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An Assessment of Skill Needs in Post-16 Education and Training

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Foreword

Skills Dialogues are commissioned and funded by the Skills Intelligence Team at the Department for Education and Skills (DfES). They are high level strategic discussions grouping sectors with similar agendas. The Further Education National Training Organisation (FENTO) has led on this particular dialogue and worked with the Employment National Training Organisation (EmpNTO), the Higher Education Staff Development Agency (HESDA) and PAULO to look at issues in wider, non-compulsory education and training, bringing together views from further, higher, community and work based training sectors/organisations.

Working with the DfES, the Learning and skills Council (LSC) and other government agencies, we commissioned the Institute for Employment Studies (IES) to consolidate existing data from each sector and draft a report. The draft report was considered at five focus group meetings held around the United Kingdom to which practitioners from the above sectors were invited to make their comments. This skills dialogue report is based on all the available statistical evidence and takes full account of the discussions and views expressed at each of the focus groups.
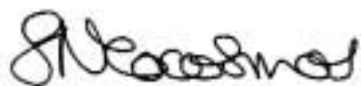
We would formally thank the practitioners in our sectors who attended and contributed to the focus group events. We are indebted to them as without their input this skills dialogue report would not have been possible.

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Executive Summary

Introduction

This report summarises the most up-to-date information about skills issue in the post-16 education and training sector. In particular, it seeks to draw together common themes that affect employers and employees working in further and higher education, community and adult education, and training and workforce development.

Background to the study

At least 1.05 million people work in post-16 education and training: in further education, higher education, and in the community, workplace, private and voluntary sectors. They play a vital role in providing the skills and qualifications required by society and employers, but they can only fulfil this role if they themselves are able to recruit, retain and develop the human resources they need.

The Department for Education and Skills (DfES) joined forces with four National Training Organisations (NTOs) to assess the future skills needs of the post-16 Education and Training Sector across the UK as a whole. For the first time all the key players are working together to:

- map out the skills that are most needed across the entire sector;
- communicate common needs to agencies that can help deliver the workforce that the post-16 education sector requires (eg the Learning and Skills Council and Regional Development Agencies).

Four NTOs are taking the lead in representing the sector:

- FENTO, representing Further Education.
- HESDA, representing Higher Education.
- PAULO, representing community-based learning and development.
- Employment NTO, representing personnel, training and development professionals, trade union professional officers, advice, guidance and counselling workers, and occupational health and safety officers who span across all industrial sectors.

Data on skills issues in the education and training sector has traditionally been weak because of, among other things, the plethora of agencies representing interests within the sector, and problems mapping the sector onto existing industrial and occupational classifications.

The post-16 education and training sector also suffers from a lack of cohesion among its constituent sub-sectors which acts as a potential barrier to effective staff development across the sector as a whole.

Drivers of change (Chapter 1)

Post-16 education and training serves many purposes and needs, and produces a wealth of benefits that are not economic or even measurable in quantifiable terms. However, it also serves directly measurable economic and social needs in equipping adults with the skills, knowledge and qualifications required to sustain and develop a thriving economy and society. The government set out its own perspective on this in its The Learning Age green paper (1998):

'Learning is the key to prosperity - for each of us as individuals, as well as for the nation as a whole. Investment in human capital will be the foundation of success in the knowledge-based global economy of the twenty-first century. This is why the Government has put learning at the heart of its ambition.'

The thrust of policy is towards:

- **a culture and practice of lifelong learning, in which the state, employers and individuals share responsibility.** Put simply, the policy is for everyone to learn, and to carry on learning, throughout and even beyond their working life;

- **stimulate demand for learning, and target such stimuli particularly at groups and individuals least likely to participate.** Aside from social cohesion and fairness issues, such a policy pragmatically recognises that in saturated education and training markets, the only means of growth is to reach out to non-traditional learners and excluded groups;

- **improve the basic skills of adults with literacy and numeracy problems.** The DfES Adult Basic Skills Strategy unit is working to implement the recommendations of the Moser report and Skills for Life to improve basic skills levels among the seven million adults with literacy or numeracy problems;

- **develop more capacity but also enhanced capability of supply, through enhanced quality amongst all providers of post-16 education and training.** New inspection regimes for higher, further and work-based education and training are evidence of the commitment of government to sharpen and improve the role of inspection and quality assurance;

- **an increase in earmarked government funds for post-16 education and training, to support increased participation.** The government has set and retains an ambitious aim of increasing participation in higher education from a third to half of young people;

- **the progressive implementation or further development of many recommendations arising out of the National Skills Task Force,** including vital work on labour market and skills intelligence that the new Sector Skills Councils have a key role in delivering;

- **development of a coherent and relevant vocational qualification system** that helps reward individual learners (through the increased mobility a national qualification facilitates) whilst recognising employer antagonism to expensive, irrelevant or bureaucratic qualification systems that ultimately may lead to excessive staff turnover.

The government's proposed 14-19 agenda will have a significant impact on the further education sector, if not on the other sub-sectors. Although the implications are not fully understood, there are likely to be issues in terms of accommodating and responding to younger age groups, and new relationships between FE and both schools and the higher education sector, which in turn may have implications for the image of FE and the skill needs of the sector.

The devolved administrations in Wales, Scotland and Northern Ireland have an important role to play in supporting the development of the education and training sectors in their areas.

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Funding for post-16 education and training has a big influence on the sector, not only the level of, but also the nature of funding. Much funding is provided on a short-term, bid-by-bid basis, which can distort activity and constrain long-term planning, innovative response and flexible operation.

One issue should be underlined above all others: quality. Improved quality and systematic use of quality assurance systems will create considerable demands for the specific skills in the post-16 education and training system, and strongly reinforce the drive towards professionalisation and mandatory qualifications for staff in some areas.

In its Workforce Development Report (2001) the Cabinet Office's Performance and Innovation Unit (PIU) makes a strong argument for increasing the demand-led nature of post-16 education and training. This project is very important to this Dialogue group (despite explicitly excluding Higher Education from its remit) as it provides clues for future developments in the areas of further, adult and workplace education and training. The project goals are that *'in 2010, the UK will be a society where Government, employers and individuals actively engage in skills development to deliver sustainable economic success for all'*, and it observes that:

> *'The quality of provision available from publicly funded FE colleges and private training providers is variable and there is a need to raise standards further across the board.'*

The PIU report cites work by the Employment NTO in developing occupational standards as an example of work to increase quality in work-based training and learning contexts, and the DfES/LSC Standards Fund in supporting staff development in further education.

The situation for higher education is more complex, with the whole area of quality assurance having been under review. However, whilst the HE system appears to be moving away from external inspection as a key tool of quality, the requirements for internal and self-assessing measures are, if anything, increasing over time. In that sense there is a common theme running throughout the post-16 education and training sector, of quality assurance becoming more important and requiring higher and different types of skills from some staff.

Current employment in post-16 education and training sector (Chapter 2)

This Chapter presents information on the current level of employment in the post-16 education and training sector, looking at the total employment level, employment by occupation and in the individual sub-sectors, and the regional distribution of post-16 education and training employment. Data is from the Spring 2001 Labour Force Survey.

The key points are:

- In Spring 2001 the post-16 education and training sector employed 1.05 million workers, and accounted for 3.7 per cent of total employment in the UK.

- The higher education sector makes up nearly 40 per cent of this total, some 413,000 workers.

- Employment is concentrated at the higher end of the occupational scale. Some two thirds of the workforce are employed in professional and associate professional occupations, generally requiring qualifications at degree level, and the largest group outside these occupations is managers and administrators.

- There are occupational differences between the sub-sectors within post-16 education and training:

- Over half of total employment in further and higher education is in professional occupations.

- The community-based learning and development sector has proportionately fewer professional workers, and proportionately more managers and administrators and associate professionals than further and higher education.

- The work-based learning and training sector is defined as specific managerial and associate professional occupations.

- The largest numbers of post-16 education and training workers are in London and the South East, while the highest concentrations by region are in London, Merseyside, and Wales.

Employment trends and projections (Chapter 3)

This Chapter describes the changing numbers and patterns of demand for workers, both historic and projected, in the post-16 education and training sector. Data on historic trends and future projections are from Cambridge Econometrics and the Institute for Employment Research. The key points are:

- Employment in the post-16 education and training sector has grown at a faster rate than overall employment during the last three decades.

- This faster than average employment growth is projected to continue over the next decade. By 2010 the employment level in the sector is expected to have increased by 195,000.

- Employment growth is expected to be faster in the work-based learning and training sector than in post-16 education and training establishments in the further, higher and other adult education sectors.

- By occupation, the largest increases in employment are projected for professional and associate professional occupations, while the numbers of clerical and secretarial workers and elementary staff are projected to decrease.

- The sector will also need to replace people who leave the sector, in addition to recruiting for expansion. The number of people the sector will need to recruit to replace leavers is likely to be 60 per cent higher than the level of employment growth in the sector, at 325,000. Thus, over the next decade the sector will need to recruit 520,000 new workers.

- As with expansion demand, the largest levels of replacement demand will be for professional and associate professional occupations, and over the next decade the sector will need to recruit around 600,000 professional and associate professional workers.

- Recruitment on this scale represents a significant problem for the sector. More emphasis needs to be put on staff retention, clearer career structures, and improved reward packages.

- The number of highly skilled people (degree level or equivalent or higher) in the economy is projected to grow by at least 2.3 million to 2010. and

- The increase in the supply of highly skilled people is only four times greater than the highly skilled recruitment needs of the post-16 education and training sector; therefore the sector is likely to find itself in competition with other sectors for this highly qualified workforce.

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Workforce demographics (Chapter 4)

This Chapter looks at the demographic characteristics, including sex, age, ethnicity and disability of the post-16 education workforce, using data from the Spring 2001 Labour Force Survey. Key points are:

- Women make up 56 per cent of the post-16 education and training workforce, compared with 45 per cent of overall employment.

- The work-based learning and training sector has the highest proportion of women, at 63 per cent, while the higher education sector has the lowest, at 51 per cent.

- Among the higher level occupations, the over-representation of women is less marked, indeed there are slightly more male professional workers than female.

- The proportion of women in the post-16 education and training workforce has increased in recent years, and is projected to continue to do so, so that by 2010 women may comprise 62 per cent of total employment in the sector.

- The post-16 education and training sector has an older age profile than overall employment. Workers aged under 30 make up 19 per cent of post-16 education and training staff, compared with a quarter of all workers.

- The work-based learning and training sector has a younger age profile than the other three sectors.

- The proportion of both young and old workers in the post-16 education and training has increased in the last five years, although the average age of workers in the sector has remained static.

- The proportion of ethnic minorities in post-16 education and training, at 5.3 per cent, is very close to the national average of 5.1 per cent. However, there are issues about the level to which staff from ethnic minority groups have risen in the hierarchies.

- However, the proportion of ethnic minorities among the population aged 16 to 34, the main client group for the sector, is much higher at 10 per cent. Therefore in many organisations there is a mismatch between the ethnic profile of teachers and learners.

- The community-based learning and development and higher education sectors have the highest proportions of ethnic minority workers.

- There may be an under-representation of Asian workers in the post-16 education and training sector.

- The proportion of people with a disability in the post-16 education and training sector is the same as the proportion of disabled people in total employment, at 12 per cent. The proportion is highest in the further education sector, and lowest in the community-based learning and development sector.

Workforce development and qualifications (Chapter 5)

This Chapter examines the training and development received by the workforce of the post-16 education and training sector, and broadly at the qualification base of those working in the sector. The chapter draws on a number of data sources including the Spring 2001 Labour Force Survey, the 2000/01 Employer Skills Survey, and a HESDA survey of higher education institutions. The key points are:

- Workers in the post-16 education and training sector are more likely than average to have received job-related training in the last month. Nearly one-quarter of post-16 education and training workers received training in the month before they were interviewed, compared with 15 per cent of all workers.

- The further education sector is most likely to train its workforce, with 27 per cent of workers receiving training, while the work-based learning and training sector is least likely, with 20 per cent of the workforce being trained.

- The likelihood of receiving training is greater for staff in professional and associate professional occupations than for those in managerial, administrative, clerical, secretarial and elementary occupations.

- Post-16 education and training establishments are much more likely than average to have arranged or funded training for their workforce in the last year, with 64 per cent of post-16 education and training establishments arranging training compared with 37 per cent of all establishments.

- Post-16 education and training establishments are also more likely to train the majority of their workforce than are establishments across all sector.

- Looking at the types of training arranged or funded, post-16 education and training establishments are more likely than average to arrange supervisory training, induction training, and soft and generic skills training, and less likely than average to arrange training in new technologies.

- The post-16 education and training workforce is very highly qualified, with nearly 60 per cent having a first degree or equivalent, or higher qualification. Across all sectors only 27 per cent of workers are qualified at this level or above.

- Within the post-16 education and training sector, the highest qualification levels are found in the higher education sector. Two thirds of higher education workers have at least first degree level qualifications.

- The proportion of highly qualified workers in the further education and other adult education sectors is 62 per cent and 58 per cent respectively.

- The lowest qualification levels are in the work-based learning and training sector, with 49 per cent of workers being qualified to at least first degree level or equivalent, although this is still well above the average for the entire workforce.

Skills issues and recruitment (Chapter 6)

This chapter considers the extent and nature of skills shortages and skills gaps within the education sector based on the available evidence on recruitment difficulties and hard-to-fill vacancies, and employer views about the proficiency of their workforce. The main data source for this chapter is the 2000/01 Employer Skills Survey. Key points of the chapter are:

- Vacancies in the post-16 education and training sector have increased slowly but steadily over the last few years, while nationally vacancies have remained stable.

- Nearly four out of ten vacancies in post-16 education and training are hard-to-fill, compared with nearly half of vacancies across all sectors.

- However, the proportion of post-16 education and training vacancies that are hard-to-fill for skill related reasons is the same as the national average, at one in five.

- The skills which are difficult to obtain are predominantly general technical and practical skills, advanced IT skills, communication skills and management skills. These are common across all the sub-sectors within this Dialogue project.

- Reasons for skills shortages included low numbers of skilled applicants, low numbers of applicants generally, and lack of qualifications and work experience among applications.

- However, low pay may be a cause of skills shortages in some sub-sectors (FE and PAULO), in certain geographical hotspots and for lower occupational grades relatively low pay may be a cause of skills shortages.

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- The most common response to skills shortage vacancies was to increase recruitment efforts, by expanding recruitment channels or spending more on advertising and recruiting.

- Skills gaps were reported among professional, technical, managerial, and clerical and secretarial staff. The skills most commonly reported as lacking were communication skills, advanced IT or software skills, and management skills.

- High staff turnover and the inability of staff to keep up with change were the most commonly reported reasons for a lack of proficiency among the workforce, and the main implications of a lack of proficiency were problems introducing new work practices, problems meeting required quality standards, and problems meeting customer service objectives.

- The most common response to skills gaps was to provide further training, followed by changing working practices, relocating work within the organisation, and expanding trainee programmes.

- The most significant barriers to maintaining a fully proficient workforce among post-16 education and training establishments are lack of time for training, lack of cover for training, and a lack of funding for training. The effects of a lack of funding may be exacerbated by the short-term nature of funding arrangements.

- It is the skills in which post-16 education and training establishments are currently experiencing gaps, i.e. IT, communication and management skills, that are going to become more important in the future. In other words, these are issues that show no signs of going away.

Sector responses to the skills challenge: issues and plans (Chapter 7)

In this chapter we review the main thrust of thinking emerging from the sector to date as a response to labour market and skills data. Sector Workforce Development Plans (SWDPs) have been drawn up by NTOs to marshal the priorities of sector institutions and other stakeholders in workforce development. This chapter draws together key findings from these SWDPs, thematically for the whole post-16 education sector. The key priority areas are:

- Increasing basic skills teaching and training.
- Transferability of qualifications across the sector.
- Measuring and developing a more equal and diverse workforce.
- Supporting professional development of teaching and research staff, including mandatory qualifications.
- Encouraging more and better management development.
- Improving take-up and use of information and learning technology.
- Developing support staff.
- Improving labour market and skills data and intelligence.
- Improving adult literacy, numeracy and English for Speakers of Other Languages (ESOL) skills for manual staff.
- Technician training.

1. Introduction and Background

This report summarises the most up-to-date information about skills issue in the post-16 education and training sector. In particular, it seeks to draw together common themes that affect employers and employees working in further and higher education, community and adult education, training and workforce development.

1.1 Background to the study

At least 1.05 million people work in post-16 education and training: in further education, higher education, and in the community, workplace, private and voluntary sectors. They play a vital role in providing the skills and qualifications required by society and employers, but they can only fulfil this role if they themselves are able to recruit, retain and develop the human resources they need.

The Department for Education and Skills (DfES) joined forces with four National Training Organisations (NTOs) to assess the future skills needs of the post-16 Education and Training Sector. The NTOs have responsibility for their sectors across the whole of the United Kingdom. For the first time all the key players are working together to:

- map out the skills that are most needed across the entire sector;
- communicate common needs to agencies that can help deliver the workforce that the post-16 education and training sector requires (eg the Learning and Skills Council and Regional Development Agencies).

Four NTOs are taking the lead in representing the sector;

- FENTO, representing Further Education.
- HESDA, representing Higher Education.
- PAULO, representing community-based learning and development.
- Employment NTO, representing personnel, training and development professionals, trade union professional officers, advice, guidance and counselling workers, and occupational health and safety officers, who span across all industrial sectors.

Data on skills issues in the education and training sector has traditionally been weak, because of the:

- plethora of agencies and bodies representing various interests within the various sectors and sub-sectors;
- blurred boundaries between institutions, sectors and occupations that can limit the utility of major national datasets (e.g. some surveys cannot distinguish higher and further education staff, while in others these two groups cannot be compared);
- a focus on academic staff, which has tended to distract attention from the skills issues for other staff within educational institutions (e.g. the so-called 'support staff' in further education and 'non-academic' staff in higher education).

Improving labour market and skills data and intelligence has been identified as a priority for action by some of the NTOs to help overcome some of these weaknesses.

Furthermore, the post-16 education and training sector suffers from a lack of cohesion among its constituent sub-sectors, which acts as a potential barrier to effective staff development across the sector as a whole. The four sub-sectors generally operate autonomously and with little consideration for their partner sub-sectors. This is partly because of the different client groups they serve, and partly because of institutional factors such as different organisational infrastructures and occupational frameworks.

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1.2 Drivers of change

Post-16 education and training serves many purposes and needs, and produces a wealth of benefits that are not economic or even measurable in quantifiable terms. However, it also serves directly measurable economic and social needs in equipping adults with the skills, knowledge and qualifications required to sustain and develop a thriving economy and society. The government set out its own perspective on this in its The Learning Age green paper (1998):

> *'Learning is the key to prosperity - for each of us as individuals, as well as for the nation as a whole. Investment in human capital will be the foundation of success in the knowledge-based global economy of the twenty-first century. This is why the Government has put learning at the heart of its ambition.'*

The drivers of changing skills requirements (of staff) in post-16 education and training are primarily the same as those driving national policy to help develop and deliver education and training to all who need it. The government is the single most noteworthy 'driver' here, although in many senses it co-ordinates, exhorts and assists rather than delivers or requires. For example, a large majority of work-based training is funded by employers rather than the state, and quite significant sums of the higher and further education budgets are provided by individuals and companies as customers, rather than the state in grant-aid.

In the area of labour market and skills policy, governments have traditionally consulted and compromised with key stakeholders including employer groups, professional bodies, trades unions, universities and learned societies, and the associated bodies and agencies that in one way or another support the infrastructure of post-16 education and training. That is not to say that there is always consensus or even agreement on specifics: for example, government policy on qualifications (e.g. NVQs) has arguably been so ambitious and formal that some employers have simply said 'not for us'. However, and increasingly in recent years, there is now a powerful coherence in policy-making that assists in planning of areas such as the one this Dialogue is concerned with - what skills do the post-16 education and training workforce need in the future, and in what quantities.

The importance of stakeholders is hard to exaggerate, and it is vital to recognise that while HE and FE institutions are of course important centres of formal learning, a huge amount of learning (formal and informal, and not all leading to qualifications) is delivered elsewhere and by others in a range of innovative models, such as trades union workplace learning representatives. As a recent example of the type of activity driving change, Littlewoods has signed a lifelong learning agreement with USDAW and the GMB, formalising company support for Union Learning Representatives. Under this agreement, eighteen union reps have been trained to date and have received paid time for training.

The thrust of relevant government policy is towards:

- **a culture and practice of lifelong learning, in which the state, employers and individuals share responsibility.** Put simply, the policy is for everyone to learn, and to carry on learning, throughout and even beyond their working life. Specific instruments have been created by government in response to perceived market failure or deficiencies, e.g. learndirect, Ufi and Individual Learning Accounts. This policy objective underpins everything else, and is essentially permissive in nature: government will try to help make lifelong learning a reality - in any constructive ways that are within its powers, resources and responsibilities;

- **stimulate demand for learning, and target such stimuli particularly at groups and individuals least likely to participate.** Aside from social cohesion and fairness issues, such a policy pragmatically recognises that in saturated education and training markets, the only means of growth is to reach out to non-traditional learners and excluded groups;

- **improve the basic skills of adults with literacy and numeracy problems.**
  The DfES Adult Basic Skills Strategy unit is working to implement the recommendations
  of the Moser report and Skills for Life to improve basic skills levels among the seven
  million adults with literacy or numeracy problems;

- **develop more capacity but also enhanced capability of supply, through
  enhanced quality amongst all providers of post-16 education and training.**
  New inspection regimes for higher, further and work-based education and training are
  evidence of the commitment of government to sharpen and improve the role of
  inspection and quality assurance;

- **an increase in earmarked government funds for post-16 education and training,
  to support increased participation.** The government has set and retains an
  ambitious aim of increasing participation in higher education from a third to half of
  young people;

- **the progressive implementation or further development of many
  recommendations arising out of the National Skills Task Force,** including vital
  work on labour market and skills intelligence that the new Sector Skills Councils have
  a key role in delivering;

- **development of a coherent and relevant vocational qualification system** that
  helps reward individual learners (through the increased mobility a national qualification
  facilitates) whilst recognising employer antagonism to expensive, irrelevant or
  bureaucratic qualification systems that ultimately may lead to excessive staff turnover.

A recent development which will have implications for at least the further education sector,
if not the other areas of post-16 education and training, is the government's 14 to 19
agenda, outlined in the Green Paper '14-19: extending opportunities, raising standards'.
Although the implications for the sector are not fully understood, there are likely to be
issues, for example, in terms of accommodating and responding to a younger age group,
and the new relationships between FE, schools and the higher education sector which may
have implications for the image of FE, and the skill needs of the sector.

The devolved administrations in Wales, Scotland and Northern Ireland have an important role
to play in supporting the development of the education and training sectors in their areas.

There are many other important policies, instruments and measures, not just those of
government, but of other agencies (e.g. the Learning and Skills Council) that are relevant,
although ultimately they tend to cohere with the 'big picture' aims agreed with government
and summarised above: more people learning, better targeting of provision to address
labour market needs, and a network of higher quality providers operating coherent
qualification frameworks.

One further issue, touched upon in more depth in the next section of this chapter, should be
underlined above all others: quality. Improved quality and systematic use of quality
assurance systems will create considerable demands for the specific skills in the post-16
education and training system, and strongly reinforce the drive towards professionalisation
and mandatory qualifications for staff in some areas.

Finally, funding for the post-16 education and training has a big influence on the sector,
not only the level, but also the nature of funding. Much funding is provided on a short-term,
bid-by-bid basis, which can distort activity and constrain long-term planning, innovative
response and flexible operation.

Workforce development strategy

In its Workforce Development Report (2001) the Cabinet Office's Performance and Innovation Unit (PIU) makes a strong argument for increasing the demand-led nature of post-16 education and training. This project is very important to this Dialogue group (despite explicitly excluding Higher Education from its remit) as it provides clues for future developments in the areas of further, adult and workplace education and training. The project goals are that *'in 2010, the UK will be a society where Government, employers and individuals actively engage in skills development to deliver sustainable economic success for all.'*

The PIU argue for more local flexibility and discretion to meet needs (principally but not exclusively labour market needs), and acknowledge that the use of such flexibility and discretion will create skills demands on those working in post-16 education and training. In terms of future delivery this has implications for outreach activity, the size and scale of workplaces, and delivery mechanisms.

The report endorses the recent Learning and Skills Council (LSC) strategy for quality, noting again that this will require improved opportunities for staff development amongst those working for education and training providers.

The PIU report observes that:

> *'The quality of provision available from publicly funded FE colleges and private training providers is variable and there is a need to raise standards further across the board.'*

The report also raises the need for providers to face-up to management challenges that the need for rapid change and raised quality imply, and recognises the difficulties with this that private and voluntary providers may face due to limited funds.

The PIU report cites work by the Employment NTO in developing occupational standards as an example of work to increase quality in work-based training and learning contexts, and the DfES/LSC Standards Fund in supporting staff development in further education.

The situation for higher education is more complex, with the whole area of quality assurance having been under review. However, whilst the HE system appears to be moving away from external inspection as a key tool of quality, the requirements for internal and self-assessing measures are, if anything, increasing over time. In that sense there is a common theme running throughout the post-16 education and training sector, of quality assurance becoming more important and requiring higher and different types of skills from some staff.

The national workforce development plan of the PIU should not be confused with the sectoral workforce development plans that were being taken forward by NTOs and which are referred to in the last chapter of this report. They are complementary but different.

1.3 Definitions of the sector

In this section we describe the definition of the post-16 education and training sector that is used throughout the Dialogue.

1.3.1 Post-16 education and training sector

We listed above the four NTOs that are participating in this Dialogue project. We now define them in terms of the standard classifications used in labour market information. Industrial sectors in the official datasets are classified according to the Standard Industrial Classification (SIC) 1992, while occupations are classified according to the Standard

Occupational Classification (SOC) 2000. SIC describes the activity of an establishment, and SOC describes the task or role of individuals in their work.

Definitions of the four sub-sectors and any issues concerning their definition, are given in turn. Throughout the report the sector is referred to as the post-16 education and training sector. The term 'sub-sector' is generally used to describe areas served by individual NTOs, e.g. higher education.

Further education

The further education sector is defined as the following two SIC categories:

- SIC 80.22 — Technical and vocational secondary education.
- SIC 80.301 — Sub-degree level higher education.

It should be noted that this definition does not encompass all further education establishments. Some will fall into the SIC category 80.21 General secondary education, although this category includes all pre-16 secondary education. Therefore the sector we are examining in this Dialogue project contains only FE establishments, but will not contain all FE establishments.

Higher education

The higher education sector is defined as the following SIC category:

- SIC 80.302/3 — First- and post- degree level higher education.

This category is a direct match with the higher education sector.

Community-based learning and development (PAULO)

The PAULO sector is defined as the following SIC category:

- SIC 80.42 — Adult and other education not elsewhere classified.

It should be noted that this category includes private training providers. Also, some establishments in the PAULO sector will fall outside this category, and into social work activities categories, although to include social work establishments would give a misleading picture of the sector.

Work-based learning and training (Employment NTO)

The Employment NTO sector is defined in terms of occupations and the jobs people do, rather than industrial sectors as is the case with the other three sectors. The Employment NTO Skills Foresight report maps the area onto the old Standard Occupational Classification 1990, and we have used that mapping as the basis of our definition of the sector based on the new Standard Occupational Classification 2000. The Employment NTO covers the following occupations defined in SOC 2000:

- SOC 1135 — Personnel, training and industrial relations managers.
- SOC 3562 — Personnel, training and industrial relations officers.
- SOC 3563 — Vocational and industrial trainers and instructors.
- SOC 3567 — Occupational hygienists and health and safety officers.

However, some of these workers will be employed in the further, higher and other adult education sectors and therefore our definition of the Employment NTO sector covers those employed in the occupations listed above and in establishments outside of the post-16 education and training sector.

1.3.2 Other definitions used

Certain data sources do not allow us to present information for the whole post-16 education and training sector, and therefore we have to use modified definitions of the sector.

In some cases, data is only available by industrial sector. This is the case for information on employment trends and projections in Chapter 3, and in data from the Employer Skills Survey in Chapters 5 and 6. In these instances the data refers to establishments in the further education, higher education, and community-based learning and development sectors, and are referred to as post-16 education and training establishments. This data will include some work-based learning and training staff that are employed within these establishments, but will not include such staff employed in other industrial sectors.

Also, some data sources provide information for all education establishments, that is including pre-16 education as well as post-16 education and training. In these cases we have pro-rated the data so as to present figures for post-16 education and training establishments.

2. Current Employment in Post-16 Education and Training Sector

2.1 Introduction and summary

This chapter presents information on the current level of employment in the post-16 education and training sector in the United Kingdom, looking at the total employment level, employment by occupation and in the individual sub-sectors, and the regional distribution of post-16 education and training employment. This chapter draws on data from the Labour Force Survey for Spring 2001 for the whole of the UK.

The key points of the chapter are:

⚬   In Spring 2001 the post-16 education and training sector employed some 1.05 million workers, and accounted for 3.7 per cent of total employment in the UK.

⚬   The higher education sector makes up nearly 40 per cent of this total, some 413,000 workers.

⚬   Employment is concentrated at the higher end of the occupational scale. Some two-thirds of the workforce are employed in professional and associate professional occupations, generally requiring qualifications at degree level. The largest group outside these occupations is managers and administrators.

⚬   There are occupational differences between the sub-sectors within post-16 education and training:

  ⚬   over half of total employment in further and higher education is in professional occupations;

  ⚬   the community-based learning and development sector has proportionately fewer professional workers, and proportionately more managers and administrators and associate professionals in further and higher education;

  ⚬   the work-based learning and training sector is defined as specific managerial and associate professional occupations.

⚬   The largest numbers of post-16 education and training workers are in London and the South East, while the highest concentrations by region are in London, Merseyside, and Wales.

Table 2.1: Employment in the post-16 education and training sector, Spring 2001, UK

	Number	% of post-16 education and training	% of total employment
Technical and vocational secondary education (FE)	102,900	9.8	0.37
Sub-degree level higher education (FE)	67,700	6.5	0.24
First and post degree level higher education (HE)	413,000	39.4	1.47
Other adult education (PAULO)	110,200	10.5	0.39
Work-based learning and training (Employment NTO)	354,600	33.8	1.26
Total	*1,048,500*	*100.0*	*3.74*

Source: LFS, Spring 2001

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2.2 Employment in post-16 education and training

According the sectoral and occupational definitions described in Section 1.3, estimates from the Labour Force Survey (LFS) show that the post-16 education and training sector employed 1.05 million people in the United Kingdom in Spring 2001 (Table 2.1). This includes both employees and the self-employed. The self-employed make up significant minorities of the workforces in technical and vocational secondary education, and in other adult education. Overall the post-16 education and training sector accounts for 3.7 per cent of total employment in the UK.

The sector employs a large part-time workforce, with 26 per cent of people employed in the sector working part-time.

Higher education is the largest component, accounting for nearly 40 per cent of the post-16 education and training workforce, while work-based learning and training accounts for one-third of the total, further education accounts for 16 per cent, and other adult education for 11 per cent.

2.3 Employment by occupation

Table 2.2 shows the breakdown by occupation of employment in the post-16 education and training sector. Professional and associate professional workers make up two-thirds of total employment. Professional workers are the larger group, numbering 366,000 and accounting for 35 per cent of total post-16 education and training employment, while the 337,000 associate professional workers make up 32 per cent of total employment in the sector.

Other major groups include managers and administrators (14 per cent of total employment), clerical and administrative workers (nine per cent) and elementary workers (five per cent). Elementary occupations are those which do not require formal qualifications and include elementary office workers, porters, cleaners, security staff, car park attendants etc.

2.4 Employment by sub-sector

2.4.1 Higher education

In Spring 2001 there were 413,000 workers in higher education (Table 2.1). The largest occupational group in HE in Spring 2001 was professionals - 222,000 workers or 54 per cent of the total (Table 2.2). There were 46,000 associate professionals (11 per cent), 62,000 administrative and clerical workers (15 per cent), and 19,000 managers and administrators (five per cent). Twenty-seven per cent of higher education staff work part-time.

2.4.2 Further education

Estimates from the LFS show 171,000 workers in further education in the UK in Spring 2001 (Table 2.1).

Turning to the occupations employed in FE, over half (56 per cent) of the workforce are in professional occupations, a higher proportion than in higher education or other adult education, and there are proportionately more personal service workers in further education than in the other two sectors (Table 2.2). Over one third of workers in the sector, 37 per cent, work part-time.

Table 2.2: Occupational employment in the post-16 education and training sector, Spring 2001, UK

	All-sector Number	All-sector %	FE %	HE %	PAULO %	Emp NTO %
Managers and administrators	147,400	14.1	4.2	4.7	10.2	31.0
Professional occupations	366,000	34.9	56.2	53.7	43.7	—
Associate professional occupations	337,300	32.2	11.6	11.3	23.6	69.0
Clerical and secretarial occupations	93,500	8.9	10.0	15.2	12.5	—
Personal service occupations	32,800	3.1	8.6	3.3	4.0	—
Elementary occupations	53,700	5.1	6.7	9.0	4.8	—
Other occupations	17,700	1.7	2.9	2.9	1.1	—
Total	*104,850*	*100*	*100*	*100*	*100*	*100*

Source: LFS, Spring 2001

2.4.3 Community-based learning and development sector

In Spring 2001 we estimate that there were 110,000 people employed in community-based learning and development (Table 2.1). However, in addition to paid workers, voluntary workers are very important in this sector; the PAULO Skills Foresight report estimates there may be one million people working in an unpaid or voluntary capacity. The sector also has the highest part-time workforce within post-16 education and training, with 44 per cent working part-time.

There are relatively fewer professionals, and relatively more associate professionals, in the other adult education sector compared with further and higher education. However, these two groups combined to make up around two-thirds of employment in the sector, comparable with the other two sectors. There are also proportionately more managers and administrators in the other adult education sector. This may be a reflection of smaller establishment size in this sector, and thus a higher ratio of managerial to professional staff within such establishments.

Table 2.3: Employment in work-based learning and training (Employment NTO), Spring 2001, UK

	Outside post-16 education and training		Total	
	Number	%	Number	%
Personnel, training and IR managers	109,800	31.0	118,500	30.4
Personnel, training and IR officers	117,800	33.2	121,200	31.1
Vocational and industrial trainers/instructors	96,300	27.1	117,600	30.2
Occupational hygienists and H&S officers	30,800	8.7	32,100	8.2
Total	*354,700*	*100*	*389,400*	*100*

Source: LFS, Spring 2001

2.4.4 Work-based learning and development

The level of employment in the work-based learning and training sector in Spring 2001 was estimated to be 355,000 (Table 2.1). Because the sector is defined in terms of occupations rather than industrial sectors, all of the employment is in managerial and administrative, and associate professional occupations (Table 2.2).

Table 2.3 shows the breakdown by occupational group for those employed outside of post-16 education and training establishments, and for all workers. The table shows that personnel, training and industrial relations officers comprise one-third of employment outside the post-16 education and training sector, while there are slightly fewer personnel, training and industrial relations managers (31 per cent). The work-based learning and training sector has the lowest proportion of part-time workers among the post-16 education and training workers, at 14 per cent.

There were 35,000 workers in the work-based learning and training sector employed in post-16 education and training establishments in Spring 2001. Vocational and industrial trainers and instructors are most likely to be employed in the post-16 education and training sector, particularly the 'other' adult education sector.

Work-based learning and training workers are found across all industrial sectors, although they are most commonly found in the business services sector, and in public administration.

Table 2.4: Employment in post-16 education and training sector by region, Spring 2001, UK

	Number	% of total employment in region
North East	40,000	3.65
North West	95,400	3.70
Merseyside	25,300	4.58
Yorks & Humber	82,900	3.57
East Midlands	69,100	3.45
West Midlands	94,100	3.81
Eastern	93,200	3.39
London	158,900	4.61
South East	157,800	3.82
South West	82,700	3.44
Wales	49,500	3.99
Scotland	83,600	3.52
N Ireland	16,000	2.27
Total	*1,048,500*	*3.74*

Source: LFS, Spring 2001

2.5 Employment by region

Table 2.4 shows the employment levels and the proportion of employment in each region accounted for by post-16 education and training. In terms of employment numbers, the largest regions are London and the South East. The highest proportions of post-16 education and training employment are in London and in Merseyside, at just over 4.5 per cent, followed by Wales, the South East, and the West Midlands. In all other regions the proportion of post-16 education and training employment is below the national average, and Northern Ireland and the Eastern region have the smallest post-16 education and training sectors.

3. Employment Trends and Projections

3.1 Introduction and summary

This chapter describes the changing numbers and patterns of demand for workers, both historic and projected, in the post-16 education and training sector. Section 3.2 looks at past trends in the numbers employed in the sector, while the rest of the chapter presents forecasts to 2010 of employment and output (Section 3.3), employment by occupation (Section 3.4), employment needed to replace leavers from the sector (Section 3.5), and the numbers of highly qualified people in the labour market (Section 3.6). This Chapter draws heavily on projections produced by Cambridge Econometrics and the Institute for Employment Research.

The key points of the chapter are:

- Employment in the post-16 education and training sector has grown at a faster rate than overall employment during the last three decades.

- This faster than average employment growth is projected to continue over the next decade. By 2010 the employment level in the sector is expected to have increased by 195,000.

- Employment growth is expected to be faster in the work-based learning and training sub-sector than in the further, higher and other adult education sub-sectors.

- By occupation, the largest increases in employment are projected for professional and associate professional occupations, while the numbers of clerical and secretarial workers and elementary staff are projected to decrease.

- The sector will also need to replace people who leave the sector, in addition to recruiting for expansion. The number of people the sector will need to recruit to replace leavers is likely to be 60 per cent higher than the level of employment growth in the sector, at 325,000. Thus over the next decade the sector will need to recruit 520,000 new workers.

- As with expansion demand, the largest levels of replacement demand will be for professional and associate professional occupations, and over the next decade the sector will need to recruit around 600,000 professional and associate professional workers.

- Recruitment on this scale represents a significant problem for the sector. More emphasis needs to be put on staff retention, clearer career structures and improved reward packages.

- The number of highly skilled people (degree level or equivalent or higher) in the economy is projected to grow by at least 2.3 million to 2010.

- The increase in the supply of highly skilled people is only four times greater than the highly skilled recruitment needs of the post-16 education and training sector; therefore the sector is likely to find itself in competition with other sectors for this highly qualified workforce.

3.2 Historic trends

Employment in the post-16 education and training sector has grown at a faster rate than overall employment in recent years. Employment trends are presented separately for the post-16 education and training establishments (that is, further, higher and other adult education), and for work-based learning and training.

3.2.1 Post-16 education and training establishments (excluding work-based learning and training)

The recent trends since 1995 in employment in post-16 education and training establishments are shown in Figure 3.1, along with the trends in all education establishments and total employment in the national workforce. The increase in employment in post-16 education since 1995 is very similar to the outturn for all education establishments, and employment in education has increased at a faster rate than overall employment. There have been slightly different trends among the post-16 education sectors, with employment in further and higher education rising steadily, and employment in other adult education rising rapidly to 1999, and then falling between 1999 and 2000.

Information on longer term historic trends and projections for the education sector are only available for all education establishments, including pre-16 education establishments as well as post-16 education and training. However, as the recent trends in employment in post-16 education and training establishments have been very similar to the overall trend in the employment sector, we can be moderately confident that historic trends and projections in all education establishments will provide a reasonable indication of trends in post-16 education and training.

Figure 3.1: Employment trends for post-16 education and training establishments, 1995-2000, GB
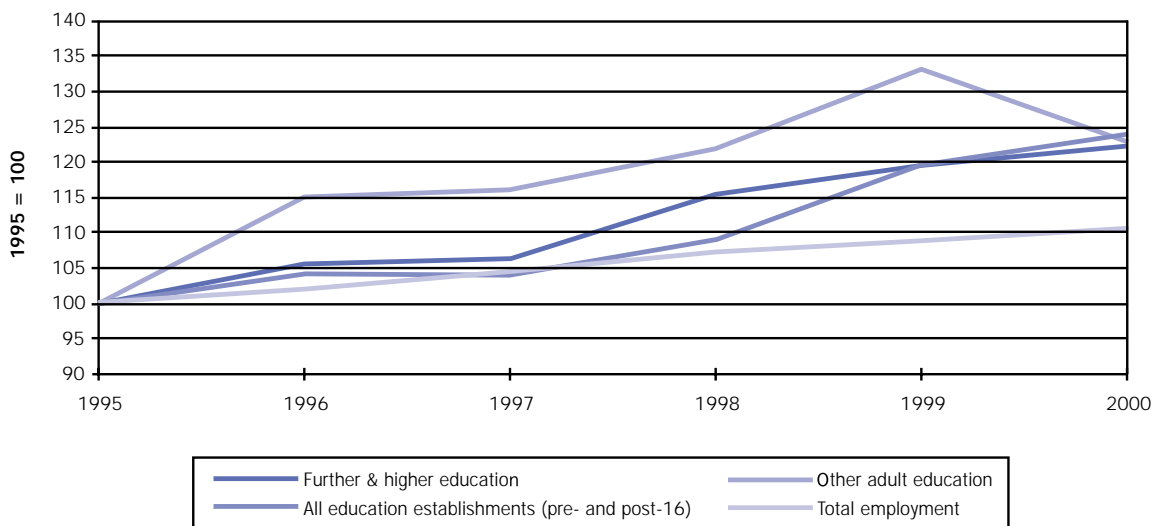
Source: ABI/IES

Figure 3.2 shows that employment in post-16 education and training has grown at a much faster rate than overall employment during the last three decades, although the post-16 education and training sector has been subject to the changing cyclical fortunes of the economy as a whole. Thus the rapid growth occurred in two periods, during the early 1970s, and during the mid to late 1980s, while employment fell during the early 1980s and the early 1990s.

Employment in the sector in 1999 was nearly 50 per cent higher than the level in 1971, while for overall employment the increase over this period was 12 per cent.

Figure 3.2: Employment trends for post-16 education and training establishments, 1971-1999, UK
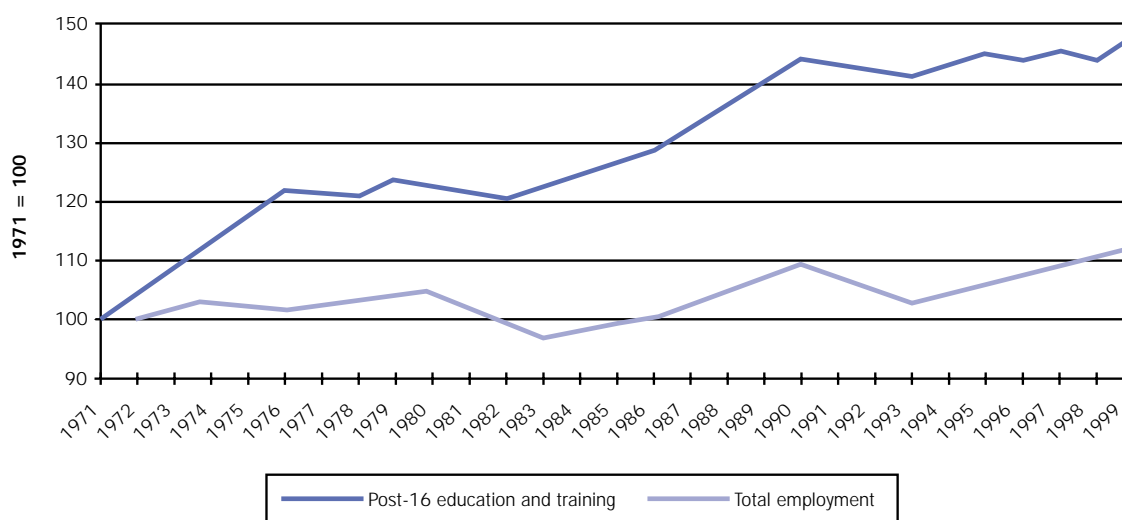
Note: based on trends in all education establishments, and assumes post-16 education and training sector has performed in line with overall education employment trend

Source: CE/IER

3.2.2 Work-based learning and training sector

Employment trend information for the work-based learning and training sub-sector is not available on the same basis as for the remainder of the post-16 education and training sector. However, the Employment NTO Skills Foresight report presents information on employment in their sector for 1991, from the 1991 Population Census, and also trends since the previous Census in 1981. Employment stood at 185,000 in 1991, up from 133,000 in 1981. This represents an increase of 38 per cent over this period.

Employment growth in the work-based learning and training sector has increased over the last decade. The LFS suggests that total employment in the sector (that is, including those people employed in post-16 education and training establishments) was 389,000 in 2001. This represents an increase of 110 per cent from the 1991 level, an annual increase of eight per cent per year over the last ten years.

3.3 Future projections

Employment in the post-16 education and training sector is projected to continue growing, and at a faster rate than overall employment.

Projections are presented separately for the post-16 education and training establishments (that is, further, higher and other adult education), and for work-based learning and training.

Total employment in the post-16 education and training sector is projected to increase by 195,000 by 2010, an increase of 19 per cent. Employment growth is expected to be greater in work-based learning and training than in post-16 education and training establishments, at 33 per cent compared to 11 per cent.

3.3.1 Post-16 education and training establishments (excluding work-based learning and training)

Employment

Employment in post-16 education and training establishments is projected to grow by 11.2 per cent between 1999 and 2010, or around 1.0 per cent per year. This compares with growth in total employment of 7.6 per cent, or 0.7 per cent per year, over the same period (Figure 3.3).

Thus the employment level in post-16 education and training establishments is projected to increase from 694,000 in 1999 to 772,000 in 2010, an increase of 78,000.

Figure 3.3: Employment projections for post-16 education and training establishments, 1999-2010, UK
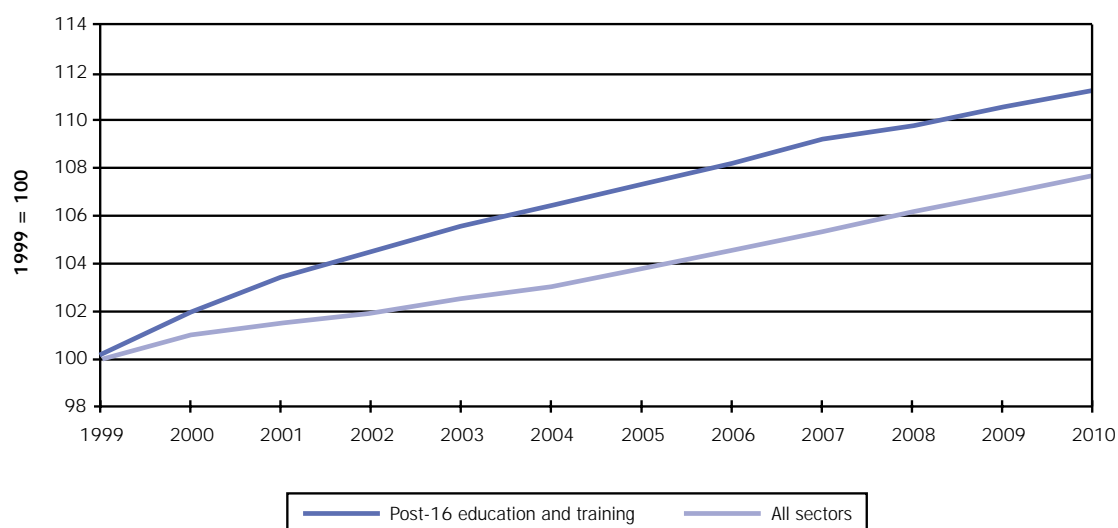
Note: based on trends in all education establishments, and assumes post-16 education and training sector will perform in line with overall education employment projections

Source: CE/IER

Output

Output for education and training is less tangible than for other sectors. Nevertheless, the entire education and training sector (including pre-16 education) had, in 1999, an output of £36 billion, representing 5.2 per cent of total UK GDP. Over the past three decades output in post-16 education and training establishments has grown at a fairly steady rate, and has been relatively immune to cyclical changes in the economy, that is remaining stable or declining only slightly during times of recession, and growing steadily but at a slower rate than the economy as a whole during boom times.

Figure 3.4 shows projected output in the economy as a whole, and in post-16 education and training establishments, between 1999 and 2010. The education and training sector is projected to perform in line with the economy as a whole, with only small deviations from the national trend. Overall output growth is expected to be around 2.5 per cent per year.

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Productivity

Productivity however, is projected to grow more slowly in the education and training sector. Figure 3.5 shows projections in productivity for post-16 education and training establishments, and for all workers, between 1999 and 2010. After a slight fall in productivity after 1999, average growth in productivity in education and training is projected to be slightly less than the 1.9 per cent per year across all sectors. The stronger than average employment growth is the factor behind the slower than average productivity growth for the education sector.

Average productivity per worker in education and training (including pre-16 education) stood at £17,569 in 1999, compared with the figure for all sectors of £24,779, and by 2010 productivity in education is expected to rise to £20,800 compared to £30,478 for all sectors.

Figure 3.4: Output projections for post-16 education and training establishments, 1999 - 2010, UK
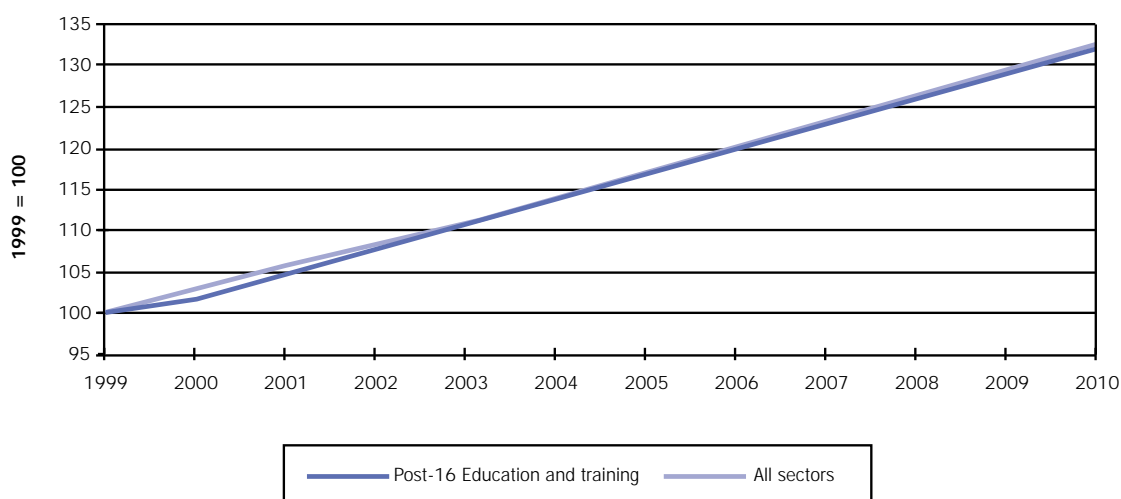
Note: based on trends in all education establishments, and assumes post-16 education and training sector will perform in line with overall education output projections

Source: CE/IER

3.3.2 Work-based learning and training sector

Occupational employment projections are produced at a three-digit SOC (Standard Occupational Classification) level. However, this is at one level above the occupational definitions of the work-based learning and training sector. Therefore for the purposes of this forecasting exercise we have assumed that employment in the categories of the definition of the sector will grow at the same rate as the wider occupational group they are in.

Table 3.1 shows the projected employment changes in the relevant occupational groups, and the projected employment figures for the four occupational groups that comprise work-based learning and training in 2010. Employment among the associate professional occupations is expected to grow faster than among the personnel, industrial relations and training managers. Overall employment in the work-based learning and training sector is projected to grow by 33 per cent, or 118,000 by 2010.

Figure 3.5: Productivity projections for post-16 education and training establishments, 1999 - 2010, UK
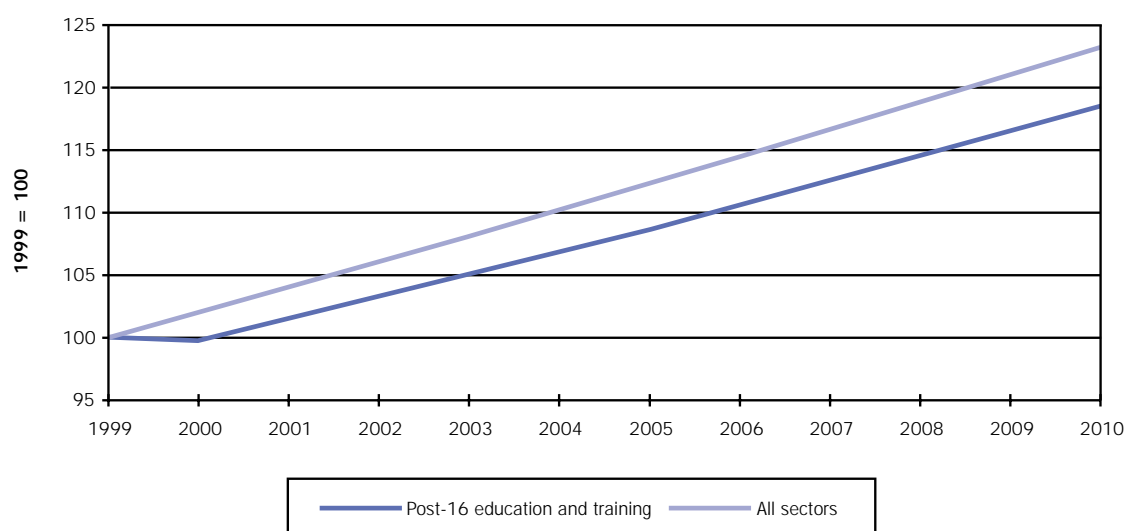
Note: based on trends in all education establishments, and assumes post-16 education and training sector will perform in line with overall education productivity projections

Source: CE/IER

Table 3.1: Employment projections for work-based learning and training, 1999 - 2010, UK

	1999	2010	Change	% change
SOC 113 Functional managers	999,300	1,287,200	287,900	28.8
Personnel, training and IR managers	109,800	*141,400*	*31,600*	28.8
SOC 356 Public service and other associate professions	404,400	546,800	142,400	35.2
Personnel, training and IR officers	117,800	*159,300*	*41,500*	*35.2*
Vocational and industrial trainers/instructors	96,300	*130,200*	*33,900*	*35.2*
Occupational hygienists and H&S officers	30,800	*41,600*	*10,800*	*35.2*
Total Employment NTO	*354,700*	*472,600*	*117,900*	*33.2*

Source: CE/IER, and IES calculations in italics

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3.4 Changing occupational balance

Having looked at overall employment projections for the post-16 education and training sector, we now go on to look at prospects among the different occupational groups in the sector.

Table 3.2 shows the changing occupational patterns in the post-16 education and training sector to 2010. The major growth areas are among high level non-manual occupations, managerial, professional, and associate professional workers. These have been the areas of rapid growth between 1981 and 1999.

The number of associate professionals is expected to increase by 103,000, so that by 2010 associate professionals outnumber professional workers in the sector. There are large projected decreases in employment among clerical and secretarial and elementary occupations, continuing the declining trend in these occupations in the post-16 education and training sector.

Table 3.2: Changing occupational employment in post-16 education and training sector, 1999 - 2010, UK

	1999	2010	Change	% change
Managers and administrators	147,400	184,400	36,900	25.0
Professional occupations	366,000	434,700	68,700	18.8
Associate professional occs	337,300	440,600	103,300	30.6
Clerical and secretarial occs	93,500	88,700	-4,800	-5.1
Personal service occs	32,800	43,600	10,700	32.7
Elementary occs	53,700	36,500	-17,300	-32.1
Other occupations	17,700	15,600	-2,100	-11.8
Total	*1,048,500*	*1,244,000*	*195,500*	*18.6*

Source: IES calculations from CE/IER and LFS data

3.5 Replacement demand

While growing employment in the post-16 education and training sector will create an additional demand for workers, there will also be a need to replace workers who leave the sector through job changes, retirement or death. The combination of expansion demand and replacement demand provides an indication of the net demand requirement the sector will face, both overall and among the different occupations, taking into account worker turnover and estimates of people moving between occupations.

The overall net demand requirement by 2010 is projected to be 520,000, which compares with employment in the sector of 1.05 million in 1999. Thus the net demand over the coming decade represents 50 per cent of the total employment level in the sector at the beginning of the period. The level of recruitment activity in the post-16 education and training sector will be in the region of 47,300 recruits per year over the next decade.

Table 3.3: Net replacement demand analysis for post-16 education and training, 1999 - 2010, UK

	Number	%
Base year employment	1,048,500	100.0
Expansion demand	195,500	18.6
Replacement demand	324,800	31.0
Net requirement	*520,300*	*49.6*

Source: IES calculations from CE/IER and LFS data

Table 3.3 shows that the largest component of additional demand over the next decade will come through replacing workers who leave the sector, rather than new job opportunities in the sector. Of the net demand requirement, 62 per cent will be replacement demand.

Figure 3.6 shows the replacement demand and net demand requirements by occupational group. By far the largest areas of future demand are among professional and associate professional occupations. The post-16 education sector will have to recruit around 600,000 professional and associate professional staff over the next decade, 430,000 of whom will be to replace leavers.

Figure 3.6: Replacement demand and net requirements by occupation for post-16 education and training sector, 1999 - 2010, UK (absolute numbers)
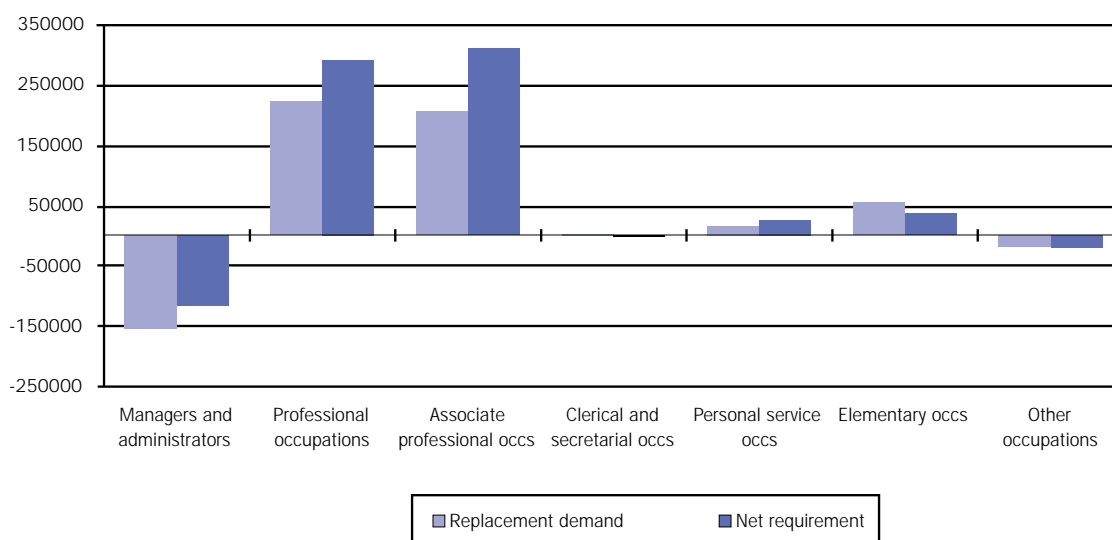
Note: based on projections for all education and training establishments, and assumes that post-16 education and training sector will perform in line with overall education replacement demand projections.

Source: IES calculations based on CE/IER and LFS data

Other significant areas of recruitment activity will be among personal service occupations, as a result of both expansion in this area and replacing turnover, and elementary occupations, to replace leavers. (The negative replacement demand components for managerial and other occupations indicate that likely inward migration into these occupational groups will exceed turnover from the education sector. That is, there is an assumption that current workers in the sector changing occupations from associate professional or professional to managerial will exceed managerial staff leaving the sector).

Responses during the Dialogue process were that recruitment on this scale over the next decade represents a significant problem for the sector. It was not clear during the discussions where the staff needed to address current and future skill needs are going to come from, particularly when the economy is close to full employment. One example was that the sector had recruited early retirees, but that this pool might dry up as people remain in work longer to maximise their pension income.

There are likely to be sub-sectoral differences in the severity of recruitment problems. In many respects higher education operates in a global market for academic staff, and so is more immune to domestic labour market conditions. The further education and community-based learning and development sectors are likely to be relatively harder hit, with low pay having a knock-on effect on recruitment. Unlike other sectors, such as IT and financial services, post-16 education and training is unlikely to be able to buy itself out of staff and skill shortages.

A related issue is staff retention. It was felt that, in the past, there had not been a strong culture of 'growing one's own' in the sector. The situation is exacerbated by the fact that the sub-sectors recruit from each other. There is a need for greater internal progression to address the problem, not just within organisations but across the entire sector. In the future, it was suggested that the sector will need to develop more explicit and clearly understood career structures, with better reward packages. The short-term nature of funding is a related problem, with organisations not able to plan more than a couple of years ahead.

3.6 Skill supply forecasts

Data from IER in their Projections of Occupations and Qualifications 2000/2001 report suggest that the numbers of highly qualified people in the workforce will increase over the next decade, by between 2.3 million and 2.9 million depending on the assumptions used.

The report presents two scenarios based on different assumptions about supply of qualifications:

- under the benchmark new supply scenario, future numbers of graduates as a proportion of the 21 year old age cohort are fixed at the 1997 levels;

- under the high new supply scenario, future number graduating as a proportion of the 21 year old age cohort are projected to grow in line with an increase in the Age Participation Index (that is the proportion of the cohort going on to study at higher education level) to 40 per cent by 2009.

Table 3.4 presents the numbers of highly qualified people in the workforce under the two scenarios. The largest increase, both in absolute numbers and percentage terms, is projected to be in first degree graduates, with numbers increasing by almost two-thirds under the high new supply scenario, and by almost half under the benchmark scenario. The number of postgraduates is expected to increase by a third under the high new supply scenario, and by slightly less under the benchmark scenario, while the number of people with other higher qualifications is projected to increase by 14 to 15 per cent.

Table 3.4: Projections of economically active people by higher qualification, UK (thousands)

	1999	2010			
		New supply scenario			
		Benchmark		High	
	Number	Number	% increase	Number	% increase
Postgraduates	1,244	1,625	30.6	1,671	34.3
First degree graduates	3,267	4,859	48.7	5,331	63.2
All graduates	4,511	6,484	43.7	7,002	55.2
Other highly qualified	2,634	2,996	13.7	3,034	15.2
All highly qualified (NVQ 4&5)	*7,145*	*9,480*	*32.7*	*10,036*	*40.5*

Source: CE/IER

4. Workforce Demographics

4.1 Introduction and summary

Having looked at current and projected numbers employed in education, we now go on to look at the demographic characteristics, including sex, age, ethnicity and disability of the post-16 education workforce. This chapter draws on LFS data for Spring 2001. The chapter also discusses staff record data that is available for the further and higher education sectors.

Key points in the chapter are:

- Women make up 56 per cent of the post-16 education and training workforce, compared with 45 per cent of overall employment.

- The work-based learning and training sub-sector has the highest proportion of women, at 63 per cent, while the higher education sub-sector has the lowest, at 51 per cent.

- Among the higher level occupations, the over-representation of women is less marked, indeed there are slightly more male professional workers than female.

- The proportion of women in the post-16 education and training workforce has increased in recent years, and is projected to continue to do so, so that by 2010 women may comprise 62 per cent of total employment in the sector.

- The post-16 education and training sector has an older age profile than overall employment. Workers aged under 30 make up 19 per cent of post-16 education and training staff, compared with a quarter of all workers.

- The work-based learning and training sector has a younger age profile than the other three sub-sectors of this Dialogue group.

- The proportion of both young and old workers in the post-16 education and training has increased in the last five years, although the average age of workers in the sector has remained static.

- The proportion of ethnic minorities in post-16 education and training, at 5.3 per cent, is very close to the national average of 5.1 per cent. However, there are issues about the level to which staff from ethnic minority groups have risen in the hierarchies.

- However, the proportion of ethnic minorities among the population aged 16 to 34, the main client group for the sector, is much higher at ten per cent. Therefore in many organisations there is a mismatch between the ethnic profile of teachers and learners.

- The community-based learning and development and higher education sectors have the highest proportions of ethnic minority workers.

- There may be an under-representation of Asian workers in the post-16 education and training sector.

- The proportion of people with a disability in the post-16 education and training sector is the same as the proportion of disabled people in total employment, at 12 per cent. The proportion is highest in the further education sector, and lowest in the community-based learning and development sector.

4.2 Gender

Women are in the majority in the post-16 education sector, accounting for 56 per cent of staff. This is in contrast to overall employment, where men make up 55 per cent of the total (Table 4.1).

Table 4.1: Employment in post-16 education and training sector by sex, Spring 2001, UK

	Number	%	All employment %	FE %	HE %	PAULO %	Emp NTO %
Male	460,000	43.9	55.1	41.4	48.6	37.0	41.8
Female	588,500	56.1	44.9	58.6	51.4	63.0	58.2
Total	*1,048,500*	*100*	*100*	*100*	*100*	*100*	*100*

Source: LFS, Spring 2001

There is considerable variation by sub-sector. The community-based learning and development sector has the highest proportion of female employment, at 63 per cent, while in the higher education sector women only slightly outnumber men. Women make up 59 per cent of the further education workforce, and 58 per cent of the work-based learning and training workforce.

At the top end of the occupational scale the over-representation of women is less marked. Among professional occupations there are slightly more men than women, 51 per cent and 49 per cent respectively, and men make up 48 per cent of managers and administrators.

The proportion of women in the post-16 education and training sector has increased in the last few years. In 1996 women made up 53 per cent of total employment in the sector, compared with 56 per cent currently. Employment projections suggest that the proportion of women will continue to increase. Among all education establishments (including pre-16 education) women will account for 98 per cent of the increase in employment to 2010; thus by 2010 women could comprise around 62 per cent of the total post-16 education and training workforce.

4.3 Age

Table 4.2 shows the age breakdown of workers in the post-16 education sector, in comparison with all workers. The post-16 education sector has an older age profile than the overall pattern found in the workforce: only 19 per cent of education workers are aged under 30, compared with 25 per cent of all workers; 28 per cent of post-16 education workers are aged 50 and over, compared with 24 per cent of all workers.

The work-based learning and training sector has the youngest age profile, with 24 per cent of workers aged under 30 and only 21 per cent aged 50 and over. Thus the proportion of workers aged 50 and over is lower in the work-based learning and training sector than in employment overall. Among the other three sectors there are only minor differences in age profiles, although the community-based learning and development sector has the oldest age profile and the highest proportion of workers aged 50 and over.

The average age of employees in the post-16 education and training sector has changed little over the last few years, although the age distribution has changed, with more workers in the youngest and oldest age groups now than in the past. In 1996 only 17 per cent of the workforce was aged under 25, compared with 19 per cent now, while 25 per cent of the workforce was aged 50 and over in 1996, compared with 28 per cent now.

Table 4.2: Employment in post-16 education and training sector by age, Spring 2001, UK

	Number	%	All employment %	FE %	HE %	PAULO %	Emp NTO %
16-24	79,800	7.6	14.0	7.3	6.9	6.6	8.9
25-29	119,800	11.4	11.2	7.7	10.7	8.7	14.9
30-34	134,400	12.8	13.2	10.4	11.2	8.3	17.2
35-39	142,600	13.6	14.0	13.0	12.1	15.9	15.0
40-44	129,700	12.4	12.5	14.1	12.2	10.7	12.2
45-49	148,100	14.1	10.9	18.3	14.9	13.9	11.3
50-54	137,000	13.1	11.1	14.7	13.2	13.7	12.0
55-59	97,900	9.3	7.7	9.0	11.8	11.7	5.9
60+	59,200	5.6	5.3	5.6	6.9	10.4	2.6
Total	*1,048,500*	*100*	*100*	*100*	*100*	*100*	*100*

Source: LFS, Spring 2001

4.4 Ethnicity

The proportion of ethnic minority workers in the post-16 education and training sector is very similar to the proportion in total employment. Table 4.3 shows that 5.3 per cent of post-16 education and training staff are from ethnic minority groups, compared with 5.1 per cent of all workers. The table uses the definitions of ethnic minority groups that are to be used in the 2001 Census of Population.

Table 4.3: Employment in post-16 education and training sector by ethnicity, Spring 2001, UK

	Number	%	All employment %	FE %	HE %	PAULO %	Emp NTO %
White	992,800	94.7	94.9	96.2	93.9	92.4	95.7
Non-white	55,300	5.3	5.1	3.8	6.1	7.6	4.3
Of which:							
Asian or Asian British	19,100	1.8	2.5	na	na	na	na
Black or Black British	15,100	1.4	1.3	na	na	na	na
Other/mixed	21,000	2.0	1.3	na	na	na	na
Total	*1,048,000*						

Source: LFS, Spring 2001

Although ethnic minorities as a whole are not under-represented in the post-16 education and training sector, the data suggest that the proportion of Asians working in the sector is below the average for all sectors. The community-based learning and development and higher education sectors have the highest proportions of ethnic minorities among their workforces, while the lowest proportion is in the further education sector. However, the relatively small sample sizes in the Labour Force Survey mean that these analyses should be treated with a degree of caution.

It is not possible to analyse LFS data on the ethnic profile of the post-16 education and training workforce any further, due to sample size constraints. However, there is some anecdotal evidence that black and ethnic minority workers are under-represented among higher level and managerial positions. As mentioned later in this report, better data on ethnicity (and other facets) is a priority issue being addressed by sector bodies.

Although the proportion of ethnic minority workers in the post-16 education and training sector is in line with the proportion in the entire workforce, it was argued that a better comparison should be with the ethnic profile of the markets the sector serves. The proportion of ethnic minorities among the 16 to 34 year age group is ten per cent, and the proportion is even higher among those aged under 16, who will be the new customers of post-16 education in the coming years, at 12 per cent.

These differences between the staff mix and the student mix may be even more stark in particular local areas. During the Dialogue process it was felt that in some organisations there is a need to get a better profile of the ethnicity of teaching staff relative to the markets they target in terms of students.

4.5 Disability

The LFS contains information on the number of people who meet the definition of disability contained in the Disability Discrimination Act (DDA), and information on people who do not meet the DDA definition but who still have a work-limiting disability.

In the post-16 education and training sector in Spring 2001, there were 88,200 workers who are DDA disabled, who made up 8.4 per cent of the total workforce, and 33,800 people who had a work-limiting disability but who are not DDA disabled, and they comprised 3.2 per cent of total workers (Table 4.4). Thus, 11.6 per cent of the sector workforce had a disability. This is the same as the proportion of disabled people across all sectors. The proportion of disabled workers is highest in the further education sector, at 14.4 per cent, and lowest in the community learning and development sector, at 10.5 per cent.

Table 4.4: Employment in post-16 education and training sector by disability, Spring 2001, UK

	Number	%	All employment %	FE %	HE %	PAULO %	Emp NTO %
Not disabled	926,500	88.4	88.4	85.6	89.2	89.5	88.5
Disabled	122,000	11.6	11.5	14.4	10.8	10.5	11.5
Of which:							
DDA disabled and work-limiting disabled	47,900	4.6	4.8	na	4.9	na	4.6
DDA disabled	40,300	3.8	3.7	na	3.2	na	4.4
Work-limiting disabled only	33,800	3.2	3.0	na	2.8	na	2.8
Total	1,048,000						

Source: LFS, Spring 2001

4.6 Staff record data

Central agencies in the further and higher education sectors collect data on staff working in institutions in their sectors; the Learning and Skills Council in the case of further education, and the Higher Education Statistics Agency (HESA) in the case of higher education. These data returns contain demographic information on staff and are an additional source of this information for the FE and HE sectors. However, there are limitations with the data; FE coverage is England only, and HE data is collected for academic staff only.

4.6.1 Further education

The LSC's staff individualised record (SIR) records data about staff employed by colleges in the FE sector in England. Data is collected for all staff who are employed by a college for 15 hours or more over a college year, including administrative and support staff. The most recent data available is for the 2000-2001 academic year (01 August 2000 to 31 July 2001). Key points from the data are:

- 62 per cent of staff in FE colleges in England are female;
- the age breakdown is very similar to that from the LFS, with 15 per cent of staff aged under 30, and 30 per cent aged 50 or older;
- the proportion of ethnic minority staff in FE colleges in England is 6.8 per cent: 2.5 per cent of staff are Black, 1.2 per cent are Indian, 0.7 per cent are Pakistani or Bangladeshi, and 2.4 per cent are from other ethnic groups. This is above the proportion from LFS data. There is very little difference in the ethnic profile of teaching staff, teaching support staff, and other support staff.

As national datasets, such as the LFS and 2001 Census of Population, are using a new definition of ethnic groups, it would be advisable for the SIR to adopt these new definitions in the future.

4.6.2 Higher education

The HESA Individualised Staff Record is designed to collect data in respect of the characteristics of members of teaching and research staff in higher education institutions (HEIs). It does not collect information on support or administrative staff, and different institutions may define academic staff in different ways and so comparisons may not be exact. The most recent published data is for the academic year 1999/2000 (Resources of Higher Education Institutions, 1999/2000, HESA), and key points are:

▷ 65 per cent of academic staff in HEIs are male;

▷ nine per cent of academic staff are aged 30 or under, and 31 per cent are aged over 50. This compares to data from the LFS showing 18 per cent of all HE staff aged under 30, and 32 per cent of staff aged 50 or over;

▷ ethnic minorities make up 4.7 per cent of academic staff, whereas LFS data show that across all HE staff ethnic minorities comprise 6.1 per cent of the total. Looking at the different ethnic groups, 0.8 per cent of academic staff are Black, 1.1 per cent are Indian, 0.4 per cent are Pakistani or Bangladeshi, and 2.5 per cent are from other ethnic minority groups.

HESA is planning to collect better staff demographics through the ISR from September 2002. As part of this it would be advisable to adopt the new definitions of ethnic groups.

5. Workforce Development and Qualifications

5.1 Introduction and summary

This chapter examines the training and development received by the workforce of the post-16 education and training sector, and broadly at the qualification base of those working in the sector. It draws on information from the LFS, the results of the 2000/01 Employer Skills Survey, and the results of an IES survey of higher education institutions undertaken for HESDA.

The key points of the chapter are:

- Workers in the post-16 education and training sector are more likely than average to have received job-related training in the last month, according to the LFS. Nearly one-quarter of post-16 education and training workers received training in the month before they were interviewed, compared with 15 per cent of all workers.

- The further education sector is most likely to train its workforce, with 27 per cent of workers receiving training, while the work-based learning and training sector is least likely, with 20 per cent of the workforce being trained.

- The likelihood of receiving training is greater for staff in professional and associate professional occupations than for those in managerial, administrative, clerical, secretarial and elementary occupations.

- Post-16 education and training establishments are much more likely than average to have arranged or funded training for their workforce in the last year, with 64 per cent of post-16 education and training establishments arranging training compared with 37 per cent of all establishments.

- Post-16 education and training establishments are also more likely to train the majority of their workforce than are establishments across all sector.

- Looking at the types of training arranged or funded, post-16 education and training establishments are more likely than average to arrange supervisory training, induction training, and soft and generic skills training, and less likely than average to arrange training in new technologies.

- The post-16 education and training workforce is very highly qualified, with nearly 60 per cent having a first degree or equivalent, or higher qualification. Across all sectors only 27 per cent of workers are qualified at this level or above.

- Within the post-16 education and training sector, the highest qualification levels are found in the higher education sector. Two thirds of higher education workers have at least first degree level qualifications.

- The proportion of highly qualified workers in the further education and other adult education sectors is 62 per cent and 58 per cent respectively.

- The lowest qualification levels are in the work-based learning and training sector, with 49 per cent of workers being qualified to at least first degree level or equivalent, although this is still well above the average for the entire workforce.

5.2 Extent of training

The LFS is one of the main sources used to obtain sector-comparable data on workforce development. In particular, it asks respondents whether they have taken part in job-related training during the last month. In the post-16 education sector, nearly one-quarter of the workforce had participated in training, significantly above the UK average of 15 per cent (Table 5.1). The extent of training was greatest in the further education sector, with 27 per cent of workers receiving training in the last month, and lowest in the work-based learning and training sector, with only 20 per cent of workers receiving training.

Workers in professional and associate professional occupations are more likely than average to receive training, with 25 per cent of professionals, and 24 per cent of associate professionals having received training in the last month. The proportions for managers and administrators, and clerical and secretarial staff, are 22 per cent and 18 per cent respectively. Only 12 per cent of workers in elementary occupations received training.

Table 5.1: Whether post-16 education and training workers participated in job-related training in last four weeks, Spring 2001, UK

	Entire sector Number	Entire sector %	All sectors in UK %	FE %	HE %	PAULO %	Emp NTO %
Yes	242,700	23.1	15.3	27.0	22.7	20.9	19.9
No	805,800	76.9	84.7	73.0	77.3	79.1	80.1
Total	*1,048,500*	*100*	*100*	*100*	*100*	*100*	*100*

Source: LFS, Spring 2001

5.2.1 Post-16 education and training establishments

The Employer Skills Survey (ESS) is another useful source of information on training activity. The ESS is a survey of 27,000 establishments in England, carried out between November 2000 and March 2001. Data was provided for post-16 education and training establishments in:

◗ SIC 80.3, that is sub-degree level, first degree level and higher degree level education, and

◗ SIC 80.4, that is other adult education (this includes driving schools, although they are likely to be a very small minority of establishments in the survey).

The ESS data is weighted so as to be representative of all establishments in England. As referred to earlier, unfortunately there is no directly comparable data that can be used for Northern Ireland, Scotland and Wales.

Evidence from the ESS shows that nearly two-thirds (64 per cent) of post-16 education and training establishments funded or arranged off-the-job training for employees in the last year. This compares very favourably with the average for all establishments of 37 per cent.

Not only are post-16 education and training establishments more likely to arrange training for their staff, they are also more likely to train more of their staff. Sixty nine per cent of post-16 education and training establishments who arranged training did so for half or more of their total workforce, while among all establishment that arranged training only 61 per cent trained half or more of their staff.

Table 5.2 shows the types of off-the-job training that was funded or arranged by post-16 education and training establishments, and that organised by all establishments as a comparison. Nearly three-quarters of respondents reported funding or arranging job-specific training, and 59 per cent arranged health and safety training. These proportions are close to the figures for all establishments. In comparison with respondents overall, post-16 education and training establishments were more likely to arrange supervisory training, induction training and generic skills training, and less likely to arrange training in new technologies.

5.2.2 Higher education

Another source of training information for the higher education sector is the IES survey for HESDA (2002), and Figure 5.1 shows that academic staff were most likely to receive training and development, while manual workers were least likely to have so benefited.

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Figure 5.1: Proportion of UK HEI staff who received training or development in last 12 months, by occupational group, 2001
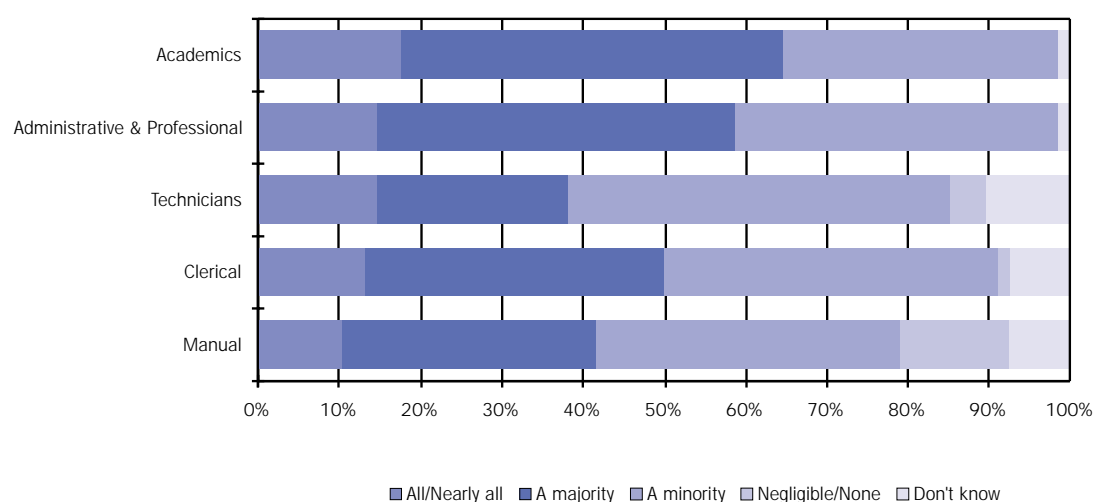
Source: IES Survey for HESDA, 2001/2002

5.3 Qualifications

The analysis of education employment by occupation (see Table 2.2) showed that two-thirds of workers in post-16 education and training were in occupations likely to possess high-level qualifications, namely professional and associate professional occupations.

Evidence from the LFS shows that the post-16 education and training sector employs a far greater proportion of highly qualified workers than the average for all sectors. Table 5.3 shows that nearly 60 per cent of the post-16 education and training workforce are qualified to at least first degree level or equivalent (NVQ 4), compared with 27 per cent of all workers. At the other end of the scale, only four per cent of post-16 education and training workers have no qualifications, compared with the average across all sectors of 12 per cent.

Not surprisingly the greatest concentration of high level qualifications are found in the higher education sector, where 38 per cent of workers have a higher degree or equivalent (NVQ 5), compared with 19 per cent of further education staff, 11 per cent of community-based learning and development workers, and eight per cent of work-based learning and training staff. However, over 40 per cent of staff in further education, community-based learning and development, and work-based learning and training are qualified to first degree level or equivalent.

Although qualification levels in the higher education sector are high, it was raised during the Dialogue process that the level of specialist teaching qualifications in the sector is not so high, and there may be some reluctance among lecturing staff who are highly qualified in their subject area to undertake specialist teacher training.

Table 5.2: Types of off-the-job training arranged by post-16 education and training establishments, 2000/2001, England

	Post-16 education and training %	All establishments %
Induction training	47.8	39.5
Health and safety training	59.1	60.3
Job specific training	73.5	74.5
Supervisory training	36.9	26.8
Management training	33.8	33.0
Training in new technologies	44.3	51.1
Training in foreign languages	3.8	2.9
Generic skills training	38.7	32.2
None of these types of training	0.6	1.8
Don't know what training	0.3	0.2

Source: ESS, 2001

5.3.1 Staff record data

The individualised staff data collected for further and higher education, described in Section 4.6, is a further source of information on the qualifications of the further and higher education workforces. However, although HESA collects qualification information on academic staff, this data is not published in its annual staff reports.

Data for FE show that 60 per cent of the workforce are qualified to Professional or Higher Technical level, while 17 per cent are qualified to Advanced level, and 12 per cent are qualified to Intermediate level. These proportions are broadly in line with the evidence from the LFS for the FE sector.

Table 5.3: Highest qualification of workers in post-16 education and training sector, Spring 2001, UK

	Entire sector Number	Entire sector %	All sectors in UK %	FE %	HE %	PAULO %	Emp NTO %
NVQ Level 5 or equiv.	229,300	21.9	5.0	19.4	37.6	10.5	8.2
NVQ Level 4 or equiv.	385,000	36.7	21.9	41.1	29.0	47.0	40.5
NVQ Level 3 or equiv.	192,200	18.3	25.8	17.8	13.5	17.0	24.7
NVQ Level 2 or equiv.	137,100	13.1	22.5	12.6	8.5	9.4	19.8
NVQ Level 1 or equiv.	13,900	1.3	4.4	*	*	*	*
Other qualification	51,600	4.9	8.7	3.6	5.2	9.1	4.0
No qualifications	39,000	3.7	11.7	*	4.6	*	*
Total	*1,048,100*	*100*	*100*	*100*	*100*	*100*	*100*

*cell size too small, estimate not given

Source: LFS, Spring 2001

6. Skills Issues and Recruitment

6.1 Introduction and summary

This chapter considers the extent and nature of skills shortages and skills gaps within the education sector based on the available evidence on recruitment difficulties and hard-to-fill vacancies, and employer views about the proficiency of their workforce. In this chapter we draw heavily on data from the 2000/01 Employer Skills Survey (ESS). We also draw on information from the Skills Foresights and Sector Workforce Development Plans from the NTOs.

Key points of the chapter are:

- Vacancies in the post-16 education and training sector have increased slowly but steadily over the last few years, while nationally vacancies have remained stable.

- Nearly four out of ten vacancies in post-16 education and training are hard-to-fill, compared with nearly half of vacancies across all sectors.

- However, the proportion of post-16 education and training vacancies that are hard-to-fill for skill related reasons is the same as the national average, at one in five.

- The skills which are difficult to obtain are predominantly general technical and practical skills, advanced IT skills, communication skills and management skills. These are common across all the sub-sectors within this Dialogue project.

- Reasons for skills shortages included low numbers of skilled applicants, low numbers of applicants generally, and lack of qualifications and work experience among applications.

- However, low pay may be a cause of skills shortages in some sub-sectors (notably FE and PAULO), in certain geographical hotspots and for lower occupational grades.

- The most common response to skills shortage vacancies was to increase recruitment efforts, by expanding recruitment channels or spending more on advertising and recruiting.

- Skills gaps were reported among professional, technical, managerial, and clerical and secretarial staff. The skills most commonly reported as lacking were communication skills, advanced IT or software skills, and management skills.

- High staff turnover and the inability of staff to keep up with change were the most commonly reported reasons for a lack of proficiency among the workforce, and the main implications of a lack of proficiency were problems introducing new work practices, problems meeting required quality standards, and problems meeting customer service objectives.

- The most common response to skills gaps was to provide further training, followed by changing working practices, relocating work within the organisation, and expanding trainee programmes.

- The most significant barriers to maintaining a fully proficient workforce among post-16 education and training establishments are lack of time for training, lack of cover for training, and a lack of funding for training. The effects of a lack of funding may be exacerbated by the short-term nature of funding arrangements.

- It is the skills in which post-16 education and training establishments are currently experiencing gaps, i.e. IT, communication and management skills, that are going to become more important in the future. In other words, these are issues that show no signs of going away.

6.2 Recruitment and vacancies

Employment Service data on vacancies notified at Job Centres indicates that there were around 11,500 vacancies notified by all education and training establishments (including pre-16 education) in October 2000. (It should be noted that vacancies notified to Job Centres are concentrated at the lower levels of the occupational scale, that is relatively few managerial and professional vacancies are notified in this way, and it is, estimated that they cover roughly a third of total vacancies existing in the economy).

Figure 6.1 shows the recent trend in post-16 education and training vacancies since July 1995. While there is significant seasonal variation, it would appear that education and training vacancies have been increasing somewhat since 1995, while the vacancy trend for all sectors has been fairly flat during this period.

6.3 Recruitment difficulties and skills shortages

6.3.1 Post-16 education and training establishments

The ESS estimated that post-16 education and training establishments in England had 12,500 vacancies at the time of the survey, of which 4,650, or 37 per cent, were classed as hard-to-fill (Table 6.1). The extent of hard-to-fill vacancies in the post-16 education and training sector is below that in the workforce as a whole, where 47 per cent of vacancies were classed as hard-to-fill. Unfortunately, directly comparable data was not available for Scotland, Wales and Northern Ireland.

Figure 6.1: Vacancies reported by post-16 education and training establishments, July 1995-Oct 2000, Great Britain
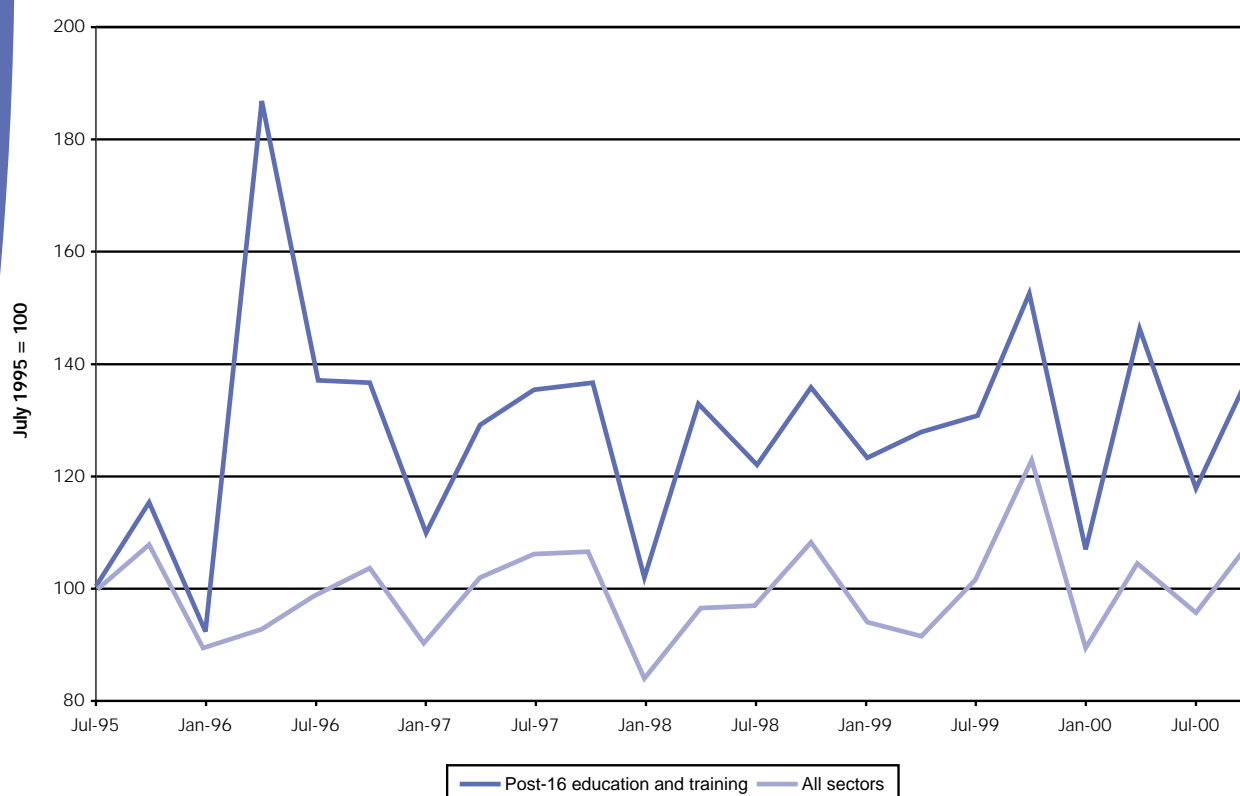
Note: based on trends in all education establishments, and assumes post-16 education and training sector has performed in line with overall education vacancy trend

Source: ONS/NOMIS

Table 6.1: Vacancies in post-16 education and training establishments, 2000/01, England

	Number	Per cent of total vacancies in sector	All sectors (England) %
Vacancies	12,526	—	—
Hard to Fill Vacancies	4,648	37.1	47.1
Skill Related Hard to Fill Vacancies	2,465	19.7	20.9
Skill Related Hard to Fill Vacancies (3 months duration)	1,428	11.4	10.2

Source: ESS, 2001

Of the hard-to-fill vacancies among post-16 education and training establishments, 2,470 were difficult to fill for skills reasons, representing 53 per cent of hard-to-fill vacancies, and 20 per cent of total vacancies. In England as a whole, skill related hard-to-fill vacancies made up 44 per cent of hard-to-fill vacancies, and 21 per cent of all vacancies.

According to the ESS, both hard-to-fill and skills shortage vacancies were most commonly found in professional, associate professional, and personal services occupations within post-16 education and training establishments.

Table 6.2: Skills found difficult to obtain in relation to skills shortage vacancies, post-16 education and training establishments, 2000/01, England

	%
Other technical/practical skills	50.0
Advanced IT or software skills	24.6
Communication skills	20.0
Management skills	19.4
Customer handling skills	16.4
Literacy skills	15.2
Team working skills	14.6
Numeracy skills	14.6
Don't know/not sure	12.9
Problem solving skills	12.4
Company or job specific skills	10.9
Experience	10.6
Other skills	7.7
Basic computer literacy	4.4
Personal attributes	3.1

Source: ESS, 2001

The ESS explored issues relating to skills shortage vacancies, looking at the skills that were difficult to obtain, reasons for, effects of, and responses to skills shortage vacancies.

Table 6.2 shows the particular skills that were difficult to obtain for hard-to-fill posts in post-16 education and training establishments. The skills that were most commonly lacking were job-specific technical and practical skills, with half of skills shortage vacancies being affected, followed by advanced IT or software skills (25 per cent), communication skills (20 per cent), and management skills (19 per cent). Basic IT and computer literacy skills were rarely difficult to obtain.

Skills related hard-to-fill vacancies were most often caused by low numbers of applicants with skills, with three-quarters of skills shortage vacancies caused by low numbers of skilled applicants (Table 6.3). Other important causes of skills shortage vacancies were lack of qualifications among applicants, low numbers of applicants generally, and lack of work experience.

Just over one in ten skills shortage vacancies were caused by low pay in the organisation. Low pay was raised as an issue during the Dialogue process, and was felt to be a more widespread and serious a problem than these survey results suggest. It was felt low pay was a problem particularly for the further education and community learning and development sectors, and in certain geographical areas with high housing costs, mainly in the south of England.

Table 6.3: Main causes of skills shortage vacancies, post-16 education and training establishments, 2000/01, England

	%
Low number of applicants with skills	75.0
Lack of qualifications	41.7
Low number of applicants generally	32.1
Lack of work experience	25.8
Company does not pay enough	10.8
Not enough people interested	6.9
Low number of applicants with motivation	3.5
Too much competition	0.7

Source: ESS, 2001

Figure 6.2 shows average gross weekly earnings for all staff in the higher education and other adult education sectors, although data for further education is unfortunately not available due to the limitations of the industrial classification. Earnings for all sectors, and for the secondary education sector are shown for comparison. The figure shows that earnings in higher education are above the average for all sectors, although they have not been rising as fast as earnings overall over the last few years, and the gap between earnings in HE and the average for all sectors has decreased from £35 per week in 1997 to £28 in 2001.

Figure 6.2: Average gross weekly earnings for all employees in post-16 education and training sectors, GB, 1997-2001
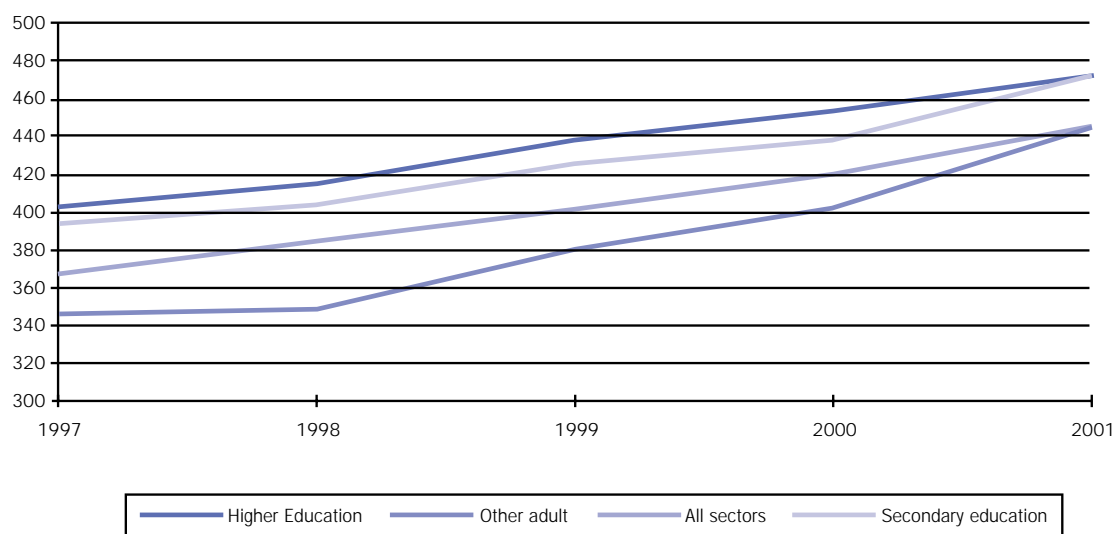
Source: New Earnings Survey

Average earnings in the other adult education sector have been below the average for all sectors until 2001, when other adult education earnings increased by 11 per cent to reach the level for all sectors.

During the Dialogue process it was reported that earnings in FE are below those in secondary schools, vis-à-vis FE lecturers and school teachers, and this is a source of discontent. For example, it is estimated that in some parts of the country there is a £4,000 annual pay difference in favour of school teachers. Figure 6.1 shows that earnings in secondary education have caught up with those in HE, which if anything will make the difference between FE and schools even greater. In FE it is felt that professional skills are not recognised in salaries. This may exacerbate skills shortages for lecturers in IT and accountancy for example. The short term nature of funding arrangements may be an issue limiting the ability of some organisations to pay competitive salaries.

It is interesting to note that no post-16 education and training establishments reported 'poor career progression/lack of prospects', 'unattractive conditions of work', 'location of the organisation', or 'irregular hours' as a cause of skills shortages.

The most commonly reported implications of skill related hard-to-fill vacancies are presented in Table 6.4. Delays in developing new services and difficulties in meeting required quality standards were the most serious effects of skills shortage vacancies in post-16 education and training establishments. However, there were other major impacts reported by significant minorities of establishments, including difficulties meeting customer/learner service objectives and withdrawal of services.

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Table 6.4: Effects of skills shortage vacancies, post-16 education and training establishments, 2000/01, England

	%
Delay in developing new products/services	59.9
Difficulties in meeting required quality standards	53.0
Difficulties meeting customer service objectives	48.8
Withdrawal of products/services	46.1
Loss of business/orders	41.7
Increased operating costs	26.6
Difficulties introducing new work practices	24.3
Difficulties introducing technological change	19.8
Don't know/not sure	12.6

Source: ESS, 2001

The vast majority of post-16 education and training establishments made efforts to increase their exposure to the external labour market as a result of skill related hard-to-fill vacancies, by expanding their recruitment channels or increasing advertising or recruitment spending as a result of skill related hard-to-fill vacancies (Table 6.5). Other common responses to skills shortage vacancies were internal changes, including redefining existing jobs, increasing training given to the existing workforce and increasing salaries.

Table 6.5: Responses to skills shortage vacancies, post-16 education and training establishments, 2000/01, England

	%
Expanded recruitment channels	86.8
Increased advertising/recruitment spending	86.3
Redefined existing jobs	54.8
Increased training given to existing workforce	54.8
Increased salaries	52.9
Increased/expanded trainee programmes	42.3
Used technology as a substitute for labour	5.5
None of these	3.3
Don't know/not sure	0.2

Source: ESS, 2001

Further education

The FENTO Skills Foresight report presented the analysis of a survey of FE colleges conducted during 1999/2000. Among the areas covered was recruitment difficulties, and the report presented the proportions of colleges reporting recruitment difficulties for different categories of vacancies. Recruitment difficulties were most widespread for:

- IT lecturers (60 per cent of colleges).
- Engineering lecturers (58 per cent).
- Construction lecturers (45 per cent).
- Course/programme leaders (41 per cent).
- Accounts lecturers (37 per cent).
- IT instructors (37 per cent).
- Key/core skills support (32 per cent).

The reasons given for recruitment difficulties were less to do with a shortage of skilled and qualified people and more to do with colleges finding it difficult to offer pay and conditions packages to attract such applicants. The reasons included difficulty for colleges in offering competitive salaries, and competition for staff from other sectors during a period of low unemployment and relatively tight labour market conditions.

There were also problems finding applicants with the combination of technical qualifications with teaching qualifications and up-to-date experience to take up positions as programme leaders and managers of cross-college functions.

Higher education

UCEA (Recruitment and retention in employment in UK higher education, 1999) reported that recruitment difficulties for higher education institutions were marginally more common in England than in Scotland, and that of the three nations it is Welsh HEIs that are least likely to encounter such difficulties. The differences are most marked in the area of manual and clerical staff, where the tighter labour markets of southern England create problems for some HEIs.

1999 research by UCEA (ibid.) found that while recruitment difficulties were not a major problem, there were localised problems filling posts for:

- academics in business subjects, information technology, engineering and some other specialisms; professors, researchers and senior academics in a range of subjects;
- administrative/professional staff in IT, accountancy/finance and HR;
- technical staff in IT;
- secretarial and junior clerical grades, particularly fixed-term staff;
- cleaners, caterers and security staff.

It should be noted however, that difficulty recruiting cleaning, catering and security staff are largely a product of the relatively low wages for such posts, i.e. they are not a product of skills shortages.

Community-based learning and development

The PAULO Skills Foresight report raised some issues relating to recruitment difficulties, skills shortages and staff retention among community-based learning and development establishments.

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One of the main issues emerging was skills 'leakages'; while the numbers of students in higher education on training courses relevant to the sector are growing, especially at a postgraduate level, a high percentage of them use their qualifications to find work in other sectors, particularly further and higher education sectors and urban/rural regeneration focused employers. Thus the PAULO sector suffers from the 'leakage' of trained personnel and skills to other sectors.

Another issue is that as community-based projects develop new services and facilities, they need the skills to manage and sustain such facilities, and there appears to be difficulties in 'buying-in' such skills from the labour market.

The main occupational group that employers reported recruitment and retention problems in was youth work. The impact of the launch of the Connexions service has been an impact here, and leakage of staff into other PAULO occupational groups and to other sectors, has also had an effect.

These latter sustainability problems are experienced across the country, while skills leakages are not seen as a problem in the North East, the West Midlands and the South West.

6.3.2 Work-based learning and training
There is a lack of comparable up-to-date information on recruitment difficulties and skills shortages among the Employment NTO occupations, as there is for the other three NTOs. However, many of the general skills shortages issues discussed above will be pertinent for work-based learning and training.

6.4 Skills gaps

A *skills shortage* exists where an employer cannot readily recruit someone with the skills required for a post. A *skills gap* exists where existing employees do not possess all the skills required to meet employer expectations.

6.4.1 Post-16 education and training establishments
As with recruitment difficulties and skills shortages data, ESS data on all post-16 education and training establishments is presented first, followed by information on the individual sub-sectors produced by the three NTOs.

The ESS asked respondents what proportion of their staff in each occupational category they would regard as being fully proficient at their job. Those respondents who reported that fewer than 'nearly all' of their staff in any occupational category were fully proficient were considered to have internal skills gaps.

Internal skills gaps were most commonly reported among professional occupations, who accounted for 34 per cent of all instances of skills gaps, followed by clerical and secretarial staff (24 per cent), managers and administrators (18 per cent) and associate professional staff (12 per cent).

The skills that respondents reported were lacking are presented in Table 6.6. The skills that were most commonly lacking were communication skills, which were lacking in 36 per cent of instances of skills gaps, followed by advanced IT or software skills (33 per cent), management skills (28 per cent), problem solving skills (27 per cent) and team working skills (25 per cent).

During the Dialogue process management skills were frequently identified as lacking in the sector, particularly skills in managing change. It was recognised that the sector has been going through significant changes, and will continue to do so. At present it is felt that there is not sufficient resource within the sector to plan and effect aspects of change, and unless

there is some attempt to address aspects of managing change within the sector, it will move forward in a reactive and ad hoc way rather than proactively meeting the new challenges.

There were different patterns among the occupational groups: management skills gaps were most commonly reported for managerial staff; the most common skills gap among professional staff was advanced IT or software skills; and clerical and secretarial staff were most commonly lacking basic IT skills, and other technical and practical skills.

Table 6.6: Skills reported as lacking in internal skills gaps among post-16 education and training establishments, 2000/01, England

	%
Communication skills	35.5
Advanced IT/software skills	32.7
Management skills	28.4
Problem solving skills	26.7
Team Working	24.6
Other technical/practical skills	21.7
Basic IT skills	19.4
Customer handling skills	14.6
Literacy	12.5
Numeracy	10.9
Other	5.7
Don't know	9.0

Source: ESS, 2001

Table 6.7 shows the causes of post-16 education and training staff not being fully proficient in their jobs. The most common reasons for lack of proficiency were:

- high staff turnover (38 per cent of skills gaps);
- inability of workforce to keep up with change (38 per cent);
- recruitment problems (28 per cent);
- failure to train and develop staff (25 per cent).

Hours and pay were rarely reported as a cause of internal skills gaps.

Table 6.7: Causes of internal skills gaps among post-16 education and training establishments, 2000/01, England

	%
High turnover	38.0
Inability of staff to keep up with change	37.9
Recruitment problems	27.8
Failure to train and develop	25.4
Lack of experience	10.3
Lack of motivation	3.4
Hours and pay	2.0
Other	2.4
Don't know	5.2

Source: ESS, 2001

The main implications of lack of proficiency were difficulties introducing new work practices, difficulties in meeting required quality standards, and difficulties meeting customer service objectives, which were reported for over half of instances of internal skills gaps (Table 6.8). Other common impacts of a lack of proficiency were delays in developing new services, and difficulties introducing technological change. However, in just over one in five cases of internal skills gaps there were no particular problems with the lack of proficiency.

Table 6.8: Implications of a lack of proficiency among post-16 education and training establishments, 2000/01, England

	%
Difficulties with new working practices	55.4
Difficulties with quality	54.2
Difficulties with customer service	50.7
Delays developing new products	47.0
Difficulties with technological change	46.1
Increased operating costs	37.6
Withdrawal of services/products	20.7
Loss of business/orders	15.6
No particular problems	22.1

Source: ESS, 2001

Table 6.9: Responses to internal skills gaps among post-16 education and training establishments, 2000/01, England

	%
Provide further training	80.2
Change working practices	47.0
Relocate work within organisation	36.7
Increase/expand trainee programme	36.2
Expand recruitment channels	21.6
Increase recruitment	15.6
Other	2.1
No particular action	2.3
Don't know	3.7

Source: ESS, 2001

The actions taken to overcome skills shortcomings are presented in Table 6.9. The most common response to skills gaps was to provide further training, which was undertaken in four out of five instances of internal skills gaps. Other common responses were to change working practices, to relocate work within the organisation, and to increase or expand trainee programmes.

Expanding recruitment channels and increasing recruitment were more commonly undertaken for professional staff, while internal responses such as changing working practices and expanding trainee programs were common responses to managerial skills gaps.

Further education

FENTO's Skills Foresight research examined the extent of skills gaps among FE colleges. The research looked at skills gaps among three particular groups of staff, lecturers, college managers and support staff.

More than half of colleges in the survey reported that their lecturers lacked IT skills, either using IT in the curriculum, teaching on-line, or IT for personal use. Around a third of colleges reported skills gaps related to teaching the disaffected, and business development, among their lecturers. Research, pedagogy and new curriculum developments (Curriculum 2000) are recognised as significant gaps by around one-fifth of respondents.

Turning to skills gaps among managers, the most widespread gaps were in performance management and people management, each cited by around one-third of respondents, and using IT for management and generic management skills, with around a fifth of colleges reporting weaknesses in these management skills.

IT emerges as an important skills gap among support staff, with one-third of colleges reporting weaknesses in providing support on-line, and a quarter reporting weaknesses in supporting ICT. Other problem areas among support staff included business development, languages, learning centre management, and supporting the disaffected.

During the Dialogue process, a common view was that there were deficiencies in skills in delivering basic skills training. One of the problems the sector faces is that there are lot of basic skills units to be delivered, and not only are there skills gaps but also skills shortages and difficulties recruiting staff for this area.

Higher education

IES Research for HESDA (2002), based on survey research conducted in January 2002, found that:

- nine out of ten HEIs in the UK reported a skills gaps (88 per cent);
- skills gaps were most likely to exist among academic and professional staff and were least likely to exist amongst clerical and manual workers;
- the generic skills most lacking were: computer literacy (84 per cent of HEIs with a skills gap reported this as a problem area); team-working (79 per cent); customer care (77 per cent); communication (74 per cent) and project management (72 per cent).

Specific skills gaps identified by the HESDA 2002 research include:

- specialist IT and technical skills for technical staff;
- pedagogical and ILT skills amongst academics;
- finance and budgeting skills among administrative staff;
- leadership and management skills amongst academics and professionals;
- basic skills among manual staff.

Community-based learning and development

The PAULO Skills Foresight report identified the current skill needs of the sector, and thus areas where skills may be lacking:

- time management;
- people management;
- working with media;
- multi-agency team building;
- strategic planning;
- audit/monitoring/evaluation systems;
- accessing funding;
- financial management.

The majority of these skill needs concern management skills in one form or another. An issue raised under the skills shortage section but which is also relevant for skills gaps is that of being able to manage, develop and sustain new services and facilities in the sector. Staff are often not trained to manage and run the facilities they have obtained, and more crucially they cannot identify where such training might be found, given the novelty of their centre and the services it provides. During the Dialogue process community development skills were mentioned as an area in which there may be gaps among the workforce in the sector.

There was strong support among employers in the sector for ongoing training of staff, with distance learning and part-time courses preferred due to difficulties in releasing staff for any length of time. However, a large number of employers had no significant training budget provision.

6.4.2 Work-based learning and training

There is a lack of comparable up-to-date information on skills gaps among the Employment NTO occupations, as there is for the other three NTOs. However, many of the general skills gaps issues discussed above will be pertinent for work-based learning and training.

6.5 Future skills issues

6.5.1 Post-16 education and training establishments

The ESS asked questions about future skills issues of all post-16 education and training establishments. Firstly, respondents were asked what barriers they would say may exist to them developing or maintaining a fully proficient workforce in the future, and secondly they were asked which skills they expected to become more important for their workforce over the next two to three years.

Post-16 education and training respondents reported that the most common barrier to maintaining a fully proficient workforce in managerial, professional, associate professional and clerical and secretarial occupations was lack of time for training, followed by lack of cover for training, and lack of funding for training (Table 6.10). Funding for training, where it is available, is often of a short-term nature and it is therefore difficult for organisations to plan their training strategies over the long-term. There was little variation in the barriers facing the different occupational groups, although lack of suitable courses in the area or locality was a particular problem for associate professional staff.

Table 6.10: Barriers to maintaining a fully proficient workforce in post-16 education and training establishments, 2000/01, England

	Managers %	Professionals %	Associate professionals %	Clerical and secretarial %
Lack of time for training	50.6	40.7	50.0	41.1
Lack of cover for training	38.0	31.9	30.4	36.3
Lack of funding for training	28.0	24.9	28.8	24.4
Unwillingness of staff to undertake training	14.3	8.2	3.6	7.4
Lack of suitable courses in area or locality	13.7	8.4	17.6	8.7
Lack of suitable courses relevant to this grade of staff	12.0	6.8	12.4	4.7
High labour turnover	7.9	3.1	6.4	4.3
Recruitment difficulties	2.6	4.3	1.8	2.8
Other barriers	2.5	3.0	1.2	1.7
No barriers	33.7	34.9	27.7	39.1
Don't know	0.7	4.6	2.7	0.5

Source: ESS, 2001

Changing skill needs have predominantly been driven by the need to cope with new working practices, and the need to cope with new technology. It is likely that these factors will continue to drive future skill needs.

Table 6.11 shows the skills which post-16 education and training establishments report are going to become more important in the next two to three years. Half of establishments in the sector feel that advanced IT/software skills are going to become more important in the future, and around one in six report that communication skills, customer handling skills, basic computer literacy skills, and other technical and practical skills will become more important.

Thus it is the skills in which post-16 education and training establishments are currently experiencing gaps, i.e. IT, communication and management skills, that are going to become more important in the future.

The area of customer handling and customer care may place significant skills demands on the sector. Expectations of learners are increasing, and staff in the sector need to be more responsive to the needs of customers. Customer care is likely to be a prime area for staff development. This is an area where collaboration and partnership with the work-based learning and training could benefit the other sub-sectors, as the private sector is recognised as being much better at issues around customer care.

Table 6.11: Future skill needs of post-16 education and training establishments, 2000/01, England

	%
Advanced IT/Software skills	50.4
Communication skills	16.2
Customer handling skills	16.1
Basic computer literacy skills	15.3
Other technical and practical skills	15.2
Industry specific skills	5.9
Problem solving skills	5.8
Management skills	5.6
Team working skills	5.4
Other skills	8.2
Don't know/not sure	17.7

Source: ESS, 2001

Community-based learning and development

One particular issue for the PAULO sector, highlighted in the *Skills Foresight* report, is that the sector must start planning for and training staff in the skills necessary to meet the new demands that will emerge from current initiatives on basic skills training and community development. This may require a cultural change in the sector, as across the sector most training seems to be largely an ad hoc response to perceived problems and gaps in individual capacity, and there is little long-term strategic planning of training related to business plans.

6.5.2 Work-based learning and training

Comparable up-to-date information on future skills issues, such as is available for post-16 education and training establishments, is not available for work-based learning and training.

However, the minimum skills framework in the DfES *Government-funded Work-based Learning* report identifies the following key functions which provide an insight into new emerging key skills for staff in work-based learning and training:

- managing the training and delivery process;
- planning and developing integrated programmes of work-based training;
- identifying trainee abilities and needs in relation to programmes of work-based training;
- providing appropriate work-based training opportunities;
- supporting trainees and monitoring their progress against an agreed training plan;
- assessing trainee achievements on work-based programmes;
- monitoring and evaluating the effectiveness of work-based programmes;
- developing and maintaining professional competence.

The main drivers of change in work-based learning and training, as identified in the Employment NTO Skills Foresight report, will have implications for staff working in training and development, and key changes include:

- a firmer understanding by training practitioners of the business context which should inform training activity;
- a more commercial and responsive approach to the management and resourcing of training. This is likely to involve harnessing internal expertise, e.g. for coaching and mentoring, and targeted use of external specialists;
- use of technology-based training, where this contributes to greater flexibility and cost-effectiveness. This is more likely to pertain in larger organisations, where it can widen access and reduce unit costs, but opportunities will arise for smaller organisations through current national policy developments and ICT access;
- convergence of teaching and learning strategy in FE and HE with training and development strategy elsewhere; and
- support of training and development as part of the core values of the organisation, to aid recruitment of quality personnel, motivation and commitment, and retention through enhanced employability.

Within the area of trade union representation, changes are having an impact on the skills needed by full-time officials, and to a lesser extent workplace representatives. There is an increased need of management skills, driven by factors internal to the unions, and to external factors. The unions are developing an 'organising' rather than a 'servicing' culture, and using FTOs as team leaders, with the result that they are having to become increasingly skilled in people management. In addition, some FTOs are having to make increased efforts in recruiting new members to the union, or assisting workplace representatives to do so, and this is an area which FTOs generally have had little experience in.

The continuing development of the Union Learning Fund has resulted in some 3,250 union learning representatives being trained over the last few years, who are proving to be very effective in encouraging training and development in the workplace, not just in education and training but across all sectors. Government plans to place union learning reps on a statutory footing, and so allow them paid time off for training, will go some way to raising their profile and increasing their effectiveness.

External factors which are increasing the need for management skills among FTOs include the drive to contracting in the public sector, with FTOs being involved in originating bids from unionised workforces, and technological change which places demands on FTOs to advise both management and workplace representatives on optimal work organisation, health and safety and other matters.

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7. Sector Responses to the Skills Challenge: Issues and Plans

7.1 Introduction

In this chapter we review the main thrust of thinking emerging from the sector to date as a response to labour market and skills data. Sector Workforce Development Plans (SWDPs) have been drawn up by NTOs to marshal the priorities of sector institutions and other stakeholders in workforce development. The relevance of these priorities and issues relating to them were explored during the Dialogue process. This chapter draws together key findings from both the Dialogue discussions and these SWDPs, thematically for the whole post-16 education and training sector. Its sections are:

- ❍ Context: setting the scene for workforce development (Section 7.2).
- ❍ Increasing basic skills teaching and training (Section 7.3).
- ❍ Transferability of qualifications across the sector (Section 7.4).
- ❍ Measuring and developing a more equal and diverse workforce (Section 7.5).
- ❍ Supporting professional development of teaching and research staff, including mandatory qualifications (Section 7.6).
- ❍ Encouraging more and better management development (Section 7.7).
- ❍ Improving take-up and use of information and learning technology (Section 7.8).
- ❍ Developing support staff (Section 7.9).
- ❍ Improving labour market and skills data and intelligence (Section 7.10).
- ❍ Improving adult literacy, numeracy and English for Speakers of Other Languages (ESOL) skills for manual staff (Section 7.11).
- ❍ Technician training (Section 7.12).

Note on sub-sector coverage

It is worth noting that the SWDPs differ markedly in style and detail, and Employment NTO have not published a draft at this stage, and it is these differences (and sometimes omissions) that is responsible for the somewhat uneven coverage between the various sectors. Under some headings, information about Employment NTO and PAULO workforce areas have been joined simply because there is less detail available for either than is available for FE and HE respectively.

7.2 Context

An overall picture has been painted of:

- ❍ increasing employment in a growing sector;
- ❍ tight recruitment market — education and training struggles to compete with other sectors, especially in areas with high housing costs;
- ❍ endemic skills gaps, affecting all levels of staff;
- ❍ raising expectations (eg for a qualified workforce).

At the same time, the post-16 education and training sector is in some senses exemplary in terms of training staff and seeking to develop its workforce. Common good practice (and aspirations) exist across the sector, with a good number of current 'Investors in People' recognitions and evidence that the 'Business Excellence Model' is in use. Within FE, Beacon Colleges and Accredited Colleges have the potential to share good practice in workforce

development more widely with other colleges (and indeed, possibly, with others within the post-16 education and training sector).

Traditionally the post-16 education and training sector has been hampered by a lack of unity in its response to these issues, with overlapping and sometimes competing sector bodies and agencies representing various factions and perspectives. Through the NTO approach, and in the future as the Sector Skills Council approach, it is possible that there will be some useful common work on identifying and addressing skills and related issues affecting post-16 education and training.

As a starting point there are two issues raised during the Dialogue process, before some of the key 'priorities for action' emerging from the Sector Workforce Development Plans (SWDP) of the respective NTOs are discussed.

7.3 Increasing basic skills teaching and training

Implementing *Skills for Life* Strategy

During the Dialogue process there were widely expressed views that greater emphasis needs to be given to the issues of delivering adult literacy, numeracy and English for Speakers of Other Languages (ESOL) training. The government is spending £1.5 billion supporting its Skills for Life strategy for improving adult literacy and numeracy skills.

In September 2001, the DfES Adult Basic Skills Strategy Unit commissioned FENTO, PAULO and the Employment NTO to carry out a major research project to identify issues related to skills gaps and shortages with respect to teachers of Adult literacy, numeracy and English for Speakers of Other Languages. The report on this research will be published in the early autumn 2002. FENTO have approved new subject specifications for teachers of adult literacy and numeracy. For the first time, as part of the professionalisation of teachers, from 1 September 2002, all new teachers entering the profession who wish to teach adult literacy or numeracy will need to enrol on programmes that take account of the subject specifications at level 4. New qualifications at levels 2, 3 and 4 for those who lead and/or support learning will form part of the National Qualifications Framework.

There is a perceived need for the sector to respond more effectively to its own training needs and train more adult literacy, numeracy and ESOL teachers. PAULO has recognised in its Skills Foresight report that the sector must start training staff in the skills necessary to meet the new demands that will emerge from current initiatives on basic skills training.

In addition to adult literacy, numeracy and ESOL teachers within FE and other sub-sectors, there is an important role for the community development and work-based learning sectors in acting as a broker between customers and providers of basic skills training. Community workers, personnel staff and trade union officials who are not primarily responsible for delivering adult literacy, numeracy and language training, are in a position to identify adult literacy, numeracy and language needs among their clients or colleagues and to help direct them towards suitable training.

The Adult Basic Skills Strategy Unit and the Active Community Unit at the Home Office, has commissioned a consortium led by the Basic Skills Agency, to develop and implement a national Volunteers strategy. The aim of this project is to recruit 6,000 new volunteers to help support adults with their language, literacy and numeracy needs. The project will draw on existing good practice in volunteering and mentoring in both the statutory and voluntary sector, and provide an integrated approach to the recruitment and placing of volunteers across an area. Building on work from the National Voluntary Organisations Partnership Programme and the Adult Community Learning Fund the programme will train and support

volunteers in a range of roles and contexts including:- mentors, frontline workers, classroom supporters and community facilitators. The project will make links with a range of national and regional initiatives including the Experience Corps, Millennium Volunteers and the Neighbourhood Renewal Unit.

The project is producing an accredited Level 2 Qualification and training programme for those people acting as advocates and signposters in the community, workplace etc. as well as training for the volunteers who support the learners. The project will run until March 2004 and is to be sited in 20 of the most deprived communities in England.

Frontline workers are a key focus for this project as they can play a key role in identifying members of their communities who need to develop their literacy, numeracy and language skills. The Link-Up project will be working with the public, voluntary, community and private sectors to train their frontline workers in adult literacy, numeracy and language awareness, identifying need and signposting skills.

7.4 Transferability of qualifications across the sector

The post-16 education and training sector is in many ways not a cohesive sector. The four sub-sectors generally operate autonomously and with little consideration for their partner sub-sectors. This is partly because of the different client groups they serve, and partly because of institutional factors such as different organisational infrastructures and occupational frameworks.

This lack of cohesion between the sub-sectors is a potential barrier to effective staff and skills development across the entire post-16 education and training sector. During the Dialogue process there were views expressed for having a clear, national qualification structure which encompasses career paths in all four sub-sectors. This could be part of a national framework of professional development which makes clear how an individual might move or progress from one sub-sector to another, via a clearly understandable and transparent route of qualifications and/or cpd units based on sector standards. For example, how a volunteer currently working in adult education might progress to being a teacher in further education, that is the qualifications they would need to study for and the work experience or work based learning accreditation they would need.

7.5 Measuring and delivering a more equal and diverse workforce

Not enough is known about the demographic characteristics of the workforce, and this is partly a product of inadequate completion and collation of staff employment records (centrally) and partly a result of national surveys being too small to yield up the required detail. The Census of Population will bring knowledge up-to-date, at least for a short period, in 2003, but it is not frequent enough to provide a sustainable evidence base of change.

Employment NTO and PAULO:

Both Employment NTO and PAULO identified labour market intelligence as a major concern and priority for action, and there is poor data on the ethnicity of the workforces they serve. PAULO has worked towards the promotion of social inclusion and equality in the workforce it serves, for example, through dissemination of good practice. Further, this work has also addressed the diversity of learners, and staff development needs that arise from this.

HE:

In higher education this issue is being addressed by HEFCE and HESA (Higher Education Funding Council for England, and the Higher Education Statistics Agency), with HESA planning to collect better data on staff demographics from September 2002.

What is known from available data (for higher education) is that women tend to be under-represented in the higher level occupations, including senior managerial positions. In part this may be a reflection of time-lag between increased female participation in higher education and women then progressing in academic and managerial careers. However, the sector cannot lag behind others, not simply for reasons of natural justice, but because it would otherwise be at a severe disadvantage in recruiting and retaining talent in a tight labour market.

Available data also shows that ethnic minority staff within HE are disproportionately found amongst the lower-level jobs, and are something of a rarity in senior academic and managerial positions.

The Equality Challenge Unit (ECU), supported by UUK, SCOP and the HE funding councils, aims in the next five years to improve equal opportunities for all who work or seek to work in the sector. The HEFCE 'Rewarding and Developing Staff' initiative invites all English HEIs to produce HR strategies that include targets on diversity.

FE:

Recognising the current shortcomings of statistics on workplace diversity and opportunity, FENTO, in its Sector Workforce Development Plan, prioritises action on research and data collection.

Also, as part of a drive to reduce recruitment difficulties, the FE sector seeks to 'develop innovative schemes to attract staff from groups such as early retirees from successful companies and under-represented minority groups - (especially in) - construction, engineering and similar subjects' (FENTO SWDP).

7.6 Supporting professional development of teaching and research staff, including mandatory qualifications where appropriate to sub-sector

Employment NTO:

This is an area where some differences of priority and emphasis are apparent in the various sub-sectors of the post-16 education and training sector. In the work-based learning sectors there has been less emphasis on mandatory qualifications for staff, and more emphasis on the development of occupational standards and continuing professional development. This is largely attributable to the fact that there is less direct DfES involvement, with funding for training coming from employers. Training and National Occupational Standards for trades union officers who are learning representatives is seen as important. However, these have not been put into an NVQ framework.

PAULO:

There are differences in approach between the four countries in the UK, and as a UK-wide body PAULO is keen that these be addressed. The PAULO SWDP notes that

'There has been considerable resistance to vocational qualifications in the past.'

and especially where volunteers are involved there are particular issues about not deterring voluntarism with excessive hurdles or barriers. PAULO report that recent improvements to vocational qualifications should ease traditional concerns in this area, but add that:

'Training in the sector needs to accommodate the needs of learners from a diversity of starting points and to ensure that whatever the starting point or route taken to qualified status there is area parity of esteem, both within and outside the sector.'

The PAULO SWDP also suggests that it would be useful to:

'Explore the potential for graduate apprenticeship training courses for those coming into the sector with high level qualifications in other areas, and requiring training in the practical skills and methods of the sector.'

HE:

In higher education, professional training and development in teaching skills is patchy. This is especially the case for part-time staff. Problems with inadequate professional development of contract staff (notably researchers) are now well known.

A response is to encourage staff to make use of the Institute for Learning and Teaching (ILT). In Scotland, SHEFC plans to make the integration of a satisfactory quality enhancement strategy (including staff development) within institutions' overall strategic plans a condition of grant from 2002/3.

For research staff, HEFCE has established a sub-group of its fundamental review of research that is assessing the impact of its funding methodology on the career development of researchers. The Research Careers Initiative will continue to monitor and encourage steps to improve contract research staff management, with the aim of achieving better conditions and prospects for researchers within HE and in industry.

FE:

Similar problems exist in further education, with a significant minority of practising lecturers lacking a formal qualification in teaching. A move towards mandatory qualifications, supported in part by Standards Fund resources, is one response to this problem in the FE sector. From September 2001, regulations require all new FE teachers to embark on a programme of teacher training leading to qualifications meeting the FENTO *Standards for Teaching and Supporting Learning.*

Amongst the approaches outlined in the FENTO SWDP are:

- ▸ introducing a structured approach to CPD so that general weakness in pedagogy are addressed;
- ▸ developing learning units for existing qualified staff that address such issues as supporting the disaffected, inclusive learning and basic skills development.

7.7 Encouraging more and better management development

The need for more management skills is evident across the post-16 education and training sector, and clear evidence of skills gaps has been presented in this report.

Employment NTO and PAULO:

Both NTOs have addressed the need for more management development training as an important issue, with PAULO stressing in its sector workforce development plan the scale of change in the sector and challenges that are faced. The Employment NTO New Qualifications Framework now includes an NVQ Level 4 in *Management of Learning and Development Provision.*

HE:

HESDA have argued that, in the absence of a higher education sector strategy on management development (currently being developed), this area of HR development has received less attention than in other sectors. The response proposed through its sector workforce development plan is:

- additional funding for management development within HEIs, supported by HEFCE's 'Rewarding and Developing Staff' and other similar initiatives;

- further dissemination of good management practice, again supported by HEFCE funding;

- the continuation of HESDA's Top Management Programme (TMP), which provides development for 24 senior managers each year;

- developing and disseminating leadership/management materials and programmes at all levels within the sector.

FE:

In FE, the strategy stresses the development of junior managers, and with that comes the thorny issue of releasing such people from some teaching duties without taking them away from the direct experience required to manage some initiatives.

FENTO has developed new occupational standards for FE management, which will be used to develop improved qualifications, learning programmes and CPD provision. The new National Professional Qualification for Principals is an example of such work, and further work is promised on finding the correct incentives to encourage take-up of formal management qualifications, including the proposed Leadership and Management College.

7.8 Improving take-up and use of information and learning technology

The deployment of IT (and developing and maintaining the necessary skills within the workforce) features prominently in skills research across the post-16 education and training sector. The issue is not just how the sector makes best use of the potential of IT and Information Communications Technology (ICT), but also how it can contribute to the wider information society and growth of IT literacy within the UK.

A lot of activity is taking place in this area, for example the Universities and Colleges Information Services Association (UCISA) staff development group facilitates and delivers information services training to IT staff across the sector.

Employment NTO have identified the use of IT, ILT and ICT as a major issue, but more detail is available for HE and FE than for the Employment NTO and **PAULO** work areas. Therefore we only draw on the HE and FE SWDPS (in addition to the work of UCISA) to help us towards an approximate picture for the entire sector. It is worth noting however, that there are probably fewer resources for IT training for voluntary staff than for those in the FE and HE sectors.

HE:

The Joint information Systems Committee (JISC), Committee for Awareness, Liaison and Training (JCALT) currently supports a range of projects aimed at developing these skills in the HE workforce. In Scotland, SHEFC will provide additional funding to HEIs to address generic skills gaps in IT.

FE:

Within FE, there is an identified need for better skills in the areas of:

- managing ILT (Information Learning Technology) facilities;
- strategic management of ILT;
- choosing and using online learning and multi-media;
- production and planning of online courses;
- customising and producing learning materials.

Key initiatives to meet these needs include:

- National Learning Network, (which has been described as a national strategy for increasing update of ILT within FE);
- a 'computers for FE teachers initiative';
- training of IT technicians and IT champions within colleges;
- developing occupational standards for ILT.

7.9 Developing support staff

FE:

In further education the term 'support staff' applies to some 45,000 members of the workforce. The FENTO SWDP explains that 'these essential workers sometimes provide economical alternatives to using lecturers and they enable learners to be properly supported outside the times when they are in direct contact with lecturers'.

There are serious concerns within the sector that significant numbers of support staff appear to possess no relevant qualifications, especially since many become involved in supporting lecturers in teaching students.

To address this, FENTO are developing occupational standards for support staff.

7.10 Improving data and intelligence

Data about workforce and skills issues can always be better, but across the post-16 education and training sector there is acknowledgement that it needs to be a lot better. Earlier, we referred to shortcomings in the ability of HR data to describe the ethnicity of the workforce in sufficient detail. However, that is merely a part of a wider pattern of inadequate data that inhibits the development, targeting and monitoring of workforce development.

There are pressures to restrict requests for management information on bodies such as the LSC by post-16 education and training providers (colleges and employers) as part of the recent 'Bureaucracy Busting' initiative. However, there will be a considerable need for any new Sector Skills Council or Councils serving this sector to develop improved LMI (labour market and skills intelligence), and to work closely with LSC, RDAs and others on this issue.

PAULO:

PAULO, in its SWDP, places considerable emphasis upon the need to improve labour market intelligence, pointing out that any improvements to the system should contribute to better information about staff in voluntary and community organisations, particularly those operating at local level only.

Employment NTO:

Due to the diversity of the Employment NTO sector, with workers employed in organisations across all industrial sectors, there is a dearth of hard labour market and skills intelligence for this sub-sector. As it is not defined in terms of industrial sectors, surveys of the Employment NTO area are more problematic than they are for other sub-sectors, due to the lack of suitable sample frames. However the 2001 Census of Population should provide useful hard data on the sector when it is released.

FE:

An issue in FE is resistance amongst colleges to the burden of data collection by external agencies. Unless and until colleges can see a tangible benefit from providing data to external agencies (e.g. for funding and quality assurance and inspection purposes) then it is unlikely they will enthusiastically volunteer yet more data.

HE:

In HE there is recognition that current labour market and skills intelligence is inadequate, and in particular that data on so-called 'non academic' staff is often poor.

HESA plans an annual collection of demographic data on all staff (from September 2002). Additionally, HESDA developed a survey instrument with which it will be possible to regularly survey skills issues within HEIs (the first fruits of which have been drawn on for this report).

7.11 Improving adult literacy, numeracy and English for Speakers of Other Languages (ESOL) skills for manual staff

HE:

Within higher education, there are major concerns at the relatively low level of literacy, numeracy and language skills possessed by manual staff, and perhaps even more so that this section of the workforce receive relatively small amounts of development and training.

Individual HEIs are developing work in this area, often in co-operation with local LSCs and RDAs. The sector has an important role to play in the government's Skills for life strategy for adults and its £1.5 billion programme under the DfES Adult Basic Skills Strategy unit.

7.12 Technician training

HE:

Technician training is fairly specific to higher education (although not unique) and has been the subject of a number of important studies. A 1998 Royal Society report called for a new framework for training university technical staff to encourage trainee-entry recruitment, multi-skilling and more effective management of technicians.

A range of national stakeholders (notably HEFCE and HESDA) are working on this issue, to improve knowledge and practice.

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