.

For learners and potential learners already in the workplace, we have already noted that a person's access to learning in the workplace will depend on a range of issues, including custom and practice in their employment sector and the prevailing cultures within their organisation. Such factors are beyond HEFCE's direct remit and influence. But (as noted in Section 2) moves towards positive approaches to workforce development might be engendered in a number of ways, including creating opportunities for individuals to reflect on their work practices and knowledge of the workplace (so that learning is seen as part of their normal work); considering training and development needs beyond narrow conceptions of technical skills; providing access to knowledge-based qualifications; and supporting leadership and management development. All of these could legitimately be part of any discussion as part of a brokerage function between higher education and employment.

6.5 Summary and recommendations

Learners may view workplace learning from a range of perspectives and may have very different aims in mind when embarking on it. Workplace learning 'providers' should ensure that appropriate negotiations have taken place between all parties (learner, employer, higher education provider) so that learners' aspirations are realistic and achievable.

Workplace learning entitlements are likely to vary depending on employment contexts, but all parties should be clear what the learner's entitlements are, and how they will be met in practice. HEFCE should initiate discussions with other parties (Sector Skills Councils, relevant trade unions) about workplace learner entitlements.

There are specific issues relating to student support arrangements that might adversely affect individual access to workplace learning. HEFCE should ask the DfES to take these into account in its forthcoming review.

HEFCE should ask the QAA to consider taking a broader view of placement learning, to embrace notions of learners already in the workplace. It should also ask the QAA to consider taking forward discussions about the wider potential of APEL processes, beyond 'providing individuals with advanced standing to existing higher education programmes.

HEFCE should expect institutions to have developed institutional policies on recognising learning derived from more casual employment experiences, as well as learning derived from experiences planned as part of a formal programme.

7. Employer engagement and brokerage

7.1 Types of employer engagement with higher education

Higher education's engagement with employers has a long tradition, especially in certain disciplines. Certain aspects of this engagement have been given increasing prominence in policy developments recently, in terms of both the continuing professional development of employees, and companies' research and development activities.

There is a wide range of types and levels of employer engagement with higher education extending from low to high levels. Any detailed analysis of the characteristics of such engagement (for example, the extent of an employer's role in supporting and assessing workplace learning) will reflect, in large part, custom and practice in the particular employment sector.

7.1.1 High levels of engagement, for example the health service

A high level of engagement is characterised by situations where the employer and the higher education provider have an equal shared interest in ensuring high standards of education and training to support the initial formation of specialists to work in that employment sector, the continuing development of those specialists, and the continuing development of other employees. There is a high level of interaction between higher education providers and employers and, to some extent, integration of activities and personnel. The engagement is sustainable over the long-term and not subject to the vagaries of short-term business decisions.

The relationship of higher education to the NHS typifies such a situation. The NHS Agenda for Change and its plans for modernisation of the service are a key driver behind decisions by employers (for example, NHS Trusts and social services departments) to look to higher education in general and workplace learning in particular as a way of meeting continuing professional development requirements within the healthcare services. Universities educate virtually all healthcare professionals; on completion of their professional education and training, these practitioners move into a range of careers in both the NHS and other independent healthcare providers (UUK, 2003). The link between initial formation/pre-registration education and the subsequent labour market requirements is strong, with many academic programmes culminating in a 'licence to practise' in a specific professional role, as well as an academic award.

Higher education also educates the managers of the health service and provides post-registration education and training for healthcare professionals. Foundation degrees have been developed to support existing and new roles for healthcare staff (UUK, *ibid*). The NHS strategic changes in workforce planning and the development and delivery of patient care have created an environment in which using the workplace as a site for learning (for both potential and existing staff) is fundamental. Thus, in the health service, partnerships between HEIs and employers are the norm.

This high level of employer engagement can be seen in many different aspects of workplace learning, including:

- partnerships with local HEIs are placed within strategic health authorities' strategies for education and commissioning and practice placements;

- the active involvement of health professionals in curriculum planning and good working relationships between academic and clinical staff are highlighted as good practice by the QAA;
- team teaching (involving staff from an HEI and the local health and social work services) is used for teaching, assessment and supervision in the 'practice environment' and there may be joint appointments by the HEI and the health or social services;
- a hybrid role of 'practice educator' has developed, providing additional support to students on practice placements, and providing links between HE-based staff and practitioners;
- training courses have been developed for workplace tutors which help them acquire skills in assessing practice (seen as part of their career development); at the same time the course meets the NHS requirement for staff to have personal development plans.

Several aspects of the interconnectedness of higher education functions are also evident in respect to the NHS. HEIs undertake most UK health research in partnership with the NHS, and that research underpins evidence-based practice and supports improved patient care. Furthermore, HE staff and students contribute to patient care (UUK, *ibid*).

7.1.2 Medium levels of engagement

Medium levels of employer engagement in relation to workplace learning might be characterised by less tightly bound and less comprehensive links between higher education and employers, for example, where higher education is neither the sole nor the preferred choice as provider of continuing professional development for employees. Nevertheless, moves are being taken to strengthen links. One example would be a government-backed move to support the accreditation by higher education providers of continuing professional development activities for a particular set of workers in the private sector. The Department for Environment, Food and Rural Affairs programme of continuing professional development for farmers – 'Learning, Skills and Knowledge' – is one such example.

7.1.3 Low levels of engagement

Low level engagement in relation to workplace learning would be characterised by employment sectors in which there is no overarching strategic drive towards improving links between higher education and business for the learner's initial formation, and little emphasis on continuing professional development for existing employees. It is left to an individual learner to seek out opportunities to gain work experiences during higher education, and once in work it is an individual's choice to seek out and undertake further professional development.

It must be emphasised that for certain types of workplace learning and certain types of learner, a low level of employer engagement may be quite appropriate. Employer and employee interests will not always coincide, especially over the long term.

Any strategy for workplace learning needs to take into account the existing and differing levels of employer engagement and relate them to the different types of workplace learning and learners discussed earlier. For some types, it might be desirable to try to ensure a minimum level of employer engagement, however defined. If agreed levels of engagement could be reached, then it might also be possible to establish models of funding workplace learning that reflected that engagement, with funds being directed towards particular aspects of the learning process. But we also note the need to balance employers' demands

(for example, for tailored courses geared to specific and current business needs) against the needs of the individual as learner and as employee. Agreements about levels of engagement by employers will also need to state those things that employers should not be involved in.

7.2 Lessons from further education

Some of the people and organisations who provided evidence to the present study felt that much of the recent experience of employer engagement by further education could inform developments in higher education. Others expressed caution. Our comments at the outset on this subject would be that while the distinctions between further and higher education may not be of great interest to some employers – and there is certainly overlap in the functions and activities of the two sectors – there are a number of important differences between the sectors that would make the direct transfer of experience problematic. These include the essentially local focus of further education, the differences in occupational levels and job types served by the two sectors, and the considerable differences in organisational cultures and management processes between further and higher education institutions. That said, emphasising the differences between educational sectors should not blind us to the equally large differences between individual institutions, regardless of sector. Some HEIs have a lot in common with their further education counterparts, others have hardly anything. The diversity of institutions and their contexts and environments is something that policy bodies and employers need continuously to bear in mind.

Given the foregoing, we consider it useful to review the findings of recent studies relating to further education's engagement with employers. These studies have examined the level of responsiveness of further education providers to employers' needs, to meeting local skill needs, and the use of employer clusters and supply chains to enhance skills development. Some of these studies were undertaken with a view to informing policy and developing good practice in support of the DfES' Success for All strategy (2003). Part of that strategy was an expectation that colleges and other providers would support employers and people in the workforce in accessible ways to meet local, regional and national skill needs.

Although these studies were primarily focused on further education, they may have relevance to similar considerations with regard to employer engagement with higher education. Key findings included:

- the inter-functionality of college services to industry. Specifically, initiatives relating to engaging clusters of employers and their supply chains tended to approach employers with a flexible training offer which cut across the NVQ range and often led to 'added value' business-level services (focusing on research, innovation and consultancy);
- service offers need to be supported by a 'funding portfolio' including a number of different funding sources;
- engagement with clusters of employers tended to be on the basis of an organisation-wide commitment to employer engagement. But providers need a flexible approach, to establish trust and credibility, and be willing to invest significant resource in building strong networks;
- having established a vision of employer engagement (to generate the ideas, the staff competence, and the early networks), providers need to use flexible development funding sources to support investment in building relationships and the supporting infrastructure;

- sustained, high quality initiatives are those that can shift to mainstream funding in a short period of time;
- providers need to address the division between developing relationships and delivering solutions, through a combination of structuring and people skills to ensure responsiveness to employer needs. Commercial skills, plus practical knowledge of the business world, are particularly important.

(Centre for Enterprise, 2004)

Another study focused on employer collaboration to raise skills: as such it identified the nature of such collaboration primarily between employers, which was driven by business needs and sought to gain economies of scale by sharing training costs. However it did contain a section on the role of higher and further education in fostering skills collaborations in employer clusters and supply chains. The study noted a mismatch in motivations because of providers' need to obtain funding, often allocated using criteria that did not necessarily reflect the interests or needs of business (CBI, 2005a). Other studies on the responsiveness of providers to meeting local business needs have found similar concerns (see for example Mason et al., 2005).

Since these studies, the Learning and Skills Council has commissioned further work on the concept of a 'learning partner' to underpin the development of a good practice guide for employer engagement¹². Furthermore, the SSDA is now investigating conceptual models and existing practice in relation to employer engagement.

7.3 Employer engagement to stimulate demand

Employer engagement in providing workplace learning is linked to the slightly different issue of identifying a need, and stimulating a demand, for workplace learning of particular sorts. Problems of stimulating demand may have much to do with organisational and business cultures, including the perceived relevance of higher education to meeting that demand.

Good analysis of training and development needs relating to short- and medium-term business objectives, which then links to objective advice and guidance on how those needs might be met, could be one route to stimulating demand. Subsequent negotiations with potential providers, on an individual or group basis, may also help to shift organisational and business cultures so that they take on more of the characteristics of an 'expansive' rather than a 'restrictive' organisation (see Section 2).

The HEFCE-funded Knowledge Exchange initiative is clearly one route to increasing employer engagement and stimulating demand for education and training at higher levels. The Centres for Knowledge Exchange tend to be multi-institutional partnerships on a regional basis, and often focus on specific employment sectors and industries (see Annex G for a list). As such, their activities are meant to be aligned to regional and national agendas for economic development and regeneration. Whereas most Centres for Knowledge Exchange focus on stimulating and articulating demand from business, and increasing the capabilities of providers to respond to those needs, some see their focus more on a facilitative role, aiming to create synergies between existing activities and enhance the potential of future ones.

¹² The notion of learning partner is based on ideas of an ongoing dialogue between the client (i.e. business) and the supplier (i.e. provider of teaching and learning) built on trust and commitment and serving the common interests of each. The link/terms of engagement must add value to the business to sustain it. The supplier must expect a return for their efforts in helping the client.

7.4 The brokerage function

A key aspect of Centres for Knowledge Exchange is brokerage and brokering relationships. Brokerage can be seen in a specific sense of identifying business needs (be they for education and training, consultancy, or research and development) and matching those needs to a potential supplier. Following the matching process, further negotiation may be needed to ensure that the requirements of both parties are met. Brokerage can also be viewed in a broader sense of brokering relationships between relevant players and stakeholders in a region or sub-region; for example, between higher education knowledge transfer and business development offices and key regional and sub-regional business intermediaries (and their representative bodies).

There is general agreement that greater engagement between higher education and SMEs is desirable, particularly on a regional and sub-regional basis where it is argued that such engagement could be a powerful lever for retaining highly-skilled people in the region. Routes to such engagement continue to be difficult, but notions of brokerage offer possibilities to improve them.

We can also see brokerage as part of the functions of the HEFCE-funded Lifelong Learning Networks, although for some networks the brokerage may be more about ensuring that individual learner needs are being met by specific existing educational provision. A number of brokerage schemes sponsored by other organisations are currently being piloted: for example, the SEMTA scheme for SMEs (referred to above), and the British Chambers of Commerce scheme relating to foundation degrees. Further, UfI's Learning through Work web-based portal offers a single point of contact for generic advice and guidance about the potential for negotiated workplace learning programmes to meet employers' and learners' needs, and provides direct links to potential learning providers.

At levels of education and training below higher education, the LSC is moving ahead with actions designed to create better brokerage services to support the National Employer Training Programme¹³. Core funding for the programme is to pay for a raft of services, including support from a broker to help diagnose employers' skills needs, source training provision, provide access to information and advice, ensure flexible training provision, mainly in the workplace, and, for small firms, make available access to leadership and management training. However, if the diagnosis of employers' skills needs identifies a need above Level 3, and hence outside the LSC remit, it is not clear how the broker will respond.

Though brokerage as such may well be a way of stimulating more engagement by employers with higher education, the usefulness of such a process will depend on the qualities of the brokering. The term 'knowledge transfer professional' has been used by some Centres for Knowledge Exchange to describe people who take on brokerage roles. There is already at least one pilot model of continuing professional development for knowledge transfer professionals¹⁴. It is likely that such professionals will require a wide set of skills, including business skills (negotiation, commercial awareness) and practical knowledge of the business world, of potential funding sources, of existing business

¹³ The National Employer Training Programme will be known as Train to Gain from April 2006. It has grown out of a number of pilot programmes (designed in part to meet government targets for Skills for Life, and Level 2 skills targets) and was flagged-up in the Skills Strategy White Paper.

¹⁴ Coventry University and University College Worcester have developed the Association for University Research and Industry Links (AURIL) national continuing professional development framework for knowledge transfer professionals.

networks in their locality, and of potential providers' range of activities (teaching and learning, research and development; consultancy).

The government-sponsored Lambert review of business-university collaboration concluded that the best forms of knowledge transfer involve human interaction and recommended ways of effecting more frequent and easy communications between business people and academics (Lambert Review, 2003, p.4). Earlier we noted examples of employer engagement with higher education in relation to workplace learning wherein people from industry and business are being brought in to higher education, by way of master classes, guest lectures, provision of business-generated materials and the like. Certain organisational forms of workplace learning involve learners moving out into the workplace, and vice versa. But we have found little evidence (other than where there are high levels of employer engagement such as by the NHS) of staff from higher education going out into the business workplace for periods of time.

Our earlier discussions about definitions of workplace learning and theories of learning (Section 2) concluded that there continues to be a separation of expertise grounded in traditional forms of disciplinary knowledge, and expertise grounded in the applied use of this knowledge in the workplace (and the potential for the generation of new knowledge). Such a separation may be a limiting factor in the development of workplace learning. There are still major issues of training and staff development to be addressed, both from a higher education and a workplace perspective, if the boundaries that create this separation are to be weakened and made more permeable.

The above considerations of brokerage and forms of knowledge both suggest that a raft of training and staff development issues still need to be addressed if workplace learning and employer engagement with higher education are to make progress. While much of the above discussion will be familiar to the advocates of greater employer engagement in higher education, it may well appear rather opaque and even alienating to a wider academic audience. Yet it is this wider academic audience that will need to be engaged if the closer links between employers and higher education currently being advocated are to be achieved.

7.5 Stimulated demand - but met by whom?

Even if demand for workforce development increases, there is still the question of who is best placed to provide the appropriate education and training. As noted earlier, the Government is currently looking at ways of increasing the share of both further and higher education in this market. The recent report by the CIHE notes that the pattern of involvement of the higher education sector in workforce development is very uneven. The level and pattern of involvement tends to reflect the way different institutions view the relative importance of vocational education and training (Connor, 2005). That same report also notes the wide range of views and approaches by businesses to engaging with higher education for workforce development. More engagement is undertaken by large organisations, those operating in the public sector, and those operating in employment sectors where continuing professional development is regulated.

A recent survey of continuing professional development courses offered by higher education for businesses in the science, engineering and technology sector found that levels of provision were patchy, often difficult to access due to lack of information about services available, not customer-focused, and reliant on traditional off-the-job delivery and organisation (etb, 2004). Other recent studies have shown the extent and range of employer collaboration on skills development activities (sector-based, through the supply chain, or within a local area) which do not necessarily involve external providers (see for example CBI, 2005a; CBI, 2005b). Moreover, where external providers are sought they are

more likely to be private training organisations than publicly-funded providers (CBI, 2005a).

Such studies are a reminder that there are many players in the marketplace at all levels of educational provision. So whilst higher education may be well-placed to provide certain types of continuing professional development at higher levels, there are likely to be a number of other players offering similar opportunities. It has been argued that higher education provision brings with it a better level of quality control than many private providers can assure (Connor, *ibid*). On the other hand, we note that in certain areas, such as management, further and higher education providers offer a wide range of professional bodies' own programmes (for example, the Chartered Institute of Personnel and Development, and the Chartered Management Institute), and are 'approved' by these professional bodies to run such programmes.

Further, the CIHE report notes that even where business does seek higher education involvement in its workforce development, the broader interests of higher education in learning and accreditation of learning in academic terms continue to be cited as inhibitors to effective involvement.

One way of gaining greater understanding between higher education and employers about the potential of the workplace for learning, to meet both specific business purposes and potentially broader educational purposes for individual employees, is to discuss the possibilities of accrediting in-house training. We noted earlier that employment-based workplace learning programmes leading to higher education qualifications often comprise a blend of learning derived from sustained work activities, linked to individual work roles and organisational objectives, taught courses (either e-based and taught at a distance, or taught on-campus or possibly at the employer's site if there is a defined cohort of employees), and accreditation of employees' learning derived from in-house programmes.

Positive aspects of higher education accreditation of in-house provision have been identified from both higher education and business perspectives as shown in Table 6:

Table 6: Positive aspects of higher education accreditation of in-house continuing professional development

For higher education	For business
Acknowledgement that high level learning takes place outside academic institutions	Improved business performance; skills and knowledge gained and disseminated across the team or organisation
Equal partnership valuing knowledge and expertise of both parties (HE and business)	Greater level of quality assurance by HE than from many private providers
Forms part of flexible/negotiated programmes to meet needs of individuals and their organisations	Positive impact on professionalism, morale and motivation of staff, leading to improved retention
HE focuses on developing assessment that is 'fit for purpose' and meets both HE and organisational needs. Formal HE accreditation procedures (approved by Academic Board) have internal and external credibility	Assessing through non-bureaucratic and non-burdensome HE processes adds rigour and depth; can be more effective than in-house, and can lessen burden on management
Marketing publicity can be used as strategic tool by HE to develop partnerships with other learning providers	Increase the external standing of business: demonstrating quality of workforce publicly can be advantageous in contract negotiation)

Source: Derived from Garnett (2005) and Connor (2005)

Notwithstanding these positive perspectives, there are also potential negative aspects for HEIs, including the resources needed to undertake the initial accreditation activity and subsequent monitoring. (For a fuller list of positive and negative aspects see Annex H.)

But accreditation of in-company courses can be used as a tool by HEIs to develop strategic partnerships with business and industry, and to build on both formal learning within higher education and learning derived from activities generated by an external partner. In this way, it can start to raise fundamental questions relating to the public recognition of knowledge and concepts of what constitutes high level and valid learning (Garnett, 2005). As such, it can be seen as a part of the process of creating more permeable boundaries between learning within higher education and learning within the workplace. But as Garnett et al (2004) note, if accreditation is conceived solely in terms of granting advanced standing to existing subject-based programmes, then although the individual employee and the HEI might gain, the wider (and arguably longer-lasting) opportunities for adding value to both HEIs and employers will not be realised.

The costs incurred in accrediting in-company courses are clearly a matter for negotiation between the external accreditor and the company, and as such there are no direct implications for public funding. However, given its potential for creating strategic partnerships between higher education and employment, HEFCE needs to ensure that its own strategy for workplace learning and employer engagement enables such accreditation to take place.

7.6 Summary and recommendations

HEIs currently engage with employers on a number of different levels for a number of different purposes. High level employer engagement in relation to teaching and learning is characterised by situations where the employer and the higher education provider have an equal and shared interest in ensuring high standards of education and training to support the initial formation of specialists to work in the employment sector, to support the continuing development of those specialists, and to support the continuing development of other employees. Such high level engagement can be found in a few areas (for example, higher education links with the NHS) but is not widespread.

Policy pushes for a more demand-led supply of skills training creates an environment in which engagement with employers is expected to be the norm. But we also note the challenges for learning providers to balance employers' demands against the needs of the learner. It would be unrealistic to assume that all such engagement should (or could) be at a high level, but clearly current initiatives (for example, Lifelong Learning Networks and Centres for Knowledge Exchange) have a part to play in increasing levels of employer engagement in higher education. The balance between further and higher education involvement and the approaches taken by individual HEIs will reflect the diversity of post-compulsory educational provision. This may create complexities for employers and others representing the 'demand side' but it reflects current reality.

Several studies have highlighted the need for brokerage functions to facilitate providers' engagement with employers. Brokerage is clearly a growth industry, but there needs to be some co-ordination between (and critical evaluation of) the various schemes in operation or being piloted, to reduce the potential for duplication of effort and confusion but also to take account of the above-mentioned diversity.

Brokerage may be one way of starting to create more permeability across the boundaries between higher education and work, and hence to create conditions under which workplace learning can more easily develop. Encouraging staff from higher education to move into business and industry for periods of time (and vice versa) may be another. But

many training and staff development issues still need to be addressed, from both a higher education and a workplace perspective, if boundaries are to be weakened.

A further way of creating more permeability between higher education and work, and creating greater understanding between higher education and employers about the potential of the workplace for high level learning, may be for HEIs to engage in discussions about the possibilities of accrediting employers' own in-house training.

In relation to brokerage schemes, we suggest that HEFCE should:

- (i) increase the links between its existing funded initiatives to ensure that opportunities are realised for effecting good brokerage relationships between potential and actual learners in the workplace (and their employers) and learning providers. These initiatives should be reviewed and emerging lessons shared;
- (ii) initiate discussions with all relevant parties (including the LSC, the SSDA and the Sector Skills Councils) to establish what actions are currently being taken and identify possible scope for synergy between, and critical evaluation of, the different schemes. In particular staff development issues linked to the brokerage functions should be addressed.

8. International perspectives

This section is based on work prepared by Egbert de Weert, Center for Higher Education Policy Studies (CHEPS), University of Twente, Netherlands on behalf of CHERI.

8.1 Introduction

In this section we consider developments in workplace learning at higher educational levels in some other countries. Given moves towards greater harmonisation between higher education systems in different European countries, following the Bologna agreement, we look in particular at three countries in mainland Europe – France, Germany and The Netherlands. By way of contrast, we also consider the position in Canada.

We address the following issues with reference to these countries:

- (i) what (if any) policy initiatives are driving developments in workplace learning? Do these initiatives stem from a ‘supply side’ (such as governments pushing for ever more highly qualified workforce) or is there a demand side push from employers as well? Who are the major actors? Is there any legislation on workplace learning?
- (ii) is workplace learning seen primarily as being for ‘students’ to make the move into the labour market proper, or for workers/employees already in the workplace to enhance their knowledge and skills?
- (iii) what currently inhibits or enables the continuing development of workplace learning?

In Annex D we provide more detailed information in relation to Germany and the Netherlands.

Though a variety of terms are used to mean workplace learning¹⁵, all refer to a situation where learning activities in formal educational settings are combined or alternated with work activities in a setting outside the HEIs. As noted in Section 3, workplace learning can be categorised along several different dimensions (including type of learner, balance between formal taught provision and workplace activities, and overall aims of the higher education programme). In this section, a distinction is made between ‘weak’ forms of workplace learning, where the main purpose is familiarisation with the world of work in a rather unstructured way (for example, through internships/stages); and ‘strong’ forms of workplace learning where the programme is intended to meet the needs of the learner and of the workplace, and learners can acquire cognitive skills as well as develop specific competencies.

Our chosen countries exhibit both this strong version of workplace learning and hybrid forms that differ in the extent to which workplace requirements are subsidiary to the needs of the overall educational programme. Terms such as ‘co-operative education’, ‘apprenticeship programmes’, and ‘dual education’ generally come close to the strong version, although these may have different connotations in particular contexts. These strong versions lead to a new distribution of responsibilities between the different actors involved: government, HEIs, students/employees, and companies.

¹⁵ Internships; stages; work placements; co-operative education; apprenticeship training; dual education; sandwich courses; alternation; workplace learning; work-based learning; on-the-job training.

In general, the policy drivers towards links between higher education and sectors of employment are similar to those we find in the UK context. They include enhancing the employability of students; recognising that knowledge creation is not the sole preserve of HEIs and that workplace learning can be an important vehicle in developing knowledge networks; recognising that learners' engagement with knowledge used in a workplace context can enhance the acquisition of abstract and generalised knowledge; increasing flexibility, and enabling greater learner involvement in the learning process. Workplace learning programmes can also be viewed as bases for active public-private partnerships and new definitions of the respective responsibilities of the state, the economy, and educational institutions.

In several countries these motivations are expressed to various degrees. Some countries with a strong national apprenticeship culture will stress the employability dimension, whereas in other countries more emphasis is placed on motives relating to the emerging knowledge society.

8.2 Policy initiatives on workplace learning

In this section we look at the role governments play in securing training and the extent to which training is driven by legal requirements. Countries differ in the extent to which governments administer a central policy initiative or whether this is left to the actors mostly concerned. In locating workplace learning in the context of the broader relations between the state, capital and labour, Ashton (2004) distinguishes between different types of vocational training systems, contrasting the free market and the corporatist type. These types point to very different relations that have been created between the state, capital and labour through the process of industrialisation.

In the free market model the state plays a subordinate role, providing the legal framework which guarantees the free play of market forces. Training and workplace learning are seen as the responsibility of the individual and employer, leaving a limited role for the state. The market is supposed to provide training and skills beyond basic education, and employers are provided with ownership of the certification process. In the corporatist model, on the other hand, the state plays a more active role in workplace learning: employers no longer have sole control but are part of a more general consensus between the state, the unions and employers.

Canada represents the free market model, whereas our chosen countries in mainland Europe are examples of the corporatist model. However, these models are ideal types and when it comes to practice the distinctions are not so clearly marked.

The free market model - Canada

The Canadian education system spans both publicly- and privately-funded institutions, from nursery level through to university. Education is the responsibility of the provinces: as such there are significant differences between the education systems in different provinces. At post-secondary level, students may attend university, community colleges or (if in Quebec province) a college of general and vocational education. In the community colleges, and some university colleges, the two or three year programmes tend to be more vocationally-oriented than those offered by universities. Significant numbers of university graduates attend college after completion of their degrees to acquire more employment-related skills (www.studyincanada.com). Canadian universities are mainly publicly-funded and largely autonomous: they set their own admission standards and degree requirements and have considerable flexibility in the management of their financial affairs and educational programmes. Universities, university-colleges and community colleges can have the co-operative education option as part of their programmes. But due to the

decentralised regulatory system, and lack of leadership exercised by the federal government, the state plays a subordinate role and legislation is virtually absent. The demand for workplace learning is primarily employer-driven, leaving the issue of take-up of such provision and its development to market forces.

Since the early 1990s, many provincial governments have attempted to improve the post-secondary vocational and technical education system by introducing apprenticeship programmes, recognising some of the programmes, and improving the co-ordination of the different bodies responsible for parts of the programmes. Despite these initiatives, the effects remain marginal as there are still major problems with linking the training systems to the formal education system, for example in terms of co-ordination and articulation of programme requirements, funding, and the recognition of vocational credits (for details, see Schuetze, 2003).

However, the push for training is now escalating and government is supposed to play a larger role. Canadian industry leaders see a close link between innovation performance and a highly skilled workforce. They consider adult education and lifelong learning to be the key pillars of any workforce strategy, and argue that a more innovative culture can be created by exposing young learners to real-life work situations and problems through high quality co-operative education, internships and related programmes (Innovation in Canada, 2005).

The decline in participation in co-operative education since 2001 has put more pressure on government to provide the tools to increase the capacity of business and develop new models for financing employee training. For example, the Chamber of Commerce in British Columbia (representing businesses of every size and sector in the region) has recommended that the provincial government should introduce a human resource investment tax credit programme, which would include an increased level of credit for small and medium-sized companies. This aims to promote co-operative education placements, particularly in SMEs and not-for-profit associations.

The corporatist model - examples from mainland Europe

The French system of higher education is rather complex, and although not strictly a binary system, a non-university system co-exists alongside a university sector (Chevaillier et al, 2005). Higher education is seen as comprising short vocationally-oriented programmes (in universities, secondary schools and independent institutions) as well as more general, longer programmes in universities and the Grandes Écoles. Within higher education a clear distinction is made between the universities and the prestigious Grandes Écoles, although similar programmes are found in both sectors.

Workplace learning is based on two types of work contracts, the qualification contract (or professionalisation contract) and the apprenticeship contract. In the qualification contract, training occupies at least one quarter of the duration of the contract, leading to qualifications such as the higher technical diplomas (BTS) offered by secondary schools. The apprenticeship contracts (which involve theoretical training at special learning centres and workplace learning) are based on an employment contract lasting from one to three years. Since the late 1980s, legislation has extended this system of apprenticeship to higher education, with apprenticeship programmes mainly situated in the vocational segments of universities (Instituts Universitaires de Technologie - IUT), the Section de Techniciens Supérieurs (STS) and the more elite institutions (Grandes Écoles). Current legislation comprises legal conditions and financial regulations on the basis of which apprenticeship-like educational arrangements can evolve.

The French government has continued to encourage training through apprenticeships, mainly by using financial measures and incentives. Current legislation on lifelong learning

(which has been effective since 2004) requires French employers to pay 0.4 per cent of their wage expenditure as apprenticeship tax. The funds finance the costs of the apprenticeship, wages, and costs of training institutions (including higher education institutions), though higher education is not necessarily seen as a priority area for funding in this respect.

We should also note that legislation passed in 2002 (the 2002 Act on Social Modernisation) gives all French citizens the legal right to have their knowledge acquired through experience 'validated' for the purpose of gaining a full or partial qualification as part of their lifelong learning entitlement.

Apart from this central legislation, there are initiatives from specific employment sectors that are dissatisfied with the current situation and have developed their own special training programmes. For example, the Union des Industries et Métiers de la Métallurgie (UIMM) has established its own apprenticeship programme for engineers (Institut d'Ingenieur par Apprentissage).

This centrally-regulated model in France resembles the dual system in Germany and the Netherlands, but some differences in emphasis can be noted. The Dutch dual system in higher education has a firm legal basis: it has a clear place in the higher education law, but the implementation is left to the partnerships between employers and HEIs. However, as we note in Annex D, in the Netherlands there is a distinct binary system of higher education: the sector for higher vocational education (Hoger Beroepsonderwijs, or HBO) and the university sector. And whereas the dual system is well-established at undergraduate/bachelor level in the HBO sector, most of the dual programmes in the university sector are at postgraduate level.

By way of contrast, the well-developed German apprenticeship system (dual system) – often advocated as a model for adaptation to other countries – is embedded in a setting of close co-operation between government and the social partners, employers (represented by the chambers of commerce) and the unions. The costs are borne by the companies, but they are eligible for tax reductions when they participate in dual programmes. Dual programmes are highly standardised and successful completion leads to a recognised certificate. As noted in Annex D, in Germany the dual system has its base in the *Berufsakademien* (professional academies) which offer tertiary level education. But more recently, it has served as a model for workplace learning in the *Fachhochschulen* (the polytechnics) and the universities, although few examples are found in the university sector, and then only at the postgraduate level.

In the German system, legislation does not play such an enforcing role as in France. Current legislation requires the student/trainee and the employer to enter into a legally binding training contract which determines the student's training programme, rates of pay and other employment issues. However, German employers are not required to participate in the dual system. An important incentive to participate is that the occupationally-related apprenticeship gives employers confidence that those in the apprenticeship system will acquire the skills needed for specific occupations. These occupational skills are transferable across firms and industries. In higher education this coupling is looser, and the driving forces stem more from (regional) institutional initiatives and employer demands than from centrally-regulated arrangements.

In contrast to the situation in Germany, the French apprenticeship system is less determined by national standardisation. Rather, it is heavily influenced by the individual nature of the business providing the training and by the needs of local industry. Consequently, what an apprentice learns through in-company training is largely tied to the specific characteristics of company organisation and production. The French slogan '*tout est contextualise*' expresses the belief that all that is learned has to be contextualised in practice.

Thus, in contrast to their German counterparts, the social partners in France have less to say (at the collective level) in defining the basic elements of apprenticeship training (Brauns, 1999).

French employers have quite explicit views on workplace learning. Generally they attach much value to the stage or internships (i.e. the 'weak' version of workplace learning). The stage is an institution in France: some companies will, by definition, not recruit higher education graduates if they have had no stage. It is seen as a source of information for employers about potential recruits, their interests and capabilities. One of the strengths of the prestigious Grandes Écoles is that they maintain strong partnerships with companies where students have to carry out a (mostly assigned) project as part of their study programme.

With regard to university courses, employers argue that a new License Professionnelle (the vocational part of the first degree which sits alongside the general license) would be profitable, especially if it were linked to projects in a company in order to ensure that course content was related to the needs of the company. The influential employers' association (Mouvement des Entreprises de France – MEDEF) is pushing strongly for the development of a 'contract de professionalisation' in the professional licence. This would be a contract with companies to alternate learning and work (through work contracts, apprenticeships or sandwich courses). Generally speaking, universities are prepared to contribute to these plans.

8.3 Work-based learning for whom?

The following categories of learners can be distinguished:

- non-traditional students, seeing work-based learning as a second route to higher education
- 'regular' students, wanting to make the move into the labour market proper
- workers/employees already in the workplace, wanting to enhance their knowledge and skills.

In some countries workplace learning is primarily seen as an alternative route for non-traditional students. Among them are the 'forgotten half', minorities and other 'at risk' youth, such as those from economically disadvantaged backgrounds. But there is also a much larger group of students who are not motivated to pursue further studies of an academic nature – the students 'not heading for college' or 'non-college bound' students (Schuetze, 2003). This is an important group in most countries. Increasing numbers of students who have completed apprenticeship programmes at secondary level are continuing their studies in higher education. Thus workplace learning in higher education meets a need for those who are seeking opportunities for pursuing this type of learning at higher levels.

But workplace learning is also an attractive option for 'traditional' students, especially in those subjects that have a clear connection with occupational fields such as engineering. Financial benefits may also accrue where students enter a contractual relationship with the company and receive a salary.

In the countries considered here, most workplace learning programmes are accessible to all students without setting special entry requirements. Recent research among students in Dutch universities shows that there is no difference in the student profile (by age, gender, performance in secondary education) between those on 'regular' programmes and those choosing dual-education programmes. Both subject interest and labour market

perspectives constitute the most important motives for students to choose a dual programme. They consider it important to learn from experts outside the university. Thus, the choice for dual programmes emanates from intrinsic motivations, including a desire to make a connection between education and professional practice. Dual programmes are often more demanding in terms of study load and study duration and hence attract highly motivated and many of the best students.

8.4 Different levels of workplace learning in higher education

There is increased attention in workplace learning at both ends of the higher education spectrum, namely programmes below the bachelor degree level (short-cycle higher education) and workplace learning programmes at the doctoral level.

In France, short-cycle programmes that include workplace learning components and have a strong vocational basis are well-established (for example, the two-year IUT, and STS). The Netherlands has recently started with experiments to establish the Associate Degree, a two-year short-cycle higher education programme embedded in a labour market relevant profile. These programmes are intended to meet a need not previously addressed. It is expected that students will enter via different routes (including young people from vocational programmes at secondary level seeking a work-related higher education programme, as well as those already in the workforce seeking to enhance their knowledge and skills). For these students/ workers/employees a bachelor degree can be too long, and a short-cycle programme with a strong work-based component tuned to their specific interests and ambitions can meet their needs.

At the other end of the higher education spectrum, several institutions in Canada, France and the Netherlands have shown an interest in developing postgraduate programmes (masters and doctoral) that include a workplace component. In France, the Grandes Écoles are increasingly active in this domain, which is not surprising given their close connections and partnerships with industry. In the Netherlands, workplace learning at undergraduate level has not expanded considerably in universities. But several institutions have now developed programmes involving workplace learning at the doctoral level, most of them in the engineering departments. In Canada a number of graduate programmes (primarily law and business-oriented programmes) now include a work experience component (Rowe, 2005). But the difference with the Canadian situation is that most of these programmes operate on an ad hoc basis: students approach the department and an attempt is made to place the student, often on a flexible schedule rather than alternating work and study terms. The major problem for Canadians is job placement: there are too few appropriate jobs, and several of the programmes take advantage of the undergraduate placement system which means that graduates are competing with undergraduates for jobs (Rowe, *ibid*). In France and the Netherlands, access to work placements occurs on a more systematic basis, whereby institutions establish partnerships with industry to initiate workplace learning programmes.

In many ways, workplace learning within doctoral programmes reflects debates on the changing role of research and moves away from specific disciplinary research towards more interdisciplinary research which takes place in the context of its application. Within such doctoral programmes, the research is based in the workplace and/or professional practice and the outcome of the research is designed to provide valuable insights to the employment organisation, in addition to contributing to knowledge in the professional field.

8.5 Inhibiting and enabling factors

In this section we consider what factors seem, from an international comparative perspective, to impact on workplace learning developments in higher education.

(i) Esteem of vocational training

Countries vary in the extent to which they value apprenticeships and vocational training as opposed to general and academic education.

In Canada, Schuetze (2003) notes the poor image and esteem of vocational training and the attitudes of parents and educators who hold a clear bias in favour of cognitive skill development and hence academic education. Academic studies are seen as more prestigious and also more rewarding in terms of employability, job satisfaction, pay and other benefits.

But in Germany, vocational education is highly rewarded and the apprenticeship system in particular is a major instrument of skill formation and a major transition route from school to work. For German students it is not a negative choice to enter the dual vocational system, whereas in other countries vocational training is more often chosen by those who are not able to follow the general educational streams.

The position of vocational education in the overall educational system affects workplace learning in higher education. In both Germany and the Netherlands, there is a strong segmentation between vocational and general education at secondary school level, which continues at the tertiary level. Both Germany and the Netherlands retain binary higher education systems, with universities and polytechnics clearly separated in terms of entrance levels from secondary education, and in terms of the type of higher education programmes offered. This explains why dual education has been accepted in polytechnics, but much less so in universities.

In France, however, the segmentation between the general and vocational education systems is less pronounced. The government has introduced a vocational maturity certificate, holders of which have the same opportunities to enter higher education as do holders of the general baccalauréat. The qualification obtained in an apprenticeship programme is well-regarded as a route to employment, but it also gives access to higher level programmes in the French higher education system. This improves the status of vocational education in relation to the general education streams. This view of vocational education continues into higher education where universities offer vocational alongside academic education. Vocationalism has increased in French universities (Eicher, 1999), a trend which has been continued in the new bachelor-master structure, namely professional licence and general licence as the first degrees.

(ii) Available job placements

An often-voiced complaint in most countries is that there are too few appropriate jobs available for students. Partly this relates to prevailing economic climates: for employers the attractiveness of workplace learning is related to economic factors. In times of high demand employers are more interested in offering workplaces, since they can hire workers relatively cheaply on a temporary basis. When there is an oversupply, employers appear to be less inclined to participate in workplace learning programmes. This makes workplace learning vulnerable to economic fluctuations.

(iii) Financial and other constraints

The lack of financial and other resources are important factors affecting companies' involvement. In Canada there is hardly any regulation from government, but as we note above, the push for more government funding is now increasing, with employers recommending provincial governments to introduce a co-operative education tax credit for employers. The proposed tax investment credit is especially focused on SMEs to support the direct and indirect costs of their training investment.

In mainland Europe, there are more financial resources available for workplace learning. In Germany, employers collectively bear much of the training costs. In the Netherlands and France fiscal facilities are available for employers who hire apprentices, and current French legislation requires employers to enable each individual employee to have additional training (though in practice there is limited capacity to allow employees time away for work-related learning programmes, other than for short training courses).

More generally, employers complain that despite the available government funding support, the costs (including the time involved in training and supervising students) often outweigh the benefits (both in terms of improved productivity during the period of the programme, and retaining the individual on completion of the programme). German employers bear the costs of the apprenticeship system on a joint basis but some are now withdrawing from the system since they consider the costs are not matched by the benefits. SMEs in particular face problems in terms of the costs of involvement. But in the Netherlands some SMEs are planning to collaborate more in providing apprenticeship routes: SMEs will work on a rota basis, organising specific course subjects related to their expertise, and organising the supervision accordingly.

But changes in the funding structure of higher education can be an enabler. For example, the Dutch Ministry is in the process of introducing a new funding system based on the provision of learning entitlements. This allows students to 'cash' their entitlements for (parts of) education at any place and time. Such a demand-led system, already operating in Australia, aims to increase the flexibility and freedom of study choices geared to the individual preferences of students, and hence meet the needs of an increasingly heterogeneous student population (for further discussion, see Jongbloed, 2005).

(iv) Quality issues

Work-based programmes are in principle subject to the same quality assessment reviews as standard programmes. One basic issue is how to evaluate the work-based learning component. Is what is learned in professional practice equivalent to formal learning? Are new evaluation criteria needed which acknowledge these forms of workplace learning while at the same time preserving the integrity of a higher education qualification? The quality issue is an important factor for the failure or success of work-based programmes. The Dutch experience shows how work-based learning can be a risky activity. Given the prevailing quality assessments, universities have taken the 'safer' way and consider the actual time at the workplace as an add-on to the regular full-time programme (which then increases the total study duration). In this way universities assure that the standard criteria of academic education will be met. Similar problems were mentioned in several case studies reported at the recent 2005 World Association for Cooperative Education conference in Boston (see, for example Jorgensen & Howard, 2005).

More generally, an important enabler of workplace learning would be when accreditation agencies consider quality assurance mechanisms and develop quality criteria that acknowledge the specific character of workplace learning. The Dutch accreditation agency is taking this point seriously.

(v) Workplace learning as part of continuing professional learning

In several countries workplace learning in higher education is seen as offering progression routes between different levels of education and meeting individual needs for continuing development over the life-course. As such it can be seen as part of a broader strategy towards lifelong learning, with flexible modes of delivery which are more individualised and tailor-made.

In Germany there is now some movement away from the exclusive character and occupational specificity of dual vocational education, since such provision is seen as leading to inflexibility and limited possibilities for occupational mobility later on in working life. Work-based programmes in Fachhochschulen (polytechnics) now aim to overcome the gaps between the various streams of vocational education up to the highest professional levels, by enabling people to attain a higher education degree while building upon their working experience.

In France and the Netherlands, issues of transferability are also high on the policy agenda. In France short-cycle higher education is incorporated into the university bachelor-master structure whereby the graduates from IUTs can pursue their professional courses with apprenticeships towards the professional licence degree.

Similarly, in the Netherlands the introduction of the two-year work-focused Associate Degree is linked up with the new degree structure in Dutch higher education, and aims to enable people to progress to higher level knowledge and skills.

8.6 Concluding remarks

It is regularly stated that the well-developed apprenticeship systems in the German-speaking countries, in France and the Netherlands could function as a model for adaptation to other countries. However, the European dual system of apprenticeship training is embedded in national cultures, traditions, and institutional frameworks that cannot be easily replicated elsewhere, especially as 'structures are not readily changed (...) when they are reified into models expressing cultural norms and expectations' (Skilbeck et al, 1994). Also the differences between European countries should not be overlooked. In France there is a strong legislative basis, whereas in Germany there is much more reliance on collaboration between social partners.

Notwithstanding such legislative frameworks and collaborations based on social partners, it seems that further effort is needed to overcome the reluctance to invest in programmes involving workplace learning, to offer decent workplace learning opportunities. It is also clear that these efforts cannot be left to market forces alone, and the state does have a role to play¹⁶. Incentives through the tax system (currently being strongly pushed by the social partners in some countries) may well promote forms of co-operative or dual education. But as the experiences in mainland Europe show, such incentives have to be supported and sustained by all the actors concerned.

¹⁶ In the case of Canada, it seems that the state has not played this role very efficiently in the past (for further discussion, see Schuetze, 2003).

9. Funding aspects

This section of the report has been written by Bridget Josselyn and Nick Ratcliffe of KPMG. A fuller discussion of funding aspects can be found in Annex I.

9.1 Funding as a catalyst for change

Implementation of the Government's Skills Strategy will require changes in the current pattern of delivery of further and higher education. Whilst higher education providers may change their behaviour in response to policy steers from ministers, they are more likely to do so if they can also see a financial incentive.

The current arrangements for funding higher education provision reflect, to some extent, the higher costs of provision which contains an element of workplace learning. This is explained in detail in Annex I. Other HEFCE funding streams could be used more to reward or compensate institutions who are pro-active in delivering workplace learning opportunities. For example, although HEIF infrastructure contributes to employer engagement, the Council should consider how its future third stream strategy could do more to support this, including leveraging in other funding. If the expansion of workplace learning opportunities is a priority, HEFCE should consider the use of initiative funds to support development in this area.

Where institutions are successful in engaging with employers, it may be because the higher education provider is able to tailor the provision it offers and the mode of delivery precisely to the needs of the employer and its employees or potential employees. However, if the relationship between the provision and the employer becomes too strong, there is a danger that the provision will cease to be eligible for HEFCE funding, because it is regarded as a closed course.

9.2 Closed courses

HEFCE does not currently fund any courses that are closed, i.e. 'courses that are restricted to certain groups of people and are not generally available to any suitably qualified candidate'.

The rationale behind this ruling is that if a course is only open to employees of a particular company or organisation, then it would seem appropriate that the organisation (whether public or private) should meet the full costs of the provision. It should also be remembered that the provision of public funding for the benefit of a private company is likely to come under EC regulations on State Aid.

The definition as it stands may be considered counter to certain HEFCE and government policies, particularly its support for foundation degrees where the course may have been developed with the learning needs of employees of a particular sector in mind. This would mean that the course, although provided by a publicly funded institution and available for anyone within that sector, could potentially only have students on it from a particular group of companies within the region.

There is a need for greater clarity about which courses might be considered 'closed'. In particular, it is not clear how EC State Aid regulations would apply to the range of courses

which are closely related to the needs of employers and whether there are distinctions which might apply to public and private sector employers. There are examples within the public sector of courses that may be 'closed' since they require the learner to be employed within a specific role before enrolling on the course, for example as a Special Constable with a local police force. Other courses appear open, but are possibly closed in practice since they require that if the applicant is not employed by particular organisations, they must be able to arrange their own training necessary to complete the employer-supervised work-based element.

Further work is required to investigate whether government departments might 'join up' their approaches to enable more effective funding for public sector training.

9.3 Other agencies funding for higher education

Annex C provides an overview of current funding methodologies for teaching used by HEFCE, the TDA and the existing and anticipated future funding arrangements for NHS-funded students.

Each year, the TDA invites providers of initial teacher training and designated recommending bodies to bid for employment-based route intake targets for the following academic year. In this respect, the TDA methodology does more to encourage growth in the volume of workplace learning than the HEFCE teaching funding method.

Key aspects of the TDA funding method include:

- the link between quality of provision and funding, for initial teacher training;
- the large number of weighting factors used by the TDA (shortage subjects, location of provision, level of provision, primary/ secondary) compared to HEFCE's four main price bands;
- the TDA's use of funding premiums to providers to cover partnerships, assessment costs, and in some cases, travel costs (e.g. for modern languages abroad);
- the link between student financial support arrangements and funding of 'shortage subjects' (including administration costs).

Key aspects of the NHS funding method include:

- nursing, midwifery and allied health profession higher education programmes are currently funded on the basis of a competitive tendering process (to the Strategic Health Authority Workforce Directorate) that results in wide variations in funding between higher education providers;
- there are ongoing negotiations between the higher education sector and the NHS relating to the establishment of national benchmark pricing;
- new benchmark prices, linked to an agreed national 'model contract', will be phased in from 2005/06 onwards. As part of the agreement (amongst other things) HEIs will be prohibited from charging tuition fees directly to students; there will be recognition that practice placements are the joint responsibility of the institution, the strategic health authority and placement providers; and there will be agreed procedures and responsibility for insurance/indemnity cover for students on placements.

If HEFCE wishes to encourage growth in the volume of workplace learning, it could consult on a separate allocation of teaching grant for workplace learning.

9.4 Arguments for and against separate funding for workplace learning

Arguments in favour of separate funding for workplace learning include:

- this would send a clear signal to providers that HEFCE wished to encourage the development and growth of this type of provision;
- there is already evidence that workplace learning involves additional costs for institutions;
- there is anecdotal evidence that these additional costs are not met in full through the teaching funding method.

However, there are a number of potential drawbacks with this approach:

- it would complicate the existing teaching funding method;
- it is not clear what would be an appropriate sum to allocate for growth in the volume of workplace learning provision;
- institutions which already offer workplace learning opportunities could be penalised in bidding for growth funding, compared with institutions which do not offer workplace learning and consequently have more capacity to grow this provision.

Another approach would be to fund some elements of the delivery of workplace learning separately. For instance, it would be possible to fund the costs of organising work placements, where this is organised by a central officer or team within the teaching institution, possibly working on behalf of more than one institution.

Another option would be to fund the costs of training for an employer's staff in mentoring and/or assessment skills where these were specifically required as part of a work placement for a learner in higher education. However, in this case, the arrangements would need to ensure that funding was paid to the higher education provider, rather than directly to the employer, lest this give rise to issues of inappropriate state aid.

9.5 Metrics

If HEFCE were to allocate additional funding to support workplace learning taking place within England, it would need to consider whether that allocation should be part of the recurrent funding allocation (to support the ongoing provision of workplace learning) or distributed through a special funding allocation (to support the development costs involved with starting up workplace learning provision). It would also need to determine the type(s) of workplace learning that it wished to support, bearing in mind that in the absence of additional funding there would be a redistribution of funds across institutions.

The recent change to the allocation of funding for students on sandwich placements has resulted in some institutions having to divert funding away from other areas in order to continue the high cost activity they currently undertake in providing sandwich placement opportunities for their students.

HEFCE currently has a policy to keep burdens on institutions to a minimum. Therefore if there is data currently available to use for making an allocation then it would be preferable to use that, rather than collecting additional data.

9.6 Higher education-business and community interaction survey

The higher education-business and community interaction (HE-BCI) survey collects data on a wide range of activities, reflecting the contribution of higher education to the economy and society. There are questions asked of institutions within the survey that could be used to inform funding allocations to support aspects of workplace learning.

If HEFCE were to decide that it should allocate funding to support a particular method used to organise business placements, such as through one central department, it could use the survey question 'How are student business placements organised?' to gather information to determine the funding allocation.

The question 'Does your institution provide the following courses?' could be used to inform allocations to support institutions providing continuous work-based learning. The amount of the allocation would necessarily be the same for all institutions since there is no measure within the question of how many learners are involved in the work-based learning, just an indication that it takes place.

In order to reward employer engagement in the development of courses potentially including workplace learning, responses to the question 'To what extent are employers actively involved in the development of content and regular reviewing of the curriculum?' could be used.

HEFCE would need to decide what it wanted to reward/encourage before deciding which questions it would use. It would also need to determine how to allocate the funding – whether through a mainstream allocation or through a special funding allocation, perhaps to cover the costs of developing the courses.

9.7 Higher Education Statistics Agency

One major source of data provided by institutions about the activity undertaken by their learners is the Higher Education Statistics Agency (HESA) student record. This is an annual return collecting information on an individualised student basis.

One of the fields currently collected on the HESA student record is 'EMPROLE', the 'employer role'. This field collects data indicating the employment status of learners and whether they are studying through workplace learning. Currently this field is for further education students in higher education institutions only and was introduced by the Learning and Skills Council. There is also a field showing location of study entitled 'LOCSDY' which also applies mainly to further education students. If HEFCE were to allocate funding using either of these fields, it could extend one or both to cover higher education students, but would need to have a robust definition of workplace learning.

Any such new indicators could be used to redistribute existing funds. However, if HEFCE wishes to increase significantly the volume of opportunities for workplace learning, other than at the expense of other teaching and learning activity, it will need to make this a priority in its bid to the next comprehensive spending review.

9.8 Higher Education Innovation Fund (HEIF)

HEIF funding (rounds 1 and 2) has been allocated to support knowledge transfer activity within institutions. All HEIs will have an allocation available to them under the latest round of funding, HEIF 3. The funding is allocated by formula and there is a small activity-based component (10 per cent) to reward current performance, which will be allocated based on information currently obtained from the HE-BCI survey. HEFCE hopes that in the future it will be able to use data on the number of student placements in this calculation, as well as other information relating to activity. This allocation can be seen as supporting those types of workplace learning involving student placements.

Once robust data are available to measure the aspects of activity HEFCE hopes to reward, the proportion of the allocation could be increased to more than 10 per cent depending on HEFCE's priorities.

At present, allocations from HEIF are demand-led, in that it is higher education providers (or groups of providers) who develop proposals for funding through HEIF. This may mean that the activity funded through HEIF does not reflect the full range of activity within the sector. It may also mean that it does not necessarily address the need to develop capacity for teaching higher level skills to meet the needs of the national economy. HEFCE should consult with other stakeholders, including the Sector Skills Councils and Regional Development Agencies, on the criteria for allocating HEIF. There may be potential to use HEIF to lever in additional investment into higher education.

9.9 Entitlements in relation to workplace learning

In developing a strategy in relation to workplace learning in higher education, it is helpful to consider what might constitute an entitlement for employers, learners/employees and higher education providers. It is also helpful and necessary to consider what and how far HEFCE can or should support these.

As part of this project, CHERI and KPMG facilitated discussion with groups of stakeholders around the delivery and funding of workplace learning in higher education. As part of those discussions, stakeholders representing providers, employers and learners discussed what might constitute an entitlement in relation to workplace learning. They considered this both in relation to learners engaged in initial formation of higher education, and in relation to a learner in employment who is engaged in continuing professional development or some form of 'up-skilling'.

It was clear from these discussions that there were elements of the employer and learner/employee entitlements which seemed likely to increase the cost to the higher education provider of delivering the course or qualification. For instance, the employer might have an entitlement to expect that the staff involved in teaching a qualification with an element of workplace learning should have some recent relevant experience of the industry or skills sector to which the course related. This would represent a potential cost to the provider, in allowing staff time to gain this experience.

However, as well as a cost to the provider, there might be savings to the provider arising from a workplace learning element within a qualification. For instance, a learner who has access to equipment or facilities at his or her place of work, which can be used for practical work in relation to a higher qualification, may not need to use the same facilities on-campus or may need them for a shorter period. In some cases, the facilities available to the learner at their place of work, or on their work placement, may be a better learning environment than the equivalent facility provided by the higher education provider – by

nature of its scale, complexity or simply because it is more 'real'. Some situations or processes can only be simulated on a reduced scale in the classroom or the laboratory because of space or cost constraints. A work placement may offer experience of the real thing.

There may also be advantages to a higher education provider in building links with employers, particularly where it has research interests in a subject or field which is also of interest to the employer. Relationships built around the management and delivery of work placements may be a good foundation for developing other relationships linked to research or knowledge transfer.

The concepts of learner, employer and provider entitlements in relation to workplace learning were felt to be useful by stakeholders involved in discussions as part of this project. HEFCE should expect institutions to have agreed 'rules of engagement' so that individual departments that seek to engage with employers and workplace learners do so on the basis of an institutionally-agreed set of standards. These rules of engagement might include statements about the 'entitlements' of learners, employers and the institution in relation to the workplace learning.

Similarly, organisations involved in the promotion of workforce development and training (e.g. Sector Skills Councils, trade bodies, UK Skills or Investors in People) may want to encourage the development of sector-wide standards for use by employers in the management and planning of work placements for higher education learners.

9.10 Employer levies

Where there are additional costs to the employer associated with offering workplace learning opportunities, there may be other sources of funding which can be used to help meet these. For instance, in certain industries – notably the construction industry and the film industry – employers pay a levy to help support the costs of workforce development.

In 2005, a consultation with employer and employee organisations in the film industry in Great Britain sought to establish whether there was support for the establishment of an industry training board. There was support for such a board, funded by a levy on employers in the industry. The funds raised through the levy will be used to provide new courses at further, higher and postgraduate level. HEFCE now has a formal agreement with Skillset (the film industry Sector Skills Council) which allows institutions funded through the film industry levy to leverage additional funding from HEFCE.

If there were support in other industries, it would be possible to raise money through a levy which could help fund industry-specific higher education provision, tailored to the needs of employers, and firmly in line with the objectives of the Government's skills strategy. HEFCE could use the offer of its own teaching funding to ensure that there was a higher education component in the education and training supported through any new levy. The offer of funding from HEFCE might be particularly important where the start-up costs associated with new provision (in a new subject area, or in an existing subject delivered in a new location, or through an innovative delivery model) could be substantial, and take-up of the new provision may be uncertain.

Given that such levies would be used to support further and higher education, it would probably be appropriate for the DfES (rather than HEFCE on its own) to take forward any development of policy on industry levies.

9.11 Risk and reward

In developing new models for funding workplace learning in higher education, it may be appropriate to consider how far funding should relate to risk. As stated above, it may be appropriate to offer funding for the development of new provision, where there are high costs involved in establishing the provision and take-up is uncertain.

The same may be true where a provider seeks to develop new models for delivery of provision, including a workplace element. There may be a risk that demand for student placements will exceed the number available locally, giving rise to additional transport or accommodation costs – which it may fall to the institution to meet. These same problems may arise where an institution is offering provision in an occupational area where local (or national) capacity is reducing. For instance, a university offering training in marine engineering may find that opportunities for work placements are harder to find as the number of people in the UK employed in that industry declines.

One way to minimise the risks involved in expansion or development is through use of a brokerage model between the higher education provider and the employer. Through the use of a broker with good contacts across a number of higher education providers and employers, it should be possible to manage a better fit between the needs of learners (typically those undertaking initial formation and having no links to a particular employer) and employers' capacity to offer work placements. This may be less easy to achieve when a number of institutions each have separate but discrete relationships with the same number of employers, who in turn may have links with only one or two higher education providers. Some potential work placements may go unfilled because of the apparent lack of a suitable learner, whilst other institutions may have more learners than placements.

Given the potential for brokers to increase the extent and quality of engagement between higher education providers and employers, HEFCE may wish to consider using innovation funds to encourage the development of brokerage schemes for workplace learning. The broker may be a private sector entity, a voluntary sector body (such as the University Vocational Awards Council, UVAC), or a higher education provider with particular experience or needs in this area. It would also be possible to envisage a consortium of providers operating a brokerage system, providing a one-stop shop service to employers willing and able to offer work placements, or seeking to access continuing professional development opportunities for their existing employees. It would be appropriate for HEFCE to explore further with UVAC and Universities UK what brokerage arrangements currently exist and whether lack of funding is hindering the development of new arrangements or the expansion of existing schemes.

There may also be a role for Sector Skills Councils to work as brokers in relation to workplace learning. Given their role in defining the skills sets which are relevant for their particular sector, Sector Skills Councils are well placed to act as brokers between employers and providers.

9.12 Conclusions and recommendations

If HEFCE wishes to prioritise the development of workplace learning opportunities in higher education, it should consider using funding levers to achieve this.

HEFCE does not currently have sufficient detailed data to form the basis for an allocation of additional funds to support workplace learning, and should consider how it might obtain such data, whilst continuing to minimise the burden on providers.

If HEFCE wishes to prioritise the development of workplace learning, it needs to decide whether all types of workplace learning are equally valuable, or whether there are particular priorities for development. HEFCE should consult with the Sector Skills Councils and the LSC, in order to inform decisions on priorities. It should also consider the scope for using funding such as HEIF to lever in additional investment from other bodies, such as the Regional Development Agencies, into workplace learning in higher education.

HEFCE should consider working with Sector Skills Councils to develop entitlement models (for learners, employers and providers) in different employment sectors. This work should consider further models of risk-sharing and reward.

HEFCE will also need to decide whether to reward institutions which are already pro-active in offering workplace learning opportunities, institutions that do not yet do it, or both. Increasing funding for institutions which are already pro-active in this area is likely to involve paying more for existing activity. It may be more cost-effective, in terms of increasing the volume of workplace learning opportunities, to target increased funding on institutions which are currently less active in this area.

10. Some conclusions and policy implications

10.1 Introduction

Emerging knowledge societies potentially enhance but also threaten the role of HEIs. As knowledge permeates a growing proportion of society's organisations and institutions, the special claims made by higher education for both the creation of new knowledge and the transmission of existing knowledge become increasingly questionable. For the learner, working and learning will proceed in parallel for the whole life-course. And the boundaries between the two will become increasingly fuzzy.

Issues of workplace learning are central to the future role of higher education in the knowledge society. For the learner, the workplace is a prime source of new learning as well as the site for the application of existing learning. But workplace learning is not just about learning to do a job. It is about personal development and the acquisition of knowledge and skills that transcend particular settings.

The creation by government of Sector Skills Councils with a remit to improve productivity and business performance in their specific employment sectors, and the establishment of regional skills partnerships (led by the Regional Development Agencies) demonstrate that there are an increasing number of stakeholders with an interest in workplace learning. Higher education's role in this may be relatively minor. In future, it may increase or it may decrease as part of this wider picture of workforce development. But the scale and nature of higher education's future role in workplace learning cannot but have consequences for all the other functions of higher education.

Higher education will need to engage with these stakeholders to retain and perhaps extend its role in the knowledge society. But whatever else it does, it should not lessen its criticality in responding to new social and economic pressures, of which workplace learning is an important part. This includes recognising the power dimension to debates about workplace learning. Neither higher education nor employment has a monopoly of wisdom. It is important to recognise that the interests of the learner do not necessarily equate with the interests of the employer. And neither may equate with the long-term interests of society. Higher education has an important role to play in this long term view, to recognise the interests and needs of 'current stakeholders' but to place these within a larger vision of the future knowledge society, and its needs for social cohesion as well as for economic prosperity.

In recognising that learning can and does occur in settings well beyond the walls of academe, higher education may need to cede much of the exclusivity of its role in the transmission of knowledge. Thus all higher education providers will need to be prepared to embrace workplace learning to some degree if they want to retain a role in the knowledge industry of the future. It might be considered, however, that a reduction in higher education's authority over the processes of learning might need to be balanced by an increase in its authority over the recognition and certification of learning, especially for learning which claims application beyond the setting in which it is acquired.

In this study we have found that there are still large differences between and within higher education providers in the levels and experience of engagement with issues of employability generally, and with workplace learning specifically. There are large differences in the level of employer engagement for teaching and learning purposes, reflecting in part custom and practice in different employment sectors and in part different

labour market regulations (both in terms of initial 'licence to practise' considerations and continuing professional development).

Workplace learning activities cannot necessarily be viewed in isolation from other higher education activities which involve engagement with employers (in particular in relation to research and development and consultancy activities). The inter-connectedness of these activities creates potential synergies for the institution and the employer.

10.2 Strategic choices to inform a workplace learning strategy

A narrow definition of workplace learning, confined to learning derived from workplace experiences which are accredited as part of a higher education programme, is no longer workable. A broader conception is needed, recognising higher education's role in the wider knowledge society and embracing notions of employer engagement for the purposes of creating opportunities for learning in the workplace.

We note that some institutions already benefit from good and effective employer links and offer the more traditional types of workplace learning. However, to provide impetus to creating more permeability between higher education and employment, we consider that HEFCE's strategy should look to more innovative forms of workplace learning, and aim to reach 'hard-to-engage' employers (e.g. small to medium-sized enterprises) and their employees. Further, it should be recognised that more innovative forms may need time to develop if they are to become an accepted part of higher education provision.

The above poses policy questions of focus and strategy. Should the development of workplace learning opportunities be an objective for all higher education providers in the same way as (say) widening participation? Or should government policies be aiming to create greater selectivity and notions of excellence, and hence treat workplace learning in a similar way to research?

Our report shows the complexity of contexts for workplace learning in terms of types of workplace learning, types and needs of learners, subject differences, institutional differences, employment sector/workplace differences. But we nevertheless consider that all publicly-funded higher education providers should be expected to make some minimum commitment to offer good quality workplace learning opportunities, whilst accepting that particular institutions/departments will be able or choose to do more, to specialise in particular forms of workplace learning with particular groups of employers.

Recognising the diversity of higher education and the inter-connectedness of many institutional activities which depend on employer engagement, often with a particular local or regional focus, it is questionable to what extent a national workplace learning strategy should try to shape individual institutions' own choices of where they will focus their efforts. It is probably unrealistic to think that HEFCE can manage such processes from the centre. But HEFCE does need to ensure that higher education providers adopt and maintain an appropriately critical and rigorous approach to workplace learning in all its forms, and this may need some more evidence of learning outcomes than is currently available.

A HEFCE strategy for workplace learning (and employer engagement related to high level learning) needs to focus on structural and cultural issues so as to create sustainable conditions in which learners can access opportunities for workplace learning. Technical aspects of the delivery and management of workplace learning are arguably matters for higher education providers themselves (with other agencies) to determine, although there may be areas where HEFCE should seek to influence the policies of other agencies.

While the maintenance and development of existing arrangements for workplace learning will largely be matters for those providing them, HEFCE may have more of a role in stimulating and supporting the growth of new arrangements for workplace learning in areas (employment sectors, subjects, institutions) where there is little experience of them (and perhaps little support and understanding).

Thus, we suggest that a workplace learning strategy needs to address a number of linked issues:

- institutional strategies for learning and teaching;
- recognition of the inter-connectedness of higher education functions and activities relating to workplace learning and employer engagement;
- aspects of staff development linked to emerging forms of knowledge, and to notions of brokerage;
- notions of brokerage and entitlements;
- higher education input to skills strategy debates, and resultant actions.

10.3 Institutional strategies for learning and teaching

Higher education contains programmes at both undergraduate and postgraduate levels which, though vocationally relevant, may not include any workplace learning *per se*. But within the broad range of higher level work-related education we can identify a sub-set of provision that does include formally recognised workplace learning.

Workplace learning that is formally linked to a higher education programme tends to fall into a small number of main types. Within such programmes, it is useful to distinguish between learning needs at different stages of the life-course: initial formation prior to entering the labour market proper; and workplace learning for those already in employment. We have identified four main types of higher education programme involving workplace learning and discussed their current state and trends (see Table 5).

Taking each in turn we note the following.

HE-based programme (at undergraduate and postgraduate level) with WPL module or longer placement

These programmes tend to be part of an individual learner's initial professional formation. They are well-established (particularly at undergraduate level, involving longer/sandwich placements), though precise figures are difficult to ascertain as official data sources do not capture information on learner take-up of workplace learning modules. Funding for sandwich programmes is generally considered to be adequate. There seems to be some evidence of a decline in take-up of sandwich placements in some institutions, whereas others are retaining, or making more explicit, their commitment to such provision. We recommend that:

- short term: HEFCE ensures that the DfES review of student support arrangements looks at the impact on differential take-up of sandwich programmes;
- medium term: HEFCE commissions further study of HESA data to track trends in take-up by learner characteristics, and considers the potential impact on higher education provider/employer engagement.

HE-based programme with alternating sequences of taught modules and short practice placements

These programmes tend to be part of an individual learner's initial professional formation in teacher training, and health and social care areas. Periods of placements in practice situations are a compulsory part of the overall programme. They are well-established and tend to be funded by agencies other than HEFCE. We recommend that:

- HEFCE considers what lessons, if any might, be drawn from other agencies' funding arrangements.

HE-based programmes with some integration of taught modules with work activities (foundation degrees)

These programmes are being used by learners for both initial formation, and continuing personal and professional development. The foundation degree initiative is a recent higher education policy development and as such practices relating to these programmes are still emerging. There are still ongoing issues relating to the adequacy of funding, employer engagement, and prevailing quality, regulatory and qualification frameworks. We recommend that:

- short term: HEFCE reviews funding arrangements. Foundation Degree Forward considers further research/development in light of QAA reviews and link with other related networks (e.g. the Higher Education Academy);
- medium term: HEFCE considers more explicit focus on the brokerage process; QAA ensures appropriate higher education input to Sector Skills Council frameworks for foundation degrees.

Employment-based programme, negotiated between higher education, employer and learner

These programmes tend to be used by learners for continuing personal and professional development. They depend to a large extent on negotiations between the higher education provider, learner/worker and employer about the shape, content and level of the programme (to meet both learner and organisational needs). Though yet to achieve widespread take-up, they have the potential to be a prime vehicle for workforce development linked to higher education programmes. They also have the potential to be developed as a top-up to foundation degrees. Some providers consider current funding arrangements are inadequate to meet the real costs of negotiating and maintaining such programmes. We recommend that:

- short term: HEFCE reviews funding arrangements. QAA reviews current guidance on placement learning to incorporate wider models of WPL typified by these programmes;
- medium term: HEFCE encourages further development and commissions an evaluation.

More generally, it would be reasonable for HEFCE to expect that institutions' strategies for learning and teaching make explicit reference to workplace learning, and how the institution plans to engage with learners already in the workplace. For most people in the future, working and learning will be combined in different ways and with different expectations throughout the life course. More specifically, it will be important for both institutions and HEFCE to recognise that the majority of today's undergraduates are working alongside their studies (whether notionally full-time or part-time). Term-time working has become the norm and has significant implications for the student experience and approaches to learning. A small number of institutions have begun to assess and give credit for learning achievements outside of formal higher education programmes of study.

We expect such trends to continue. On grounds of both social equity and the maintenance of academic standards, it is desirable that there is at least a minimum comparability in institutions' approaches to this issue.

HEFCE should also expect institutions to have established 'rules of engagement', so that individual departments that seek to engage with employers and workplace learners do so on the basis of an institutionally-agreed set of standards. These rules of engagement might include statements about the entitlements of learners, employers and the institution in relation to the workplace learning.

We noted above that some providers argue that the current funding methodology does not reflect the actual full cost of delivery of employment-based negotiated forms of workplace learning. On the basis of the available data, it is not possible to determine whether this is the case, but we suggest that HEFCE review current arrangements.

Current datasets do not contain sufficiently robust information to be used as an indicator for allocating additional funding for workplace learning. HEFCE should consider the use of initiative funds to support developments in workplace learning and employer engagement.

10.4 Inter-connectedness of different higher education activities relating to workplace learning and employer engagement

Several institutions emphasised the interconnectedness of employer links concerned with learning and teaching and links concerned with research and knowledge transfer. Such links could also have implications for widening participation and social equity issues. From this perspective, it is important for HEFCE to take a holistic view of employer engagement in higher education. That said, it is also important to acknowledge that the detailed working out of employer engagement is often at the subject department level, with links developed with employers specific to that subject/sector.

We suggest that, in the short-term, HEFCE should consider increasing the links between the existing funded initiatives (for example, Centres for Knowledge Exchange, Lifelong Learning Networks) to ensure that opportunities are realised for effecting good brokerage relationships between potential and actual learners in the workplace (and their employers) and learning providers. This may entail some re-alignment of HEFCE internal structures to ensure effective staff links. HEFCE should also ensure that these initiatives are reviewed and emerging lessons are shared.

The lack of effective 'managed learning environments' was seen as an inhibitor to good quality workplace learning by some providers. HEFCE should ensure, in the short-term, that its current e-learning strategy captures this dimension. In the medium-term, HEFCE should ensure that other e-based teaching and learning funded initiatives (including those developments being pursued through CETLs) are reviewed and lessons for workplace learning identified and disseminated through appropriate channels (including the Higher Education Academy).

Whilst the internal structuring of higher education providers is a matter for providers themselves, we consider that, in the medium-term, studies should be undertaken to gain a better understanding of how activities in relation to learning and teaching, research and development and consultancy are inter-linked, the synergies between them and the benefits that accrue from such inter-linking. These benefits should be considered both in terms of costs and more importantly in terms of staff knowledge and skills in relation to employer needs and the creation, development and use of high level knowledge.

10.5 Implications for staff development

Across the spectrum of higher education provision there are now many staff with experience of engaging with employers and their employees in negotiating programmes leading to higher education awards. Delivery of such negotiated programmes requires changes to the traditional role of academic staff (which might require new skills sets) and arguably creates opportunities for staff to gain new knowledge. Within Centres for Knowledge Exchange there are discussions about the development of 'knowledge transfer professionals'. Further, discussions about skills sets needed by knowledge brokers operating in the learning and skills sector are already taking place. Clearly there could well be commonalities between these skills sets, and there will be issues about staff development and training. In the short term, HEFCE should initiate discussions with all relevant parties (including the LSC, the Higher Education Academy and Sector Skills Councils) to establish what actions are currently being taken and to identify scope for synergy between the different developments. If workplace learning is to be extended across different subject fields and to take account of a wider range of workplace contexts, there will be a need for considerable investment in staff development in order to ensure that existing good practices are both developed and shared across all of higher education.

The distributed nature of workplace learning implies that different aspects of the learning process will need to be shared between different actors. A changing division of labour in supporting learning will have implications for the roles of academic staff based in higher education and of 'workplace' based staff. This raises large issues for staff development, not only for academic staff but also for employers. There is a need to make training in assessment and supporting learning available to those managers and mentors responsible for learners accessing workplace learning opportunities. This is an opportunity for higher education providers to engage with employers in the continuing professional development of their staff. HEFCE should engage with Sector Skills Councils to promote the development of employers and their employees involved in offering and supporting workplace learning.

10.6 Notions of brokerage and entitlements

There are several brokerage schemes being piloted and developed: in essence, each scheme aims to help diagnose an employer's training and development needs and subsequently advise employers/employees on appropriate training and development activities to meet those needs (and on possible sources of funding). Some of these schemes have a narrow remit for a specific level of education (in the case of the National Employer Training Programme, and the foundation degree/British Chambers of Commerce scheme), or for a specific sector of employment (in the case of the Sector Skills Council and SMEs in the engineering sector). Others have a more general remit, spanning different levels of education but focusing on local and regional needs (in the case of HEFCE-funded Centres for Knowledge Exchange). The schemes are funded from different sources.

There is a need for some coherence and integration between the various existing and emerging schemes, so that objective and appropriate advice is given to employers (and potential workplace learners) and effort is not duplicated. In the short term, HEFCE should initiate discussions with all relevant parties (including the LSC, the SSDA and the Sector Skills Councils) to establish what actions are currently being taken and to identify scope for synergy between (and critical evaluation of) the different developments.

Any learning process involves a number of different dimensions, including assessment of learning needs, guidance on relevant programmes or qualifications, providing learner support, assessing outcomes of learning to inform future learning activities, assessing learning outcomes and giving public recognition to that learning. For traditional higher education-based programmes, the HEFCE teaching grant is used to fund all these different dimensions. But in workplace learning these dimensions may well be shared across different sites of learning and undertaken by different parties. Employers may accept the costs of undertaking these roles because they enjoy benefits or offsetting savings through the provision of workplace learning.

HEFCE's powers to fund higher education do not permit it to pay directly for employers' costs in relation to workplace learning. However, it is open to higher education providers to negotiate and agree arrangements under which employers or third parties (e.g. brokers) receive payment for work undertaken which contributes to the delivery of the higher learning aim or qualification. HEFCE should consider working with Sector Skills Councils to develop entitlement models (for learners, employers and providers) in different employment sectors. This work should consider further models of risk-sharing and reward.

Future student support arrangements may discourage students from enrolling on programmes where the duration of the programme is extended to include a period of workplace learning. HEFCE should ask the DfES to consider, as part of the assessment of the impact of the new student support arrangements, whether these arrangements are impacting differentially on demand for programmes with a workplace component.

10.7 Higher education input to skills strategy debates

Though HEFCE does not necessarily 'speak' for higher education, it does have a role in ensuring that a higher education dimension is brought to debates about national strategies for skills development. At present the higher education voice seems to be a late addition to discussions. Yet policy drives towards better interfaces between education, training and employment that meet both economic imperatives and the needs of individuals in the workplace (or about to enter the workplace) clearly need to embrace all levels of publicly-funded education and training.

In the short term, HEFCE should ensure that it has adequate and appropriate links to other agencies involved in developing policies and practice for a national skills strategy. In the medium term, HEFCE should develop and publish its own response to the national skills strategy, highlighting the contribution which higher education research and teaching makes to the competitiveness and productivity of the economy.

10.8 A note on terminology

During the course of this study to inform HEFCE's workplace learning strategy, we have read many HEFCE strategy and policy documents. Two particular aspects of terminology have struck us. First, we would suggest that the continued use of the term 'student' (for example, 'employability of students', the 'richness of the student experience', stimulating new sources of 'student demand') may tend to reinforce notions of learners who are 'just' studying, have no other commitments, and have yet to become a part of the workforce proper. As we hope we have recognised throughout this report, learning in the workplace is arguably an increasingly important part of the higher education landscape.

Second, we note the use of terms such as 'knowledge exchange', 'knowledge transfer', and 'knowledge transfer professionals'. There is a sense in which the term 'knowledge

exchange' might imply a flow of knowledge in both directions (from higher education to business/industry and vice versa), whereas the term 'knowledge transfer' might imply 'just' a one-way flow from higher education. Notions of emerging knowledge societies clearly challenge notions of knowledge creation and transfer being in one direction only.

10.9 Changing boundaries

As we note earlier in this report, much of the theorising on workplace learning and related concepts (such as informal learning and experiential learning) highlight challenges to traditional conceptions of learning at higher levels and to notions of acceptable 'sites' of learning. Considerations of what conditions are needed to ensure that workplace learning at higher levels can take place inevitably raise a series of boundary issues¹⁷.

Boundary issues include the following.

- How do the 'learners' in the workplace see themselves? Do they see themselves primarily as 'learners' parachuted into the workplace for a fixed period of time, to do a specific job of work or a specific work-based project, or to gain experience of specific practical or clinical procedures? Or do they see themselves as experienced workers doing some specific work-based activity (agreed in advance with their employer and the higher education accreditor) alongside their 'usual' job of work?
- Who is assessing the evidence of learning derived from the workplace? Is it an academic from the HEI that ultimately validates the learning and hence gives it public recognition (in terms of academic credit), or is it a supervisor in the workplace who assesses the learning claims against a potentially different set of norms/values/standards? Or is it mixture, with some of the responsibilities for making judgements about learning being shifted/distributed to others involved in the workplace learning endeavour?
- Who is creating and delivering the curriculum? We noted earlier the positive encouragement (from QAA) given to employer involvement in curriculum issues, and other aspects of direct employer input to educational provision (for example, 'master classes' from industry representatives and industry-based mentor support systems). But there seems to be less emphasis on crossing boundaries in the other direction, i.e. academic staff going out into the workplace to gain recent experience of business/ industrial/ service sector workplaces.
- How does the learner gain support for learning occurring in different sites? How do they access learning resource materials based in different sites? How do they cross those boundaries? There is currently much resource being directed towards the development and use of ICT and mobile technologies as ways of improving communications between learners in the workplace, employers and higher education staff, and of supporting learning and assessment in workplace environments. But we also note that insufficient resource in certain sites (for example, in some further education colleges) may negatively impact on the effectiveness of managed learning environments and other web-based resources.
- There is a boundary between 'real' and 'realistic' workplace environments, with the latter (referred to in some bids for Centres for Excellence in Teaching and Learning)

¹⁷ As part of this study we had access (through HEFCE) to documentation relating to Centres for Excellence in Teaching and Learning (CETLs); a number of boundary issues emerged from reviewing that documentation.

being where the HEI brings the workplace to the campus by setting up, on-campus, relevant workplace environments (e.g. exhibition spaces, theatres, media/publishing house).

- Notwithstanding the emerging Lifelong Learning Networks (with their emphasis on enabling movement and progression between different levels of post-compulsory education), there are still structural boundaries between further and higher education which may limit an individual's opportunity for learning. Further, whilst qualification frameworks and the like clearly need to be based on different levels of educational achievement, it is likely that from a workplace perspective such differentiation between levels (and whether the learning is offered by further or higher education) is of less importance than ensuring that identified needs for further development of skills and knowledge are met.

It is useful to identify and explore boundary issues as one way of identifying what makes workplace learning different from other forms/modes of learning in higher education. However, we should also recognise that part of the value of engagement with workplace learning to both HEIs and workplace organisations is that it assists in making more permeable the boundaries between different sites of learning, and (arguably) different views of what constitutes and what should be recognised as valid learning.

In this respect, workplace learning can lay strong claims to being a route, and even the prime route, to lifelong learning. Seen in this sense, strategies for workplace learning may be less about trying to answer questions about what types of learning are best undertaken in higher education, and what types are best undertaken in the workplace (or elsewhere), and more about trying to ensure that the prevailing conditions (including policy drivers and interactions between various stakeholders) are such that people are encouraged to exploit the learning potential inherent within all kinds of contexts and situations, whenever and wherever they might occur.

Finally, we noted in Section 2 how work organisation cultures and structures can create conditions which are more or less conducive to learning. We accept that there are some types of learner need where the employers' voice should probably be absent. However, on the whole we would argue that workplace learning developments that depend on negotiations between higher education provider, employer and learner about the shape and content of a programme and its links to broader organisational needs bring with them the potential for sustained interactions between higher education and employers. As a result of these interactions, boundaries may become more permeable and greater understandings between higher education and work might follow.

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Abbreviations

APEL	Accreditation of prior experiential learning
CETL	Centres for Excellence in Teaching and Learning
CIHE	Council for Industry and Higher Education
DfES	Department for Education and Skills
HBO	Hoger Beroepsonderwijs
HE	Higher education
HEFCE	Higher Education Funding Council for England
HEI	Higher education institution
HEIF	Higher Education Innovation Fund
IUT	Institut Universitaire de Technologie
LSC	Learning and Skills Council
NHS	National Health Service
QAA	Quality Assurance Agency for Higher Education
SME	Small and medium-sized enterprise
SSDA	Sector Skills Development Agency
STS	Section de Techniciens Supérieurs
TDA	Training and Development Agency for Schools
VLE	Virtual learning environment
WPL	Workplace learning