THE NUFFIELD REVIEW OF

14-19

EDUCATION & TRAINING

Annual Report

2003-04

Published by the University of Oxford Department of Educational Studies, Oxford.

ISBN: 0903535734

This Report is also available electronically at the website address below.

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October 2004

The Report arises from a grant made by the Nuffield Foundation to the University of Oxford to undertake the Nuffield Review of 14-19 Education and Training. The views expressed in the Report are not necessarily those of the Nuffield Foundation.

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Acknowledgements

The authors would like to thank the many individuals who contributed to this Report. Joanne Hazell has managed the project in all its complexity from the outset and was pivotal in the completion of this Report. Catrin Roberts and Velda Hinds at the Nuffield Foundation provided ongoing advice and support for the work of the Review and facilitated the working days held at the Nuffield Foundation in London. The Trustees of the Nuffield Foundation have supported the Review by making the facilities of the Foundation available for various events and working days. Stephanie Sturdy helped collate and undertook preliminary analyses of statistical data. Judy Reading, Nick Watts and Elsa Gill at the OUDES library tracked down any reference, however obscure. Dan Hayward and James Butterworth assisted with the production of the Report. The Core Group and Advisory Committee have provided invaluable expertise, feedback and encouragement.

Any errors or omissions, as always, remain the sole responsibility of the authors.

Foreword

In 2003, the Trustees of the Nuffield Foundation decided to establish a review of the education and training of 14 to 19 year olds. We took this decision in the context of our long-established interest in this area and our conviction that long-term thinking, based on as good evidence as could be collected together, was urgently needed.

We envisaged a review which was broad in scope: broad in terms of history, so that we could try to learn from the successes and failures of the past; broad in terms of geography, so that we could learn from what was happening elsewhere in the world; and (perhaps most important) broad in terms of philosophy, so that we could be clearer about what we wanted from this stage of learning for all young people.

It gives me great pleasure now to welcome the first year's report from the Review group. In pulling together research and data from many diverse sources, and in presenting a synthesising analysis of what is happening, I believe it is doing something that has not been attempted before. It is also asking the basic questions on aims and purposes which any society needs to address.

This is only the beginning. As the Review group continues its work, I hope that its report year by year will come to be seen as a unique and authoritative independent source of evidence and informed analysis. I also hope that its widely consultative style, already firmly established during this first year, will enable everyone with an interest in the field – not least young people themselves – to contribute to emerging thinking and policymaking.

Anne Sofer
Trustee, The Nuffield Foundation

October 2004

Part I

Introduction

What is the Nuffield Review?

There is a growing recognition of the importance of the education that takes place between the ages of 14 and 19 because these are the years when young people make the lengthening transition between compulsory education and the world of work and higher education. At the same time, education practitioners and policymakers in the UK have a real concern that too many young people do not positively participate in this phase of education. While there has been growing pressure in recent years from the education profession to recognise 14-19 education as a distinct phase in England and Wales, it has become a government policy priority in these countries only relatively recently.

Radical proposals for 14-19 education in England have now been put forward by the Tomlinson Working Group on 14-19 Reform and parallel proposals are already being put into operation in Wales. In the English context, other key policy priorities also affect this phase: Skills for Life to boost basic skills; the Skills Strategy to tackle the 'low skills equilibrium' and Success for All with its reform agenda for high-quality provision in the learning and skills sector. Taken together, these key policy initiatives suggest a more strategic approach to upper secondary education and lifelong learning. All of this is taking place in the context of the Prime Minister's drive for public sector reform and the devolution agenda.

This more strategic, higher-profile political approach has been preceded by piecemeal change designed to ameliorate the negative effects of a rigid and examination-dominated secondary education which has demotivated many 14-16 year-olds. The 14-19 phase starts at the end of Key Stage (KS) 3 when pupils' performance is measured in 'core subjects'. This is also the beginning of the two-year programme leading to General Certificates of Secondary Education (GCSEs) and the time when options are selected (often on the basis of relevance to the future). Several areas of the National Curriculum can be 'disapplied' – modern languages, the humanities and the arts. Vocational options begin. Careers advice kicks into gear as decisions are increasingly made and deliberations engaged in with regard to the future. Students can be relocated to the different environment of a further education (FE) college for part or all of their studies – currently more than 100,000 students have taken up this option. Work-based

learning (WBL) is made possible by private learning providers; indeed, all students aged 14 to 16 are obliged to undertake work experience. There is a general assumption that different pathways (academic and vocational) should be integrated, providing more flexible arrangements through which young people can progress to further and higher education or job-related training. New funding arrangements provide more effective 'drivers' and 'levers'. FE colleges increasingly provide programmes at higher education level. New qualifications have been introduced both pre- and post-16 to provide a more practical and applied learning experience, particularly for learners who are deemed unable to cope with GCSEs and General Certificates of Education at Advanced Level (A Levels).

The 14-19 landscape is cluttered with policy initiatives, though now with the promise of a more systemic, longer-term approach to change. The time is ripe, therefore, for the Nuffield Foundation to launch a thorough and independent review of every aspect of these changes, to ask searching questions, to challenge the assumptions behind these changes and examine what they mean for learners, and, in the light of the available evidence, to make recommendations. Indeed, the time calls for questioning and rethinking of what should be provided and promoted during the 14-19 phase of education and training.

The Nuffield Review of 14-19 Education and Training for both England and Wales was launched in October 2003. The Review is designed to be both independent and extensive. It provides a critical examination of every aspect of the provision for education and training, including the underlying aims and values, the different aspirations and learning needs of young people, the requirements of employers, the appropriate curriculum and learning opportunities, the framework of qualifications, progression and pathways into further training and higher education, patterns of institutional provision including WBL, links between education/training and economic performance, and national, regional and local responsibility for planning and accountability.

The Review values a comparative dimension, within the different systems of the UK and internationally. It is concerned with the developments, problems and opportunities in England and Wales. In many respects, the work of the Review applies equally to both countries and there is no need

for separate treatment of each. However, since devolution, the Welsh Assembly has developed its own independent response to the needs of the 14-19 phase, reflected in its *Learning Pathways 14-19 policy.* The Review, therefore, is paying particular attention to the distinctive nature of the Welsh initiatives. Attention is paid, too, to the needs of specific groups – whether these be identified by special learning needs, gender, ethnicity or disaffection.

Hence, the Review is exactly that – a review of existing provision for 14-19 year-olds and of the relevant research and development in this area, rather than the conduct of original research. But one result of such a review will be the identification of where further research is needed and the consequent development of research proposals in co-operation with other bodies. A crucial part of the Review is the scrutiny of different databases upon which performance is measured and decisions made nationally, regionally and locally. It seeks to establish where there are gaps and deficiencies in these databases and where greater coherence might be obtained.

The Review is being carried out by a Directorate of Richard Pring and Geoff Hayward from the University of Oxford's Department of Educational Studies (OUDES); Ann Hodgson and Ken Spours from the Institute of Education, University of London; Jill Johnson from the Universities and Colleges Admissions Service (UCAS); and Ewart Keep from the University of Warwick Business School. These are assisted by the research officers, Alis Oancea and Susannah Wright, and the Review's administrator, Joanne Hazell.

But the team brings to the Review extensive networks of research and development – the many schools and local education authorities (LEAs) associated with the Institute of Education's London Region Post-14 Network, the Economic and Social Research Council (ESRC) Centre on Skills, Knowledge and Organisational Performance directed jointly by the universities of Oxford and Warwick, and the incomparable links between UCAS and schools and universities, as well as teachers' unions and professional associations. In addition, the Review has now established close links with the Learning and Skills Research Centre at the Learning and Skills Development Agency (LSDA), the National Foundation for Educational Research (NFER) and the Institute for Public Policy Research (IPPR). It also

values the relationships developed with government departments and agencies, which are playing a major part in the 14-19 reforms – the Welsh Assembly and the architects of the Welsh Learning Pathways, the Department for Education and Skills (DfES), Her Majesty's Treasury (HMT), the Qualifications and Curriculum Authority (QCA) and the Learning and Skills Council (LSC).

Why is there a Nuffield Review?

The context in which young people are educated and prepared for the future is undergoing rapid change at the beginning of the 21st century. This is the case throughout the developed world. Such changes are reflected in today's very different labour market, which the young people are to enter, and the cultural ethos, which shapes their attitudes and values. The period of transition from education into the world of employment is longer than before. The changes are reflected, too, in public sector reforms through which we are encouraged to think differently about the organisation and funding of public services. Such changes require an educational response. There is a need to think afresh about education and training and about how it is organised to determine what would be appropriate and beneficial both for the young people themselves and for the economic and social world which they are entering.

The need for a change to upper secondary education, first recognised in the mid-1970s and marked by Prime Minister James Callaghan's Ruskin College speech in 1976, has been reflected in many documents since, for example the publications of the Further Education Unit, and in several policy initiatives, for example the highly popular Technical and Vocational Education Initiative (TVEI), launched in 1982. It is now incorporated into government policy. That policy, bit by bit, is developing through consultation documents and white papers (a list of such documents is given in Appendix 2), through institutional reform, and through examination changes and curriculum recommendations (changes in qualifications from 1976 are listed in Appendix 3). To fulfil the government's threefold agenda of raising standards, social inclusion and economic relevance, there is a perceived need for greater integration of academic and vocational pathways, more WBL, better partnerships between educational institutions and employers, more efficient guidance and more effective 'levers' and

'drivers' of change. In October 2004 the Working Group on 14-19 Reform, under the chairmanship of Mike Tomlinson, produces its recommendations for enabling these objectives to be met.

However, it would be mistaken to see the context within which the Nuffield Review is taking place to be defined solely by government initiatives. There are challenging reforms demanded or initiated by subject associations: the historians and geographers are seeing ways in which the humanities might be preserved and enhanced in a climate where relevance to employment drives reform; the teachers of modern languages, through the Specialist Schools Trust, are inventing radical ways in which the teaching of modern languages might find a place in the developing framework of qualifications; the teachers of mathematics are responding to the trenchant criticisms of Professor Adrian Smith's 2004 report *Making Mathematics Count*. Voluntary bodies, such as Changemakers, provide alternative approaches to the education of young people, often those in greatest need. And charitable bodies such as the Award Scheme Development and Accreditation Network (ASDAN) offer innovative ways in which key skills might be assessed.

Recently, the white paper *21st Century Skills: Realising Our Potential,* produced jointly by the DfES, the Department of Trade and Industry (DTI), HMT and the Department for Work and Pensions (DWP), vigorously argued for the development of the necessary skills to maintain the economic welfare of the country. It set out the new Skills Alliance through which this might be achieved, emphasising partnerships between the different stakeholders and providers, the importance of regional development and sector skills planning and an appropriate framework of qualifications. A year later, the government set out its five-year spending plan, which supports greater diversity and autonomy for schools and the creation of more specialist schools and city academies, with little recognition of partnership or of the FE colleges, which deliver so much of the post-16 skills training demanded by the white paper.

Clearly, in the light of policy tensions, contradictions and evolving solutions to the perceived problems, it is important for there to be an independent review of learners' needs and how they might be met, of institutional provision and of the reforms required. Hence, a major aim of the Review is

to provide an independent overview of these developments, to see where there is coherence and where it is lacking, to look strategically at the changes taking place, and to see how so many worthwhile initiatives can be brought together in a coherent system of education and training which serves the needs of all 14-19 year-olds in preparing them for lifelong learning and adult life. Moreover, the Review seeks to examine 14-19 education through the lens of historical analysis and to ensure that an understanding of the past is brought to bear on current problems and policies.

As stated above, much of the analysis applies to both England and Wales. However, the freedom of Wales, under its new National Assembly, to develop its own response to similar problems, reflected in its recent policy *Learning Pathways 14-19,* brings a fresh perspective to the Review. Things can be done differently, and the Review aims to benefit from the comparison between different developments within the UK and beyond.

How does the Nuffield Review work?

The Directorate and its team seek to provide an overview of the many different but interlocking changes which are taking place. They formulate a series of questions, provisional at first, which shapes the Review. In the first year, these questions have concerned:

- Purposes, aims and values which underpin the changing 14-19 phase of education and training;
- Patterns of participation and progression of young people in education and training;
- Patterns of provision of different forms of education and training, both full time and part time, and both public and private;
- Policy processes through which decisions are reached;
- Performance indicators whereby the effectiveness of the system, its institutions and individuals are assessed.

The independent, historical and systemic approach of the Nuffield Review requires a broad and pluralistic way of working and actively seeks to involve key players, organisations and experienced participants in the 14-

19 changes. This broad and consultative approach has been achieved in the following ways during the first year of the Review.

First, the Review commissions papers from researchers, policymakers and practitioners, which are delivered at a series of working days. A Core Group, drawn from government departments and agencies, LEAs, research centres, universities, schools, colleges, teachers' unions and professional associations, the workplace and voluntary bodies, attends the working days and engages critically with the presentations. The first year's working days and the main contributors to them are listed in Appendix 5. The finished versions of the discussion papers, and summaries of them and of the discussions which they provoke, are published on the Review's website, www.nuffield14-19review.org.uk, which will, it is hoped, provoke further critical and informed discussion. They also form the basis of Part II of this Report.

Second, the Review is establishing a 'select committee' style of gathering evidence from key witnesses where there are gaps in the evidence or where further clarification is needed.

Third, close working relations have been established with other bodies which are engaged in research and development in this area (especially the LSDA, the QCA, the NFER, the IPPR, the ESRC Research Project on *Education and Youth Transitions in England, Wales and Scotland 1984-2002* at the University of Edinburgh and the University of Wales Institute, Cardiff) and their work will increasingly be drawn upon for the Review.

Fourth, regular contact is maintained with representatives of the government departments which are the main movers in the 14-19 changes.

Fifth, members of the Review team have undertaken specific pieces of research, particularly in relation to developing an overall picture of the performance of the 14-19 education and training system.

Sixth, the Review has an Advisory Committee of experts in a range of fields relevant to 14-19 education and training. (Members are listed in Appendix 9.)

This Annual Report is largely based on the commissioned papers and the discussions which followed them, the review of available datasets and the work with the different bodies referred to above. It identifies what appear to be the key issues in the development of a 14-19 education and training system and the questions which should guide the Review in Years 2 and 3.

Part II

The Review 2003-04

The Review 2003-04

This is a review of the evidence on education and training for 14-19 year-olds which has been collected in the first year. The division of education and training into age-related phases is inevitably somewhat arbitrary. However, changes are taking place both in education and in wider society, including the need for greater continuity of learning experience and provision, which makes the 14-19 phase distinctive. In the context of rising levels of education participation, divisions which characterised the system of education in the past – between pre-16 compulsory education and post-16 voluntary education and training, between academic and vocational pathways, between different kinds of institution working under different funding streams and regulations – seem no longer justifiable. Furthermore, there are changing demands upon education and training from employers, higher education and the wider community.

Hence, for a decade or more, many people have increasingly identified 14-19 as a period which requires particular attention[1]. People in government (both at Westminster and at the Welsh Assembly) clearly agree, as is reflected in several publications[2] and, more recently, in the establishment of the Working Group on 14-19 Reform chaired by Mike Tomlinson.

The main reasons for focusing on this phase of education are:

- Lower than desired levels of post-compulsory participation, particularly when compared internationally;
- Lower than desired levels of achievement;
- Significant levels of disengagement[3].

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[1] See, for example, R. Pring, R. White and D. Brockington (1988) *14-19 education and training: Making sense of the National Curriculum and the new vocationalism*. Bristol: Youth Education Service; W. Richardson (1995) *14-19 Education and training: Changes and challenges.* London; Warwick: Institute of Education, University of London; University of Warwick, Centre for Education and Industry; S. Tomlinson (1997) *Education 14-19: Critical perspectives.* London: Athlone Press; A. Hodgson and K. Spours (1997) *Dearing and beyond: 14-19 qualifications, frameworks and systems.* London: Kogan Page.

[2] See House of Commons Education, Science and Art Committee (1983) *Education and training: 14-19 year olds: Minutes of evidence taken Dec. 20 – April 18 1983.* London: HMSO; DfEE (1996) *Learning to compete: Education and training for 14-19 year olds.* London: DfEE; DfES (2002a) *14-19: Extending opportunities, raising standards.* London: DfES; DfES (2003a) *14-19: Opportunity and excellence.* London: DfES; Welsh Assembly Government, DTE (2003) *Learning country: Learning pathways 14-19 action plan.* Cardiff: Welsh Assembly Government, DTE.

[3] Documented by many sources including N. Pearce and J. Hillman (1998) *Wasted youth: Raising achievement and tackling social exclusion.* London: IPPR.

Hence, a thorough review of the 14-19 phase of education and training is necessary, independent of the vicissitudes of government policy and independent, too, of particular pressures, whether from employers, universities, schools, colleges or private trainers – although taking seriously the concerns of these different groups. Above all, there is a need to examine critically the aims which underpin a divided system, to reconcile where possible the sometimes conflicting values and to articulate an educational vision which gives coherence and meaning to the phase.

The Review, therefore, commissioned 25 papers during the course of the year, covering a wide range of research on provision of educational and training opportunities; different kinds of courses and learning experiences available; participation and retention on these courses; progression through and across them; and how policy is made and the system managed and evaluated. Throughout, attention was paid to the data by which the system might be understood and decisions made in an informed way.

These papers, and the comments which followed, either orally or in written evidence, attempted to give an account which necessarily at this stage is modest and tentative. They have shown where further evidence and research are needed, and identified where there are gaps in the data and where tentative recommendations should be made for future policy and practice. They have enabled us to formulate the key questions which will guide the next stage of the Review.

What follows is a brief and inevitably inadequate summary of these findings. But it is cross-referenced to the relevant research papers which can be found on the Review's website (www.nuffield14-19review.org.uk). The summary is divided as follows:

1. Aims and values;
2. Participation, retention and achievement;
3. Courses, learning experiences, qualifications and progression;
4. Progression to higher education: assessment and standards;
5. The range of institutional arrangements;
6. Role of employers and employment: juggling the competing demands;

7. Policy formation;
8. Implementation and management of policies;
9. Datasets;
10. Tentative conclusions.

Throughout there has been a comparative dimension[4], especially with regard to the diverging systems within the UK. The comparative dimension is to be further and more fully explored in the second year of the Review. Throughout, too, we have been reminded of the historical context[5]. As far as possible these dimensions have been integrated throughout Part II of this Report.

1. Aims and values

The government has a threefold agenda as it seeks to reform the provision of secondary and further education and training: improvement of standards, social inclusion and economic relevance.

Each of these embodies values, even if unacknowledged, which affect the aims of education, the courses and experiences to be provided, indeed the very structure and ethos of the institutions and the collaboration (or competition) between them. Therefore, it is disappointing that recent policy documents, unlike the great reports of the past (for example those of Robbins, Crowther, Plowden and Newsom), fail to explore in any depth what the aims and values are or should be for this phase of education and training. Indeed, the emphasis upon choice at 14 and the disapplication of the National Curriculum could well be interpreted as a reneging on a prior commitment to a balanced education for all within compulsory education based upon the different forms of knowledge and experience. It was right,

[4] D. Raffe (2004) *The aims of 14-19 education: Learning from the Scottish experience.* Nuffield Review Working Paper (henceforward WP) 5; T. Leney (2004) *Aims and purposes: International and comparative aspects.* WP6; D. Egan (2004) *14-19 developments in Wales: Learning pathways.* WP19; I. Finlay and D. Egan (2004) *What policy trajectories are the national governments in England, Wales and Northern Ireland and Scotland following and are they converging or diverging? – A comparative perspective.* WP20. All Nuffield Review Working Papers can be accessed online at: www.nuffield14-19review.org.uk/documents.shtml.

[5] B. Bailey (2004) *14-19 education and training: Historical roots and lessons.* WP3; J.S. Higham (2004) *Continuity and discontinuity in the '14-19 curriculum'.* WP4*;* W. Richardson (2004) *14-19 year-olds in education: What are the policy drivers and where is this leading?* WP21.

therefore, that the Review started with a philosophical exploration of education and the aims and values relevant to this phase.

The comparative dimension was interesting here. Differences in the 14-19 phase between Scotland and England would seem to reflect a long-standing and deeper commitment to comprehensive schooling in Scotland; and present developments in Wales reflect greater commitment both to comprehensive education and to community involvement in decision-making.[6]

Questions about underlying values were implicit throughout – in the concern for the unequal value attributed to academic and vocational courses (again, interesting contrasts were drawn with Scotland, where a unified curriculum and assessment system has now been extended to work-based provision[7]), in the need to give a large minority of disillusioned young people a sense of dignity and self-confidence (too often ignored where they have no option but to fit into the courses on offer), in the shifting language from that of moral purpose to that of 'managing' and 'thinking in business terms', in the differentiation which is encouraged between institutions in a competitive world, and in the target-driven way in which the system is managed. Values are embedded not only in the content of what is taught but also in the very ethos of the management of the system.

Above all, there were concerns about the way in which focus upon economic relevance, even upon social inclusion, distracted attention from the broader educational aim of developing persons – with all the implications that has for the role of the arts, the humanities and modern languages in the changing 14-19 framework. Indeed, so entrenched within our culture is the contrast between a dominant but narrowing form of liberal education, on the one hand, and vocational training, on the other, that 'closing the gap' is seen to be an urgent task. But achieving such an aim is a matter not simply of creating a new framework but also of reconceptualising the nature of the relationship between the liberal and the vocational in terms of the

[6] D. Egan (2004) *op cit.*; D. Raffe (2004) *op cit.*; I. Finlay and D. Egan (2004) *op cit*.
[7] D. Raffe (2004) *op cit.*

kinds of knowledge, understandings, skills and dispositions which constitute a worthwhile form of life[8].

Even the term 'vocational', it was claimed, is too narrowly conceived and too rigidly demarcated from 'the academic' because of a failure to see how vocational training might be conducted in a way that deepens the understanding and broadens the horizon. Such narrowness of aim is reflected in the careless use of 'skills' in many policy documents[9] and in the failure it reflects to analyse the kind of understanding, knowledge, imagination, dispositions and attitudes which the system should be nurturing. It is reflected, too, in the unexamined dichotomy between the academic and the vocational, and in the ready acceptance of the impoverished language of management (with its 'inputs', 'outputs', curriculum 'delivery' and 'targets', 'performance indicators' and 'audits'). Where, it was asked, was there room for that 'struggle to understand', that 'search for meaning', that 'need for appreciation', that 'intellectual excitement' which characterise significant learning?

The Review, therefore, seeks to explore a very difficult issue – how to make learning more relevant to young people, connect with their aspirations and existing horizons and, at the same time, extend their horizons and develop their powers to explore and to question. This may mean not only grounding young people in a range of intellectual and aesthetic disciplines in the 14-19 phase and providing them with the skills for independent learning, working with others and understanding their role in the wider world, but also developing 'expansive' forms of learning across different boundaries – the classroom, the workplace and the community[10].

The reform of 14-19, therefore, needs to overcome the false but seductive dualism between the academic and vocational, and between the intellectual development of the few and the skills training of the many. It needs to identify the learning experiences and the institutional framework which will

[8] R. Pring (2004a) *Aims and purposes: Philosophical issues*. WP2. These points are developed at length in the Victor Cooke Memorial Lectures, republished in R. Pring (2004b) *Philosophy of education: Aims, theory, common sense, and research.* London: Continuum.
[9] See, for example, DfES, DTI, HMT and DWP (2003) *21st century skills: Realising our potential: individual, employers, nation.* Norwich: HMSO; DfES (2003a) *14-19: Opportunity and excellence*. London: DfES.
[10] The concept of expansive learning is explored in L. Unwin and A. Fuller (2003) *Expanding learning in the workplace.* NIACE Policy Discussion Paper. Leicester: NIACE.

provide, on the one hand, educational opportunities for the least motivated and, on the other, training opportunities for the most able – a coming together of disparate traditions which have never been integrated, particularly within the English system. We were reminded that, despite efforts to the contrary over 60 years[11], the technical and vocational never became part of the mainstream educational experience.

That broader educational vision was envisaged by the Review in relation to the preparation for 'paid employment'[12]. Such preparation can be too narrowly conceived in terms of getting a job rather than in terms of the continuing use of the active powers of the mind through, and in, employment. Such preparation must not stop at skill acquisition or at successfully obtaining a job; it requires attention to a broader sense of personal fulfilment in relation to the self, the family, the wider society and adult responsibility. Moreover, that applies not just to the most able but also to average attainers, often overlooked by educational reform, and to the most disadvantaged (e.g. NEETs – young people not in education, employment or training). Central to this type of preparation would be knowledge of self – in relation to a life worth living and to the kind of employment in which one would find fulfilment. The main purpose of education, namely, that of extending the powers of the mind, must not be neglected, if learners are not to be short-changed, however successful they might be in getting jobs. Underlying several of the papers, therefore, was the concern that, in the pursuit of relevance to economic prosperity, a more general educational vision might be lost.

2. Participation, retention and achievement

Participation in education and training is seen to compare unfavourably with other countries in the developed world. Thus, in 2001, 75% of the 15-19 age group in the UK participated in education and training either full time or part time, compared with 91% in Belgium, 89% in Germany, 88% in the Czech Republic, 87% in France, 86% in Holland and 78% in the USA[13]. However, even though the numbers seem to indicate a huge difference, it

[11] B. Bailey (2004) *op cit.*; W. Richardson (2004) *op cit.*
[12] C. Winch (2004) *Some philosophical and policy considerations concerning vocational and prevocational education.* WP1.
[13] OECD (2003) *Education at a glance.* Paris: OECD.

should be borne in mind that Belgium, the Czech Republic, France and Germany have a higher compulsory education limit (i.e. 17) than do the UK and the USA (i.e. 15).

On the other hand, recent research[14] shows that the UK is doing well in comparison with four other countries (France, Germany, the USA and Singapore) in improving the proportions of the population with qualifications at Levels 2 and 3. At Level 2 and above, the UK had the highest growth rate of all countries for the period 1994-2003; for qualifications at Level 3 and above, the UK growth rate is similar to that of France but considerably higher than those of the USA and Germany. Much of the improvement in the attainment of qualifications, it is true, is due to attainment after the age of 19, but that might be seen as building on the achievements of the 14-19 phase.

The statistical data and evidence, therefore, are inevitably complex and open to different interpretations. The Review is conscious of the importance of both the need for data and the difficulty of interpretation. The beginning of its investigations is outlined in Part III of this Report.

It will be a major task of the second year of the Review to look critically at the way in which general progress might be monitored and compared both in the UK in general and in its constituent countries, because it has been a major policy drive over several years to increase participation in education and training either full time or part time, in college or through WBL. This drive to increase participation has been pursued particularly through the growth of occupationally specific courses (more recently the Modern Apprenticeship (MA) at Foundation and Advanced Levels) and more general, 'weakly' vocational courses – in the 1980s, City and Guilds of London Institute (CGLI) Course 365, Certificate of Pre-Vocational Education (CPVE), Business Technology Enterprise Council (BTEC) General Certificate, but more recently the General National Vocational Qualification (GNVQ) and the Advanced Vocational Certificate of Education (AVCE).

However, the participation targets of different initiatives seem occasionally to be at cross-purposes, pulling prospective students towards different

[14] H. Steedman, S. McIntosh and A. Green (2004) *International comparison of qualifications: Skills audit update*. DTI/DfES Research Report (henceforward RR) 548. London: DfES.

modes of participation – for example, the 50% target for higher education entry and the 28% target for Modern Apprenticeships. Moreover, the work-based route has been characterised by low levels of attainment: in 2002-03, 23% of leavers on the Foundation Modern Apprenticeship (FMA) completed the whole framework, while 36% attained the National Vocational Qualification (NVQ) part of the framework. For the Advanced Modern Apprenticeship (AMA), the equivalent proportions were 33% and 43%[15]. Furthermore, too often there is an emphasis in the targets (which shape the data available) on participation rather than outcomes – as is the case with the targets for Apprenticeships[16].

Meanwhile, just under 50% of 16 year-olds still fail to attain five GCSEs at grade C or above – a significant figure in terms of continued participation because, as was argued[17], 'this is the group who must be targeted if participation is to be increased and widened'. Furthermore, it is a group which thereby is excluded from particular pathways – and (as our Review reveals) from particular institutions. However, there is a serious gap in the data available to show us what happens to young people who do not continue or who leave with qualifications at Level 2 or below. Such information is vital if the pursuit of participation at this level is to be maintained. This points to the importance of research focused upon carefully chosen samples. One such 'case study' was of 100 Level 1 and 2 FE students aged 16 at the beginning of the academic year 2001/2. It found that of the 36 full-time students, 13 were pursuing qualifications other than GNVQs or NVQs, that 51 students achieved qualifications but only 26 of them at Level 2, and that only one student passed all three Key Skills[18]. It would seem that Key Skills are not taken seriously. Certainly, retention rates on government-supported training (GST) are poor and retention rates on Level 3 vocational courses are not as high as those for learners studying towards A Levels and Advanced Supplementary (AS) Levels.

The Youth Cohort Studies show clearly the factors which generally contribute to participation and retention whether in academic or vocational

[15] A. Fuller (2004) *Expecting too much? Modern Apprenticeship: Purposes, participation and attainment.* WP10.
[16] E. Keep (2004b) *The multiple dimensions of performance: Performance as defined by whom, measured in what ways, to what ends?* WP23.
[17] G. Stanton (2004) *The organisation of full-time 14-19 provision in the state sector.* WP13.
[18] J. Watson (2004) *Using individual learner data to investigate progression.* WP8.

routes: GCSE results, ethnic minority status, gender, education of parents and where one lives. For Cohort 8 (minimum school leaving age in summer 1995), success rates for Levels 2 and 3 (GNVQ and AVCE) were a little over 50%. This may seem low, but in fact it may not be too different from the number who complete three A Levels – the common expectation of a full-time academic route[19].

WBL and work-related learning (WRL) – the term usually used for the work experience of the 14-16 age group – have been strongly promoted in government documents and policy as one way of encouraging more young people to remain in education and training. In the 1980s, WRL became part of the educational experience of students aged 14-16, though it was not incorporated into the qualifications structure. More recently the National Curriculum has been disapplied for some so that they can benefit from WRL. All young people at KS4 will be required to meet statutory requirements for WRL. For MAs it is vital, and approximately 1,000 private learning providers arrange for it to take place. However, despite its claimed importance, there has been a reduction of 12% in its uptake among 16-17 year-olds (2002), although an increased participation in this kind of learning further up the age range. Further, more needs to be known about the quality of the learning which takes place through employers and the private training organisations[20]. Clearly both thoroughness of organisation and quality of experience vary from sector to sector.

The commissioned papers repeatedly returned to the problem of the low achievers, some of whom join the ranks of the NEETs. The failure to engage the lowest 40% in achievement has a long history, with an inability to incorporate what are seen to be more motivating technical and vocational courses and practical modes of learning into mainstream education despite efforts over a sixty-year period[21]. Those designated NEETs are by no means coterminous with the low achievers, but there is a

[19] J. Payne (2004) *Participation, retention and qualification achievement in education and training from 16 to 19: Data from the England and Wales Youth Cohort Study.* WP7.
[20] J. West (2004) *Work-based education and training for 14-19 year olds*. WP14. In 2002-03 ALI judged 46% of WBL provision inadequate, an improvement on 60% inadequacy the previous year. ALI (2003) *Chief Inspector's Annual Report 2002-03* [online]. At: www.ali.gov.uk/ciar0203/ria/01/01.01.htm, accessed 22 September 2004.
[21] W. Richardson (2004) *op cit.*

strong overlap[22]. However, knowledge of the culture, aspirations and lifestyle of the NEET group can be patchy.

Reform of courses and qualifications, therefore, must address this lack of motivation and engagement. And that requires 'listening to the learner's voice'. There have been valuable initiatives from which to learn under the Increased Flexibility Programme[23]. These eschew the standardised courses, which too often failed to engage learners' interest, and seek much closer connection between their learning and their lives. But, sadly, such programmes have suffered from short-term funding and the laborious process of bidding. Moreover, they provide alternatives, but, not being part of the national system, they often suffer from lack of credibility, progression routes and currency.

Crucial to improved participation and retention would be an excellent system of guidance and counselling[24]. Such is recognised in Wales as essential to its Learning Pathways[25]. But two warnings were given by the papers presented. First, the focus upon the most vulnerable under the Connexions service has taken resources and expertise from mainstream education, depriving many young people of the expert advice needed. Second, the prevailing assumptions behind much careers advice (namely, that, armed with the right information, students are able to make rational choices about courses to take and careers to follow) do not match reality. Interesting case studies[26] showed much greater sensitivity is needed to the different factors which influence learners' decisions at key moments – choices of subjects and programmes in Year 9, choices of full-time or part-time study or employment in Year 11, choices (if in full-time study) between different kinds of institutions and different kinds of courses at these institutions, and choices (if not in full-time study) between jobs with or without training, MAs, training schemes – or simply becoming a NEET (9% of 16-18 year-olds at the end of 2003)[27].

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[22] J. Payne (2003) *Vocational pathways at age 16-19.* DfES RR501. Nottingham: DfES.
[23] See, for example, Changemakers, which will feature in the first Working Day of Year 2. Also see P. Huddleston (2004) *Learning on the edge: Second chance learning for 14-19 year olds.* WP11.
[24] M. Maguire (2004) *Guidance issues and the role of Connexions.* WP15.
[25] D. Egan (2004) *op cit.*
[26] P. Hodkinson (2004) *Learning careers and career progression.* WP12.
[27] DfES (2004c) *Participation in education, training and employment by 16-18 year olds in England: 2002 and 2003.* SFR 18/2004 [online]. At: www.dfes.gov.uk.rsgateway/DB/SFR/, accessed 27 September 2004. Data from the most recent Youth Cohort Study (Cohort 11) suggest no gender difference in the proportion of 16 year-olds of NEET status (7% of male students and 7% of female).

Critical factors affecting choice were the acquisition of literacy and numeracy, socio-economic background and social factors, individuals' 'horizons of action' and their character and disposition[28]. There is a need to get away from the idea that 'a career path' arises out of clear rational decisions. It is a part of the learning process – a constant interaction between the attitudes, aspirations and indeed horizons learners have and the opportunities made available to them.

Part III of the present Report will explore further the patterns of participation of 14-19 year-olds in education and training in England and Wales with a comparative view of the Scottish system.

In summary, the English education and training system appears to be enjoying modest rises in participation and attainment, although it cannot yet be characterised as high performing. The Nuffield Review is, therefore, attempting to dissect the headline statistics to examine the uneven nature of performance, particularly outside the prestigious academic routes. We have an underlying concern that a process of polarisation may be taking place as more young people make progress but a substantial minority are still left behind.

3. Courses, learning experiences, qualifications and progression

The range of courses (and qualifications which accompany them) is bewildering both for learners, who have to make choices, and for employers, who may or may not want to use those qualifications to select future employees. This range continues to be extended under the guise of greater choice and relevance, especially for those most alienated from the system. Thus, pre-16, the essentially subject-based GCSE courses are supplemented by a range of applied and skills-based courses, WBL (in some cases through the disapplication of the National Curriculum) and by broad

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DfES (2003c) *Youth Cohort Study: Activities and experiences of 16 year olds: England and Wales 2002*. SFR 04/2003 [online]. At: www.dfes.gov.uk.rsgateway/DB/SFR/, accessed 27 September 2004.
[28] P. Hodkinson (2004) *op cit.*; J. Bynner (2004) *Participation and progression: Use of Birth Cohort Study data in illuminating the role of basic skills and other factors*. WP9.

vocational courses at foundation or intermediate level, often linked to FE colleges (to which, in 2004, over 100,000 students go). Choices, therefore, between subjects and between academic and vocational pathways begin at 14. At 16, the potential range of provision expands further – between full-time (now modular) one-year and two-year academic and vocational courses and between part-time employer-based Advanced Apprenticeships and Apprenticeships and college-based courses with entry levels at Levels 1 and 2.

The existence of such a range of courses has, in part, its historical roots, particularly in the separation of the vocational from the academic, but is also due, in part, to the more recent attempt to create and respond to higher levels of participation. This gradual accretion of courses leads to greater fragmentation of the system as a whole – making it all the more urgent to examine the system in its entirety and to try to create some coherence within and across the range of courses.

There are various ways in which courses or programmes might be seen from the vocational point of view – from the definitely not vocational to the weakly vocational to the strongly vocational[29]. The weakly vocational might indeed be work based (as in the 14-16 work experience courses) or indeed college or school based as in the AVCEs, which are often timetabled as subjects totally disconnected from the other subjects and which do not involve training in circumstances which would meet modern industrial standards. The 'strongly vocational' programmes, such as the Apprenticeships or BTEC Nationals, focus upon occupational skills and require employers' engagement. A significance of this distinction between the different types of vocational courses and programmes lies in recognising how promotion or 'improvement' of the vocational has too often meant the substitution of the 'weakly' for the 'strongly vocational' (e.g. the GNVQ for the BTEC National), thereby denying this type of programme the needed currency in the labour market. But also this 'weakening' of the vocational is partly due to the development of vocational courses in schools, which do not normally have the facilities or expertise to offer 'strongly vocational' provision, to meet the needs of those who, it is deemed, are not able to pursue the more academic route.

[29] G. Stanton (2004) *op cit.*

Perhaps, so it was argued, the main significance and attraction of the weakly vocational courses lie, not so much in their vocational relevance, but, first, in the fact that they produced a different route into higher education for those who were not attracted to study A Levels, and, second, in the fact that they made available a more integrated, less fragmented organisation of learning, from which many young people have benefited (this was one conclusion from the evaluations of TVEI in the 1980s[30]). If so, then more attention should be paid to the motivational power of different organisations of learning, and, in particular, to the development of coherent learning programmes which can contain 'strongly vocational elements'.

Vocational courses of all types and the qualifications which go with them have evolved over time and result from initiatives for specific needs, the attempts to meet the wider range of ability and attainment of those staying in education, or short-term measures to combat youth unemployment. Thus, the map of qualifications is continually changing. In many respects, the current system could be seen to provide a wide range of opportunities – full time, part time, short and long courses, and school or college or work based. But various cautionary points were made.

- The attempt to provide a comprehensive framework for vocational qualifications, under the National Council for Vocational Qualifications (NCVQ), with clearly defined standards at different levels, never succeeded. More qualifications lay outside the framework than within it.

- The desire for standardisation and measurability has often led to rather mechanical forms of assessment and thus to the exclusion of those aspects of learning which are more difficult to assess formally (although it has been the great achievement of ASDAN to recognise these in its awards[31]). It has also led to an obsession with levels: defining standards in one kind of award or subject as equivalent to standards in other kinds of awards or subjects. Such attributions of equivalence often do not seem to make much sense across the

[30] See in particular Roger Dale et al. (1990) *The TVEI story: Policy, practice and preparation for the workforce*. Buckingham: Open University Press.
[31] ASDAN is approved by QCA as a national awarding body for qualifications in Key Skills, life skills, career planning and community volunteering.

different kinds of awards and learning – a criticism strongly made by the Smith report on post-14 mathematics education[32].

- Different status is attributed to different courses irrespective of their merit. This is not helped by explicit support for those institutions which are committed to academic education and eschew the more practical and vocational[33]. Thus, employers, in selecting employees, generally opt for the non-vocational academic courses rather than the 'relevant' vocational ones, because they see the former as a test of general ability.

- The choice of course is not entirely that of the learners, especially where they have failed to obtain 'good' GCSEs and are thus not eligible to move into the A Level pathway. Hidden selection takes place as students move from pre- to post-16. Not all types of courses are available in all post-16 institutions, and different institutions select different kinds of students. In 2001 sixth form colleges catered for fewer than 7% of those who attained fewer than five GCSEs at grade C or above; over 70% of those studying for Level 2 qualifications went to FE colleges, whereas only 22% remained in school sixth forms; ethnic minority 16-19 year-old learners chiefly studied in FE colleges. Moreover, the disparities can be very great across institutions of the same type. It is clear that many students are forced into second choice institutions and into second choice subjects[34].

- Irrespective of the merits of more integrated and practical courses (e.g. such innovative programmes as those introduced under TVEI), the single-subject course represented by A Level remains the gold standard – despite the long-term criticism of its lack of breadth – and there is a resistance to innovation.

- The many unconnected national policy initiatives, developed in response to felt needs, have led to a fragmentation of qualifications,

[32] Smith report (2004) *Making mathematics count. The report of Professor Adrian Smith's inquiry into post-14 mathematics education*. London: The Stationery Office.
[33] See, for example, Prime Minister Tony Blair's speech to the Labour Party spring conference, 13 March 2004.
[34] G. Stanton (2004) *op cit.*

making them unintelligible to the outsider as well as to the learner who has to make choices.

- Progression through the myriad courses and qualifications is not helped by the institutional break which takes place for many at age 16, especially where significant partnership between neighbouring institutions is absent. While the LSC might have taken over the planning and funding of much post-16 education and training (except higher education), provision for 14-16 year-olds remains largely outside its remit.

The ever-changing face of qualifications is reflected in that of MAs. Established in 1993 with a view to providing high-level (Level 3) occupational skills, they were revamped in 1997 as Advanced (Level 3) and Foundation (Level 2) Modern Apprenticeships. Now the word 'Modern' is to be dropped and the Cassels Report[35] on apprenticeships recommended a tightening of standards through the incorporation of a 'technical certificate' within the award. The ongoing work of the current National Modern Apprenticeship Taskforce under Roy Gardner has influenced the most recent apprenticeship reforms. But it seems to be a reflection on the lack of coherent planning of the system as a whole that this development (with its aim of 28% of the 16-22 age cohort being on Apprenticeships) should coincide with the aim of 50% of the age range entering higher education. As the entry to higher education rises, so does the entry to MAs fall, and an initiative which originally aimed at high standards in employment-based skills training has now transmogrified, in the main, to a low-standards attempt to accommodate the more disaffected – support for social inclusion, but less so for a high-skills economy.

Clearly there is a need to look afresh at the framework of qualifications because of the effects it has on the 14-19 phase. Historically qualifications reform has been seen as a way of changing the system – of supporting different courses, forms of assessment and learning patterns (as in a shift to more criterion-referenced testing or the adoption of objective-based assessment[36]). But such reform, as history also demonstrates, is fraught with difficulties. There is a need for the Review to see how lessons from

[35] DfES/LSC (2001) *Modern Apprenticeships: the way to work (Cassels Report).* London: DfES, Learning and Skills Council.
[36] B. Bailey (2004) *op cit.*

past failures might illuminate future attempts and to use the knowledge gained to judge the 14-19 curriculum and qualifications proposals put forward by the Tomlinson Working Group on 14-19 Reform.

4. Progression to higher education: assessment and standards

At Level 3, especially with regard to the more academic pathways, universities have for many decades played a determining role in the content of what is taught and in the examining, and they, for the most part, were responsible for the examining boards. In recent years, with the reduction of the number of examining boards and with the increased responsibility of the QCA and other regulatory authorities, this is no longer the case. Nonetheless, A Levels are still the main route into higher education for young people and, therefore, the requirements of universities and colleges offering higher education provision are a major influence on the developing framework of qualifications.

A major anxiety about the present system of qualifications lies in what is often perceived to be a lowering of standards at A Level. Though often referred to as 'the gold standard' (and thus impervious to reform), achievements at different grades are seen to have been increasingly inflated. In 2004, the pass rate was 96% and 22.4% received the top grade in at least one subject. Various explanations are given to defend these grades – more focused teaching and greater effort on the part of learners. But other explanations relate to the different modes of assessment – course work in addition to terminal examinations, the opportunity to repeat assessments in order to improve upon grades, more regular accumulation of assessments through modular systems and the weighting given to the AS component of the full A Level. It is, however, worth pointing out that although over 22% of grades awarded are As, only 8% of the candidature (and less than 2% of the 18 plus age group) gain at least three grade As[37].

[37] Jill Johnson, personal communication.

On the other hand, there are real causes for anxiety. The number of sixth formers studying French and German has halved since 1992[38]. A-level entries in physics fell from 46,606 in 1985 to 31,543 in 2002 and in mathematics they fell from 71,608 to 53,940 over the same period[39]. Research at York University suggests that the same quality of work at mathematics A Level receives higher grades than 15 years ago[40]. And other research by Professor Peter Tymms of Durham University shows that there is a greater likelihood of getting higher grades in certain subjects (e.g. history, geography, economics, English literature and business studies) than in others (e.g. mathematics, German, French, physics or chemistry)[41]. To some extent the problems were created by the shift in 1988 from norm referencing (when only a fixed proportion of students were allowed to obtain certain grades) to criterion referencing (where the examinee obtained a grade if he or she met the specified requirements)[42]. Conversely QCA research has indicated that standards have not dropped, although, of course, incremental structural changes made to A Levels, particularly over the last 15 years, make it impossible to compare like with like.

Whatever the causes of the increased numbers of students passing and achieving top grades at A Level, there is also no doubt that the most selective institutions and courses are struggling to differentiate between similarly well-qualified applicants. One solution suggested is that, at the A grade, there is a need for sub-grades – greater refinement of the criteria. Another is that the marks, whereby grades are given, should be revealed. A further suggestion is that universities (and employers) should set their own tests – and, indeed, that is happening in some subjects and in some universities. On the other hand, for a large majority of institutions and courses, many of which are recruiting students as opposed to selecting them, A level grades are still more than adequate for their purposes. See Appendix 6 for an analysis of entry requirements for A Level in the UCAS courses database.

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[38] W. Mansell and A. Bloom (2004) Language crisis mars A-level triumph. *Times Educational Supplement*, 20 August.
[39] Institute of Physics (n.d.) *The number of entries to A-level examinations in sciences and mathematics 1985-2002 (source AQA)* [online]. At: www.policy.iop.org/Policy/stats/1.1x.doc, accessed 22 September 2004.
[40] P. Baty (2004) B-Grade maths students are so bad, they may as well guess the answers. *Times Higher Educational Supplement*, 27 August.
[41] P. Hill (2004) Study calls for grading reform. *Times Higher Educational Supplement*, 3 September.
[42] J.S. Higham (2004) *op cit.*

There is, therefore, an extremely complex set of arguments about assessment and the stability of standards in a world where different demands are being made upon the assessment of students' work. And different 'players' in this set of arguments – employers, higher education, teachers and students – are requiring different uses of the system. A key issue is whether these multiple and competing demands on assessment can be reconciled within existing or reformed advanced-level qualifications without distorting the curriculum experience for learners.

The Dearing Report on 16-19[43] made it clear that standards at 18 (and A Levels in particular) needed to be safeguarded and monitored over time. Little has been done since then to ensure this has happened, even though the problems of monitoring over time were thoroughly debated in the 1970s by the then Assessment of Performance Unit[44].

5. The range of institutional arrangements

The complexity of courses and qualifications for 14–19 year-olds is matched by the complexity of institutions for this type of provision, the organisation of which does not fit neatly with the concept of a 14-19 phase.

From 14 to 16, schools provide the education, although over 100,000 of 14-16 year-olds currently take some or all of their vocationally relevant courses at FE colleges. Furthermore, schools sometimes use private learning providers for the organisation of WBL or WRL. But schools themselves are increasingly differentiated into specialist and non-specialist schools and city academies, each operating under different funding arrangements and regulations. And, in addition, as the white paper *21st Century Skills: Realising our Potential* points out, independent schools, which provide for about 8% of the post-16 school population, have to be brought into the partnerships, too.

[43] R. Dearing (1996) *Review of qualifications for 16-19 year olds*. *Full Report*. Hayes, Middlesex: SCAA.
[44] The Assessment of Performance Unit was established in the Department of Education and Science in the 1970s to seek ways of monitoring standards across the curriculum and over time. It adopted light stratified random sampling techniques. For some time, faith was pinned on the use of the Rasch model for monitoring standards over time.

Post-16, there are, within the public sector, FE colleges, tertiary colleges, sixth form colleges and sixth forms of schools. Within the private sector, though receiving funding directly or indirectly from government, there are currently approximately a thousand private learning providers and employer-led MAs. These constitute a system with different parts working under different funding arrangements and regulations, often in a competitive market, thereby making collaboration and partnership, despite the rhetoric about their importance, difficult to achieve. This is, as was pointed out[45], partly the historical consequence of the dependence of vocational and technical education on the voluntary sector. But it is also in part the consequence of a policy of creating 'choice and diversity'[46] under the Conservative Government which has been continued under successive Labour administrations.

The formation of the LSC was an attempt to bring greater coherence into the post-16 sector[47] – to overlay this increasingly fragmented and often competitive system with forms of partnership and collaboration. The Strategic Area Reviews (StARs)[48], based on the 47 local LSCs, may provide the evidence and overview to ensure more equitable funding and to create the partnerships which the White Paper on 21st century skills argued were so necessary[49].

But difficulties were pointed out.

- It is extremely difficult (if not impossible) to manage such an enormous review and to implement its recommendations effectively – to bring together schools, colleges, private learning providers, employers, and Sector Skills Councils (SSCs) and to rationalise provision, especially when relevant and up-to-date data are not necessarily or readily available.

- Each education institution has its own history, culture and traditions which are jealously guarded by their local supporters. Closing down

[45] B. Bailey (2004) *op cit.*
[46] Department for Education (1992) *Choice and diversity: A new framework for schools* London: HMSO.
[47] J. Harwood (2004) *Reflections on the role of the Learning and Skills Council.* WP16.
[48] P. Davies and M. Fletcher (2004) *The role of Strategic Area Reviews (StARs) and potential implications for 14-19 education and training.* WP17.
[49] DfES et al. (2003) *op cit.*

sixth forms, for example, (especially at a time when the DfES is giving greater freedom to city academies – outside the remit of the LSC – to create sixth form provision) is never easy. And several area reviews have found that to their cost[50].

- Different institutions often embody different values and educational aims, from the more exclusive pursuit of academic excellence in many sixth form colleges to the greater commitment to social inclusion in many FE colleges.

However, reform of courses and qualifications was seen to be difficult without a radical reform of the institutional system (including an extension of partnership across the public and private divide) and of the way in which institutions are made accountable, which heavily influences the behaviour of providers. Already, as was pointed out, there are excellent examples of partnership working, but a comprehensive approach to course and qualification, a more sensitive response to individual needs and a greater flexibility in progression through the system require a much greater sharing of resources and expertise across institutions – and a replacement of the competition between institutions for student enrolment.

Currently, there remains, unofficially, a bipartite system with a preponderance of the 'academic' pathways in the sixth forms of schools and in sixth form colleges and with the vocational pathways largely offered in the FE colleges. Increased flexibility of pathways and more transparent choices require partnership within a clear inter-institutional framework rather than competition. The Review, therefore, seeks to debate and research the institutional framework underpinning an emerging 14-19 phase. It will be exploring how far institutional diversity is compatible with the concept of partnership, how effectively partnerships can deliver a more coherent service and whether institutional reorganisation is required, possibly with some form of tertiary system.

[50] P. Davies and M. Fletcher (2004) *op cit.*

6. Role of employers and employment: Juggling the competing demands

One of the characteristics that distinguishes the UK generally from most other European countries is its tendency to conflate the wider needs of employment with the often narrower and shorter-term needs of individual employers. Elsewhere, there is an assumption that the needs of employment should be defined more widely, and that, therefore, both worker representatives (the social partners) and educationalists need to be involved in formulating a common minimum package of skills and learning that all offerings for young people need to contain.

Throughout all the workshops, therefore, attention constantly turned to employers and employment. Increased involvement of employers was seen to be essential to the much needed partnerships if the right kinds of changes are to be made, if the changes are to be effective and if they are to be made to stick. And yet, 14-19 reforms are often couched simply in terms of curriculum, assessment and institutional reform, without reference to the role of employers in the provision of learning, to employers' demand for skills, to the nature of employment opportunities or to labour market regulation[51]. Too often employers have not been sufficiently involved in the development of courses, especially those which were intended to meet skills needs and respond to the labour market. Employers provide, directly or indirectly, the WBL; employers either do or do not make particular qualifications a workable currency; employers do or do not support apprenticeships and other training on the job. Indeed, the involvement of employers in supporting and providing education and training has, unlike in many other developed countries, been based on the voluntary principle.

Three aspects (amongst many raised in the papers) were viewed as particularly significant.

- The relationship between regional variation in participation and achievement, on the one hand, and employment demands, on the other, demonstrates the crucial part which the needs of employers

[51] E. Keep (2004a) *Reflections on a curious absence: The role of employers, labour market incentives and labour market regulation*. WP22.

and the labour market in general do and should play in 14-19 reform.

- The UK stands out as not having clearly defined responsibilities and roles for employers in the provision of education and training – including labour market regulation and 'licence to practise'.

- It is difficult, on the one hand, to recruit small firms to provide WBL, partly because of the administrative burdens arising from regulations, and, on the other, to get large national companies to take an active interest in the local scene.

However, not nearly enough, it was argued, was known about employers' wishes or needs or, indeed, their involvement – for example, how many, and which, provided WBL via the various learning providers, and of what quality. There is a lack of relevant data, although no doubt more relevant information will soon be gathered by the local LSCs and through the SSCs.

In particular, what needs to be examined in greater detail and depth by the Review is employers' use of qualifications for purposes of recruitment and promotion. That may well be different region by region and occupational sector by occupational sector. But greater knowledge of employers' use of qualifications might show that some vocational courses (especially at Level 2 and below) are an inappropriate path for those learners who want to use these courses for entry to the labour market.

7. Policy formation

Appendix 2 lists the main government green and white papers over the last ten years (and Appendix 4 lists those for Wales since devolution) which, directly or indirectly, are relevant to the 14-19 phase, namely, those concerning curriculum, qualifications, organisation and funding reform[52]. The sheer number of them reflects the concern of successive governments for this phase. They also show the difficulties which arise where the phase

[52] See also S. Wright and A. Oancea (2004) *Policies for 14-19 education and training in England from 1976 to the present day: A chronology.* Nuffield Review Briefing Paper 2. Oxford: OUDES, Nuffield Review.

is not seen as a whole – where, for example, part-time vocational routes are not considered within a broader institutional and qualifications framework, or where policies are created and implemented without sufficient evidence of their relevance (as in the development of Level 1 and 2 qualifications). The short life of many arrangements, though heralded as the solution to skills shortages or low participation, can be confusing (as in the several reformations of the MAs since 1993). And it is far from clear that the often *ad hoc* changes have appeased higher education or employers, who increasingly are resorting to the development of their own 'tests' and 'qualifications' because of dissatisfaction with the public system of assessment (an issue examined in the Schwartz report)[53].

A main purpose of the Review, therefore, is to provide such an overview of the various policy initiatives and the overall impact of them – and to identify problems, their relative urgency and possible solutions to them. In so doing, the Review is conscious of the factors affecting the way in which policy has come to be formed: the greater centralisation of decision-making and control in place of the erstwhile balance between central and local government, the professions and institutions; the creation of 'quangos' or arms-length agencies for the development and implementation of policy; the devolution of some aspects of policymaking to national assemblies (e.g. Wales) and possibly, in the future, to regional assemblies; the diverse range of steering mechanisms and government interventions (target-setting and funding in particular); the flood of policy documents of different forms; the alignment of funding to targets; and the increased role for private providers and sponsors[54].

At one level, there is much greater government intervention and control. At the same time, within central parameters, there is room for local development and response, for local partnerships and arrangements, for both co-operation and competition.

Within such a framework, the Review needs to identify the 'political space', the area within which policy might be influenced by argument and evidence. Furthermore, it needs to reflect on how change, when accepted in theory,

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[53] Admissions to Higher Education Steering Group (2004) *Fair admissions to higher education: recommendations for good practice*. Nottingham: DfES.
[54] A. Hodgson and K. Spours (2004) *14-19 education and training: Politics, policy and the role of research.* WP18.

might be implemented in practice – a serious reflection on the failures of the past with a view to success in the future. (Examples were given from the attempts to reform qualifications or to integrate the academic or vocational, as in the aborted TVEI.)

Other countries within the UK, notably Scotland and Wales, have in recent years taken a different approach to policy formation and the policy process. The Review argues that particular lessons can be learned from the experience of Wales, because of its tradition of having qualifications and institutional arrangements in common with England. The Welsh policy on education and training, first sketched out in *The Learning Country*: *A Paving Document* (2001), then implemented through *Learning Country: Learning Pathways 14-19 Action Plan* (2003), works through 22 learning communities, in which there is widespread consultation, including formal arrangement for listening to the 'learner voice'[55].

8. Implementation and management of policies

The implementation and the consequent management of public policy have increasingly depended on the statement of targets and the funding incentives for meeting them – not least in education (although less significance has been attached to them in the management of the Welsh and Scottish systems). And, as was argued, 'target chasing is the dominant focus of management activity as targets for learning achievement are cascaded, top down, from Treasury to DfES…'[56]. But this way of management, if the overall aims of education and training are to be attained, was questioned. There are different dimensions to performance and the persons who set the targets have the power to shape matters in a way which may not be justified in the light of available evidence. It is important, first, not to confuse the different purposes which targets might serve; second, to identify who should set the targets; third, to agree for which audiences targets are meant; fourth, to identify the level of management at which the targets should be set; fifth, to ensure there is prior consultation, and, finally, to ensure that one set of targets does not

[55] D. Egan (2004) *op cit.*
[56] E. Keep (2004b) *op cit.*

conflict with another to create perverse policy outcomes. It is a criticism of the current form of policy management that neither employers nor teachers have been much involved in target-setting.

Furthermore, the recent history of target setting as a management tool has not been a happy one. Most of the targets set by the National Advisory Council for Education and Training for 2000 and then for 2002 were not achieved – only one in six for the former, and one in four for the latter. The proposed solution is that the target-setting process should be more participative and open, involving the various constituents that the targets affect, developed much more from the bottom up rather than from the top down and ensuring that the full range of dimensions is taken into account. This would counteract the current pursuit of a few narrowly focused quantitative targets at the expense of broader, more qualitative ones.

In this respect, the way in which the relatively new LSC sees its role is of crucial significance. Its *raison d'être* was clearly spelt out to the Review[57]: to fund the post-16 system of education and training (apart from higher education), to harmonise that funding across institutions, to create greater collaboration through partnerships in place of wasteful competition and to monitor the system as a whole. Much greater effort was needed, it was suggested, to match labour market needs and trends with provision of skills. This, then, seemed to be a break from a system which elevated customer demand and relished market forces.

A difficult **management** job was therefore envisaged, bringing together different sources of intelligence from SSCs, regional provision, StARs and labour market surveys. Questions were raised as to whether any one body could have the capacity for matching labour market information with skills provision, whilst satisfying customer demands – and the StARs pilots were revealing some of the difficulties[58]. Indeed, the very attempt at large-scale management by objectives, cascaded down the system from 'central control', was criticised. Too much power over a complex and interacting system was put into the hands of government, which set the targets, and removed from the professional people ultimately responsible for the quality of learning[59]. There is a need to reassess the purpose of targets in

[57] J. Harwood (2004) *op cit.*
[58] P. Davies and M. Fletcher (2004) *op cit.*
[59] E. Keep (2004b) *op cit.*

managing the system and to ensure greater participation in their formation – with a greater attention to the different stakeholders and with a wider range of measures to reflect the values, standards and purposes of these stakeholders. In turn, this would affect the data which would need to be collected.

9. Datasets

Of concern to the Review has been the extent to which there is an appropriate database to inform policy and practice. A systematic overview of datasets will be carried out in the second year of the Review, as outlined at the recent British Educational Research Association (BERA) annual conference in Manchester[60].

In summary, the following are available for the Review to draw upon:

Longitudinal studies and large-scale surveys
Youth Cohort Studies; British Birth Cohort Studies; DfES New Longitudinal Study of Young People in England, 2004; Labour Force Survey (Great Britain and Northern Ireland); National Adult Learning Surveys; British Household Panel Survey; Scottish School Leavers Survey; Scottish Young People's Survey.

Individual learner datasets
Pupil-level annual school census (PLASC); ILR – Individual Learner Record (ILR); Higher Education Statistics Agency (HESA) records; UCAS data; LEA and university loans company/services data.

Examination databases
QCA examinations data; Scottish Examination Board (SEB) data, now held by the Scottish Qualifications Authority.

Other 'administrative' datasets and statistics
Department for Education and Employment (DfEE) and DfES statistics – examinations results and participation data; DfEE/DfES Database of

[60] A. Oancea (2004) *Opportunities and limitations of datasets on 14-19 education and training in the UK.* Paper presented at BERA Conference, Manchester, 17 September.

Training Statistics; Office for National Statistics data; Scottish Office Education and Industry Department data; schools and college statistics held by the National Assembly for Wales.

Actuarial and census data
e.g. General Register Office data; Government Actuary's Department's population projections database; UK electoral statistics.

International studies and datasets
e.g. Organisation for Economic Co-operation and Development (OECD) and its Programme for International Student Assessment (PISA); EuroStat (the Statistical Office of the European Communities); International Association for the Evaluation of Educational Achievement (IEA); Trends in International Mathematics and Science Study; Progress in International Reading Literacy Study (PIRLS); World Bank Education Statistics Database (EdStats); United Nations Educational, Scientific and Cultural Organization (UNESCO).

Appendix 7 shows the extent to which these datasets have already informed the Review, and how they can be used more fully in subsequent years.

Although much information is available, the general verdict was that the different databases are too fragmented and not sufficiently comprehensive to meet all policy needs. Furthermore, these large-scale surveys need to be supplemented by more detailed, qualitative work which examines the processes through which decisions are made and progression is enabled. To some extent, reports of the Office for Standards in Education (Ofsted) on institutions provide such data. If we know that a certain percentage do not complete Advanced Apprenticeships, we also need to know the stories which lie behind this statistic.

Further comments on the use of the datasets for the purposes of the Review are given in Part III of this Report.

Much more information is required on employers – from large corporate companies to the many small employers. That might partly be emerging from the StARs and the data collected by local LSCs. The NFER survey

Mapping the 14-19 Learning Landscape also provides valuable information[61]. But significant gaps remain, for example in data about the provision of WBL and the quality of that provision.

10. Tentative conclusions

The Review recognises that much has been achieved in the last few years in the improvement of the system of education and training. Many more young people are remaining in some form of learning and progressing to higher education or further education and training. Many more employers are involved in planning and providing learning experiences. The system is more accountable to its direct and indirect beneficiaries. More resources are available for its development and expansion. Comparative analyses show that the system is improving vis-à-vis other national systems.

However, there are no grounds for complacency. Furthermore, the very speed of change has inevitably created tensions within the system as a whole. Old arrangements no longer match new developments. Therefore, the Review, whilst acknowledging the value of many reforms, has tentatively concluded that certain issues need to be addressed – 'tentatively' because these are early days in the Review and each of the following statements and proposals must be seen in the spirit of issues to be debated or hypotheses to be put to the test.

(i) A broader educational vision must be maintained than what currently prevails in the language of skills, economic relevance and measurable targets. That vision would recognise the value, for all young people, of the arts and humanities through which matters of profound personal importance are explored, of those disciplines which extend the powers of the mind, and of those activities which will continue to enrich their lives.

(ii) A large minority of young people remain disengaged from any form of education and training. To re-engage them, close attention must be given, first, to 'their voices' as they make clear their needs,

[61] D. Sims and S. McMeeking (2004) *Mapping the 14-19 learning landscape*. Slough: NFER.

concerns and aspirations, and, second, to alternative learning experiences. To this end, lessons must be learnt from past and present initiatives which have succeeded but which are excluded from mainstream education.

(iii) There is the danger of polarisation between the academically successful on the more prestigious pathways (with clear progression routes into higher education and employment) and those on the 'weakly vocational' pathways (where progression is not clear and many drop out). Reform of 14-19 must reverse this polarisation.

(iv) The false dualism between the 'academic' and the 'vocational' distorts the aims of education, diminishes the place of the arts, leads to the devaluation of practical forms of learning – and must constantly be challenged.

(v) The quality of WBL and WRL is uneven, despite the importance increasingly and uncritically attached to them in the development of more flexible patterns of learning and qualifications. Getting a more accurate picture of the different patterns of WBL and WRL is urgent, if these are to contribute to the improved quality of learning.

(vi) Increasing participation and retention is not just a curriculum problem. It concerns also:

- the relation of student choice to the demands of the labour market and to the currency of qualifications gained;
- institutional arrangements which too often restrict flexibility and progression.

(vii) Partnerships between schools (of all kinds), colleges, higher education, employers, private learning providers and funding agencies are crucial for the development of 14-19 education and training. But such partnerships have to overcome the fragmentation of a system arising from a competitive ethos and different funding arrangements.

(viii) The complex pattern of employers' involvement in 14-19 is not clear, viz.: their contribution to WBL and WRL, their use of qualifications,

their involvement in education and training partnerships, or their needs for different levels of skills. Both the gathering of scattered data and the collection of new data (region by region and occupational sector by occupational sector) are important tasks to be undertaken with special regard to the distinctive developments in Wales.

(ix) Problems arise in the 18 plus examinations from the attempt to meet very different demands – to provide criteria for entry to higher education, to inform employers of applicants' competences, to reflect on what has been learnt, to provide incentives, to make the system accountable and so on. The extent to which such diverse purposes or functions can be served within a unified framework of qualifications needs to be explored.

(x) Experience demonstrates the difficulties in changing a complex and interrelated system of institutions responding to different demands and stakeholders. There is a need to examine the most effective way of managing change, including the limited role of target-setting and the use of various 'levers' and 'drivers'.

(xi) More in-depth qualitative studies are required on:

- student decision-making (including decisions not to continue on courses);
- employers' use of the system of qualifications;
- quality of WBL;
- hidden selection which takes place within different kinds of post-16 institutions.

(xii) There has been too much discontinuity of policy (for example, the failure to draw lessons in 1988 from TVEI) and too many abortive attempts to reform the qualifications (for example, the Dearing 16-19 Report's recommendations for qualifications reform). This shows the urgent need for a *comprehensive* review of the 14-19 phase and for *systematic* reflections upon many excellent initiatives of the past.

Part III

System Performance

System Performance

The ongoing purpose of this part of the Review is to analyse the performance of the 14-19 education and training system in England and Wales, compare this performance with that of other countries and explain, as far as is possible, the changing patterns of participation, progression and attainment of young people. In so doing, we will also uncover the strengths and weaknesses in existing quantitative and qualitative datasets. This will enable us to make recommendations about how data collection methods can be developed to enhance our overall understanding of system performance. In addition, we locate our work in a wider set of debates about the ways in which, and the extent to which, the current system is capable of delivering desired outcomes, such as high levels of participation and attainment, parity of esteem between academic and vocational routes, and social inclusion.

In the first year of the Review we have undertaken a mainly descriptive analysis which has been geared towards providing preliminary answers to the following questions.

1. What proportion of the age group are participating in 14-19 education and training in England and Wales and how is this changing over time?

2. To what extent has the mode of participation and the balance between participation in academic and vocational pathways changed?

3. What are the roles of different institutions (schools, various types of college and workplaces) involved in providing 14-19 education and training? To what extent do they systematically differ in terms of the provision they offer and the learners that they cater for? How well are these roles coordinated to provide a coherent system at a local level?

4. What needs is the current system meeting and how effectively? To what extent and in what ways has the system become more inclusive?

5. To what extent has the system become a high-participation, high-attainment system which supports the progression of learners?

We also identify throughout this part of the Report issues that we will pursue in the second year of the Review. The part contains seven sections. The next section provides a synopsis of the findings. This is followed by a methodological section and then four sections that set out the detailed findings of our research this year. The final section provides a brief conclusion.

1. System performance: a synopsis

Between 1986 and 1993/94, the rate of participation in the 14-19 education and training system in England and Wales increased rapidly and then levelled off at a new equilibrium position. Overall, in 2003 about 98% of 15 year-olds and 75% of 16-18 year-olds were participating in education and training. Despite this growth, participation in post-compulsory education and training by 16-18 year-olds in England and Wales remains below the average for OECD countries. The current position is therefore best described as a medium- rather than a high-participation system. One of the main reasons that the English and Welsh 14-19 education and training system's participation rate is lower than that of other OECD countries is the progressive loss of learners with age – that is the system is still characterised by a high attrition rate.

Participation rates at 16 have increased amongst young people from all socio-economic and ethnic backgrounds; that is the system has become more socially inclusive. Nonetheless participation remains significantly lower amongst those with less skilled and less qualified parents, amongst boys and amongst young white people. In particular, participation rates in post-compulsory education and training have not increased appreciably amongst the least well qualified at the end of KS4.

At the end of compulsory schooling, learners continue to be sorted in a predictable manner into academic and vocational pathways, largely on the basis of their GCSE results and other individual characteristics such as their gender, socio-economic status and ethnicity. The evidence suggests,

therefore, that in the current English and Welsh 14-19 education and training systems parity of esteem between vocational and academic pathways is a distant prospect.

Over the whole system there are long-standing regional differences in participation rates of young people in the post-compulsory education and training system and in their mode of participation. The reasons for this are poorly understood. However, such variation indicates the need to take account of local and historical factors in making judgements about the overall performance of the 14-19 education and training system in England and Wales.

Beneath the apparent stability of the participation rates in post-compulsory education and training over the last decade, longer-term trends in the mode of participation – by institution, by qualification level and qualification pathway – are occurring. In the early 1990s the institutional mode of participation in post-compulsory education and training changed radically, with more young people participating via the full-time education (FTE) route in schools and colleges, and a declining proportion participating via the work-based route, whether through GST or employer-funded training (EFT). The current system has shifted towards a more school-based model.

At the same time, the proportion of learners studying for Level 3 qualifications via FTE has increased and the proportion studying for Level 1 and 2 has declined. This is an indication of both the increasing attainment rate at the end of KS4 and the long-standing problems that the current system has in attracting lower attaining learners at 16. In addition, the proportion of young people studying for vocational qualifications at Level 3 in FTE has increased steadily over the last decade. However, the evidence suggests that only a small percentage of young people (10-13%) mix academic with vocational qualifications.

There is a continuing division of labour between general FE and tertiary colleges, on the one hand, and schools and sixth form colleges, on the other hand. In the former, learners on vocational programmes at all levels form the majority of the student body, whilst in the latter, learners on Level 3 programmes, especially A Levels, dominate. In addition, there is some evidence that school sixth forms and sixth form colleges are becoming more

selective, substituting Level 3 for Level 2 learners. General FE and tertiary colleges are increasingly, therefore, taking on the task of educating learners with lower levels of academic attainment.

The majority of learners in LSC-funded FE and WBL are involved in vocational programmes. Overall, the proportion participating in full-time Level 1 and 2 courses in FE provision has remained relatively static. The proportion working towards Advanced GNVQs/AVCEs has fallen sharply in FE and tertiary colleges since 1999/2000. However, this is offset by a sharp increase in the proportion studying for AS and A Levels and Level 3 vocational qualifications[62] such as BTEC National Diplomas.

Retention, achievement and, therefore, success rates across most qualifications are increasing. Consequently, even though participation rates have remained static overall, system performance, as measured by qualification success rates, is improving. This is reflected in the increase in the proportion of the workforce holding qualifications at Levels 2 and 3, and an improving qualification supply relative to some OECD countries.

Considerable variation exists, however, in retention and success rates between level and type of qualification and between institutions. In particular, the evidence suggests that success rates are lower on full-time vocational courses than on academic programmes. This is primarily the result of the lower retention rates within the vocational pathways. Achievement rates on AVCEs are now improving following the high failure rates on these qualifications after their introduction as part of the Curriculum 2000 reforms. Once again, however, the administrative data do not permit us to examine retention and success rates on other types of vocational qualifications. This is a major weakness of the available administrative datasets.

A policy aspiration for young people who do not achieve a Level 2 qualification by the end of compulsory schooling is that they will (a) have done so by the end of their first or second post-compulsory year and (b)

[62] The majority of learners in further education and tertiary colleges are studying for vocationally related and other vocational qualifications which either lie outside the national qualifications framework or which have only been recently recognised. Official data do not disaggregate participation in these qualifications, thus it is not possible to discern, for example, the proportion of young people taking the BTEC National Diploma from the administrative datasets we have been working with this year.

then progress to Level 3 achievement. However, the available evidence suggests that there is only limited progression to and achievement on subsequent Level 2 and 3 programmes amongst those who complete Level 1 and 2 courses successfully. The reasons for this require further investigation.

Participation in MA programmes is increasing at Level 2 but declining at Level 3. Different sectors show divergent patterns of participation by age and gender. Success rates on MA programmes remain below those of full-time vocational programmes but they are improving. Success rates also vary between sectors. The evidence about why retention and achievement in vocational and work-based routes are lower than in the academic pathway is equivocal.

2. Assessing system performance: Methodological strategies and data collection and analysis

To answer the questions raised above further, and to resolve the issues we have identified as a result of our descriptive analysis this year, we conceptualise the 14-19 system as consisting of a variety of **stocks** of young people engaging in different activities – FTE of various types, WBL, employment and so on (Figure 1 provides one way of characterising such stocks) – and **flows** between those stocks[63]. We need to understand how young people come to be distributed across these various stocks: we must understand the processes that affect their recruitment to, their survival in, and their progression between these stocks – and how these processes change over time. To achieve this will require the use of a variety of different datasets, both qualitative and quantitative, and a range of analytical techniques. However, the considerable amount of methodological detective work needed to track down and understand how administrative datasets are constructed has precluded, in the first year, more

[63] The idea of stocks and flows comes from the economics literature. A stock is a measurement of quantity at one specific point of time. A flow is a measurement of quantity over a specific period of time. Unlike a flow, a stock is not a function of time, whereas a flow measures quantity passing per minute, hour, day, year or whatever. The analogy is frequently made between a reservoir holding a given stock of water, and water entering and leaving the tank as the flow of water per minute: the water entering and leaving the reservoir is the flow; the water actually in the reservoir at any one time is the stock.

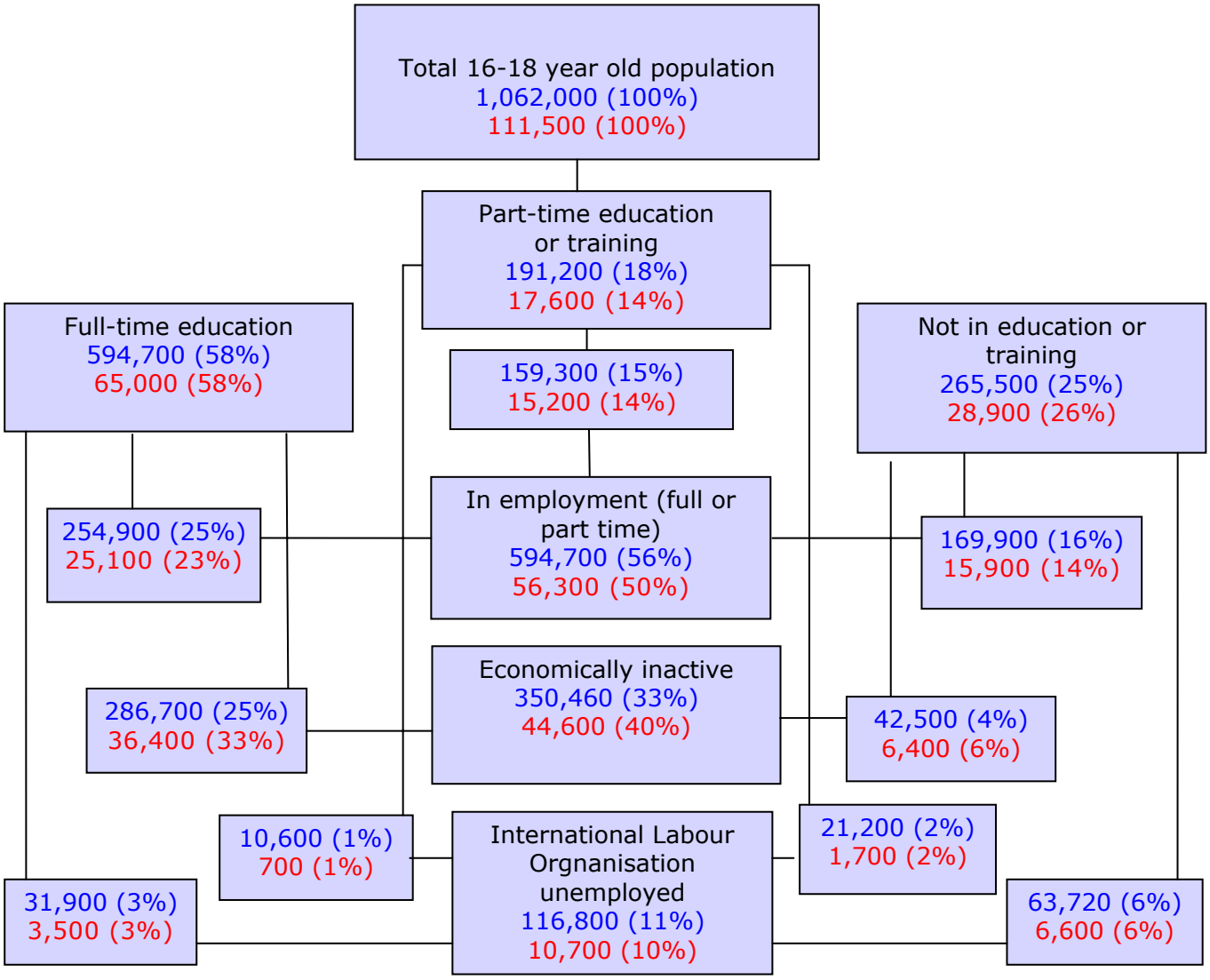
sophisticated modelling of the processes affecting survival in, and transfer between, the various stocks that make up the 14-19 system. Instead, we have concentrated on building up a detailed description of how participation, retention and attainment rates in the 14-19 system are changing over time at an aggregate level, using mainly administrative datasets and the Youth Cohort Study (YCS).

We have focused on the period from the introduction of GCSEs in 1986 to the most recent datasets available in 2003. However, it is important to recognise that the methods of data collection used to construct administrative datasets changed several times over this period[64]. Furthermore, the degree of uncertainty about the size of the age group means that interpretation of changes in participation rate, for example, needs to be undertaken cautiously. The focus is, therefore, on long-term trends rather than on small changes between years.

In addition, in the first year of the Review we have tended to focus on the performance of the vocational component of the 14-19 education and training system for two reasons. First, this component is more diverse than the academic pathway and we wished to characterise that diversity. Second, previous research led us to suspect that there were particular issues associated with participation, retention and success rates within the various pathways that make up the vocational component of the system, the understanding of which merited an immediate focusing of our research effort.

[64] See Appendix 8 for further details.

Figure 1: The size of different stocks of 16-18 year-olds in learning and the labour market: 2001/02. England blue, Wales red.



3. System characteristics: Overall patterns of participation

This section examines broad trends in participation in order to characterise the current 14-19 education and training system in England and Wales relative to the position in the mid-1980s and to other OECD countries. The 14-19 system is conceptualised as a series of stocks of young people engaged in different activities: those in education, WBL and employment, and NEETs. These stocks can then be grouped by mode of participation, level of qualification (Level 1, 2, 3 and so on) pursued, learning pathway (e.g. vocational or academic) and institutional type (e.g. school or FE college).

Overall participation rates

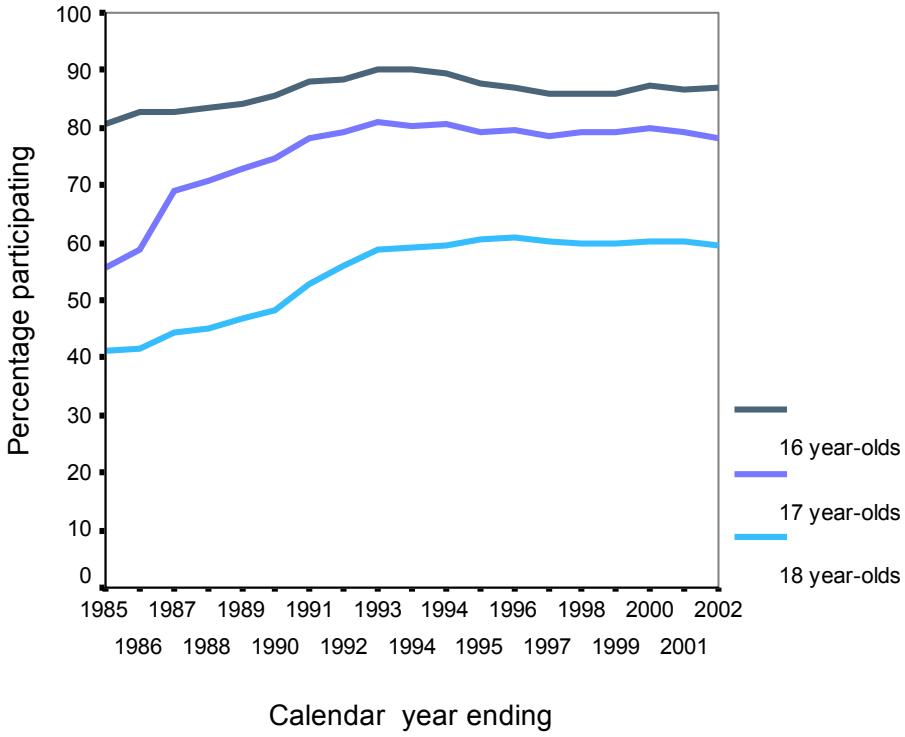
Between 1986 and 1993/94, the rate of participation in the 14-19 education and training system in England and Wales increased rapidly. It then levelled off at a new equilibrium position a decade ago (Figure 2). Overall, in 2003 about 98% of 15 year-olds and 75% of 16-18 year-olds were participating in education and training. Participation in post-compulsory education and training by 16-18 year-olds in England and Wales remains below the average for OECD countries. The current position is therefore best described as a medium- rather than a high-participation system.

Young people in England and Wales are required by law to be in school until the age of 16. So, in theory, participation rates between the ages of 14 and 16 should be 100%. In reality they have fluctuated between 96% and 99% of the age cohort over the last decade. Within the post-compulsory phase, participation rates for 16 year-olds are highest, and range between 80% and 90% of the cohort. Rates for 17 year-olds increased more sharply, from about 58% to 80% by the early 1990s, declining slightly by 2002. In 1985, only 40% of 18 year-olds participated, a rate which rose steadily until 1993 to about 60% and subsequently plateaued. Provisional figures for 2003[65] indicate that in England 87% of 16 year-olds, 80% of 17 year-olds, and 60% of 18 year-olds were participating in some form of

[65] DfES (2004c) *op cit.*

education and training during the course of that year. Over the entire 16-18 age cohort, this means that 75% were involved in some form of education and training. Of the rest, 16% were in employment without formal training and 9% (about 177,000 young people) were NEETs.

Figure 2: Total participation in education and training by 16-18 year-olds in England: 1985-2002.



We have been unable so far to construct such long-run time series datasets for Wales but the YCS suggests a similar change in overall participation rates. In the academic year 2001/02, administrative data indicate that 80% of Welsh 16 year-olds, 70% of 17 year-olds and 53% of 18 year-olds were either in FTE or in GST.

The 14-19 system in England and Wales appears therefore to have reached a new equilibrium, with increased rates of participation amongst all age groups. However, rates of participation remain below those found in most other OECD countries (Table 1). Thus, the system still cannot be characterised as being a high-participation one. This is primarily due to the progressive loss of learners between the ages of 14 and 19 resulting in a medium-participation system with a high rate of attrition.

Table 1: Enrolment rates of 15-19 year-olds in OECD countries: 2001. (Full-time and part-time students in public and private institutions)

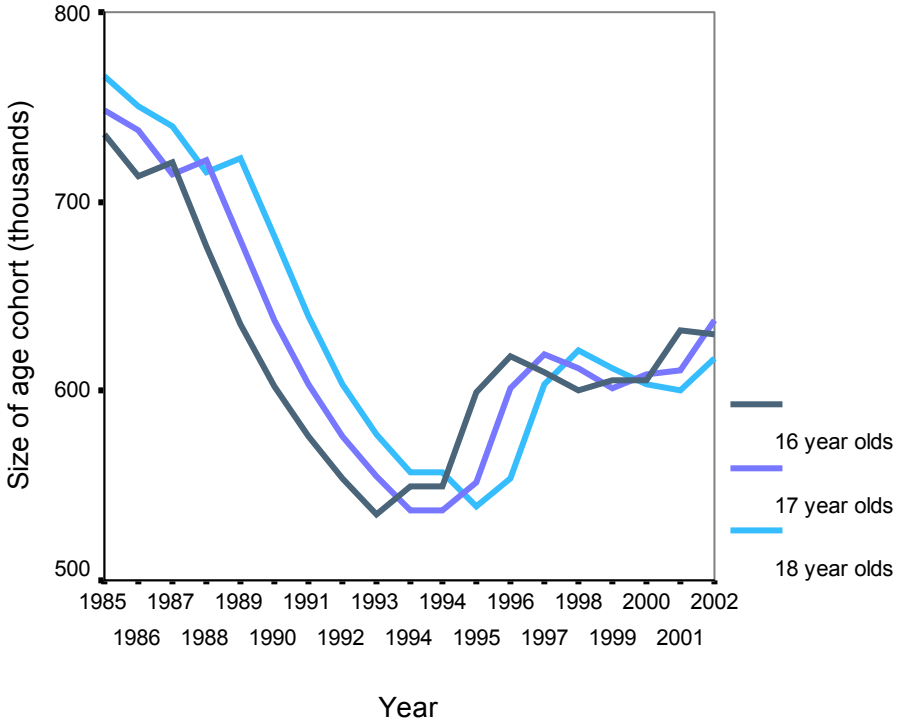
Country	Percentage of 15-19 year-olds enrolled	Country	Percentage of 15-19 year-olds enrolled
Australia	81.1	Luxembourg	78.1
Austria	76.9	Mexico	41.0
Belgium	91.0	Netherlands	86.2
Canada	75.0	New Zealand	73.0
Czech Republic	87.8	Norway	85.3
Denmark	82.9	Poland	85.5
Finland	85.3	Portugal	73.3
France	86.6	Slovakia	74.6
Germany	89.4	Spain	80.1
Greece	77.0	Sweden	86.4
Hungary	79.0	Switzerland	83.3
Iceland	79.2	Turkey	30.0
Ireland	80.9	United Kingdom	74.7
Italy	72.2	United States	77.6
Korea	79.3	Country Mean	77.7

Source: OECD (2002) *Education at a glance*. Paris: OECD.

Interpreting changes in percentage participation rates alone can obscure the considerable changes there have been in the size of the 16-18 age cohort between 1985 and 2002 (Figure 3). The importance of this demographic change should not be underestimated as an institutional driver in an education and training system where money follows the learner. The educational policy framework and institutional incentives established by the Conservative governments of the 1980s and 1990s, combined with the changing size of the age cohort, provide strong institutional incentives to change recruitment processes and criteria. Put crudely, as the size of the age cohort declines, institutions cannot afford to be as selective if they are to maintain student numbers and the associated levels of funding. As student numbers rise, with an increasing proportion of 16 year-olds achieving five or more GCSEs at grade C or above, institutions can afford to be more selective.

An additional implication of the increase in the size of the age cohort since the early 1990s is that, despite static participation rates from the mid-1990s, institutions providing education and training will have experienced an increase in the number of learners in the 14-19 education and training system.

Figure 3: The number of 16-18 year-olds: 1985-2002.



Raffe and Surridge[66] argue that we should seek to understand increases in participation in terms of incentive structures. These are constituted by factors which act both to promote participation at national and local levels and to dissuade young people from either participating in the first place or staying in the education and training system after being recruited. Adopting this perspective encourages us to eschew monocausal explanations of complex social phenomena and alerts us to the multiple factors associated with increasing participation:

- *compositional changes*: more young people have characteristics (such as middle-class backgrounds and high GCSE attainments) which are associated with a propensity to stay on;
- *'push' factors from school and home*: reforms in compulsory education, notably the introduction of GCSEs, encouraged more positive attitudes to learning and encouraged young people to stay on;

[66] D. Raffe and P. Surridge (1995) *More of the same? Participation of 16-18 year olds in education*. National Commission on Education Briefing (New Series) 6. London: National Commission on Education.

- *marketing of post-compulsory opportunities*: the marketisation of education in England and Wales meant that schools and colleges had to compete more actively for post-16 students at a time when the 16-19 cohort was declining in size;
- *'pull' factors from the labour market*: in the past, the high wages and high-status occupations available to many 16 year-old leavers provided strong incentives to leave early; occupational changes and the relative decline in youth wages have reduced these incentives. Conversely, the labour market increasingly demands higher qualifications to enter employment (even if they are not required to do the job) which can be obtained by staying on;
- *'pull' factors from higher education*: the demand for higher education responds to supply. When higher education was allowed to expand after 1987, more people stayed on in post-16 education to prepare for higher education entry.

Exploring the influence of such factors on participation amongst the different stocks of young people aged 14-19 will be a major task for the second year of the Review. Next we turn to the attritional characteristics of the current 14-19 education and training system.

The loss of learners

A continuing policy concern has been the decrease in participation at ages 16, 17 and 18 in the current education and training system, which is typically termed 'drop-out'. However, for some young people the process of detaching from the education and training system begins much earlier than 16, so this section starts by examining the issues of exclusion and truancy. It then explores what we know about the outflow of learners from the system which occurs between the ages of 16 and 19.

The level of permanent exclusion of young people and the incidence of persistent truancy of young people from Welsh and English schools is symptomatic of a system that promotes detachment at an early age for some learners. In England, permanent exclusions reached a peak of 12,700 in 1996/97[67]. This represented about 16 pupils in every 10,000 of

[67] DfES (2003b) *Statistics of education: Permanent exclusions from maintained schools in England*. London: HMSO.

the school population. Subsequently the rate of permanent exclusion has declined, reaching 9,535 pupils in 2001/02, about 12 pupils in every 10, 000. In Wales, the peak occurred in 1995/96 and rates have also declined to 15 pupils in every 10,000 in 2002/03.

Special schools have the highest rate of permanent exclusion followed by maintained secondary schools. The majority of pupils, both boys and girls, who are permanently excluded are aged 13 and 14 (equivalent to Years 9 and 10). Boys are four times more likely to be excluded than girls. Black Caribbean pupils remain the most likely to be excluded (42 in every 10,000 pupils in 2001/02 in England), though there has been a steady decrease in the exclusion rate of all black pupils.

In addition to those who are permanently excluded, a significant proportion are persistent truants. According to data from the YCS the proportion of English and Welsh 16 year-olds who reported being persistent truants in Year 11 increased from 5% in 1989 to almost 7% in 2002[68]. For a small proportion of young people the process of becoming detached from full-time education has, therefore, already started by the time they reach 16 and the end of compulsory schooling. The impact of this on their future lives is considerable. For example, in 2002 amongst 16-17 year-olds[69]:

- only 30% of those who were persistent truants in Year 11 reported being in FTE or GST, compared with 87% of those who reported no truancy in Year 11;
- only 19% of 16 year-olds who reported being permanently excluded in Years 10 and 11, and 13% who reported being persistent truants in Year 11, attained five or more GCSEs at grade C or above, compared with 55% of those who were not excluded and 60% of those who reported no truancy;
- 17% of those excluded in Years 10 and 11, and 27% of those who reported being persistent truants in Year 11, were unemployed, compared with 4% of those who had not been excluded and 3% of those who reported no truancy in Year 11.

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[68] DfEE (1999) *Youth Cohort Study: The activities and experiences of 16 year olds: England and Wales 1998*. Statistical Bulletin 4/99 [online]. At: www.dfes.gov.uk/rsgateway/DB/SBU/b000051/index.shtml, accessed 7 October 2004; DfES (2003c) *op cit*.
[69] DfES (2003c) *ibid*.

At the end of compulsory schooling, a proportion of young people 'choose' to leave the education and training system. As Figure 2 indicates, this proportion declined between the mid-1980s and the early 1990s but has subsequently levelled off at about 20% of the age cohort according to the YCS (Table 2). Administrative data produce slightly lower estimates than the YCS – about 13% of the age group in England and 16% in Wales.

A characteristic of both the English and the Welsh post-compulsory education and training systems is the further fall in participation at both 17 and 18 (Figure 2 and Table 2). The pattern is best seen in YCS data, as exemplified in Table 2 for Cohort 10. This cohort was first surveyed as 16 year-olds in the spring of 2000 and as 19 year-olds in the spring of 2003. Overall the majority of young people were in the same activity at 17 as they were in at 16, with the largest group being in FTE (86%). This is a reflection of the fact that the majority of those in FTE at 16 were enrolled on two-year programmes (this is discussed further below). For those leaving FTE between 16 and 17, a job was the most likely destination. In addition, one-third of those who were unemployed at 16 had found work by 17.

Table 2: Changes in activity of Cohort 10 of the Youth Cohort Study.

Activity	16 year-olds	17 year-olds	18 year-olds	19 year-olds
Full-time education	71	65	40	40
Higher education			25	32
GST	10	11	8	6
Full-time job (excluding GST)	8	14	31	36
Part-time job	2	4	7	6
Unemployed	5	5	7	5
Looking after home/family			2	3
Something else/not stated	3	2	5	3
NEET	7	6	13	10

Source: SFRs 02/2001, 42/2001, 05/2003, 36/2003.

The major change in activity occurs between 17 and 18. Overall, however, the majority of young people were in the same main activity at 18 as they were in at 16. For example, 53% of those in FTE at 16 were still in FTE at 18. For those changing activity, the most common destination was, once again, a job. The increase in the size of the NEET group at 18 may be the

result, in part, of young people taking a gap year before going on to higher education.

The decision to leave post-compulsory education and training early must be seen against the wider backdrop of young people's lives. Several studies[70] provide evidence about the complexity of the circumstances in which 16-18 year-olds find themselves. They argue that leaving may be a positive decision rather than a negative one. Furthermore, there is little evidence that those who leave the system early are entering the NEET category. Indeed, the evidence suggests that the most likely destination is employment. Whether this pattern of progression from the education and training system into the labour market constitutes 'drop-out' from the perspective of the learner is debatable, though it is clearly of concern to those expecting young people to engage in a linear model of progression to Level 3 qualifications and beyond. It may be a reflection more of a failure to reach government-set targets than of a failure in the learning careers of young people. Nonetheless, current estimates place 177, 000 young people aged 16-18 in the NEET group, and they remain, quite rightly, a major policy concern. In the next section, therefore, we examine in more detail who is currently participating in the 14-19 education system, and the extent to which the system is providing equal opportunities and promoting social inclusion.

Social equity

Participation rates at 16 have increased amongst young people from all socio-economic and ethnic backgrounds; that is the system has become more socially inclusive. Nonetheless, participation remains significantly lower amongst those with less skilled and less qualified parents, amongst boys and amongst young white people. In particular, participation rates have not increased appreciably amongst the least well qualified.

An important point to note about the changes that occurred in the late 1980s and the early 1990s is that participation increased amongst young people from all backgrounds (Table 3). Young women are more likely than young men to be participating in education and training at 16, especially

[70] For example M. Bloomer and P. Hodkinson (1999) *College life: The voice of the learner*. London: FEDA; S. Ball, M. Maguire and S. Macrae (2000) *Choice, pathways and transitions post-16: New youth, new economies in the global city*. London, New York: RoutledgeFalmer.

through the full-time education route. Both male and female participation in GST has declined sharply, but with more young men participating through this route than young women. White 16 year-olds have the lowest overall rates of participation in post-compulsory education and training, but the highest rate of participation in GST. This is not primarily the result of lower levels of GCSE attainment amongst white young people. For example, in 2002, 52% of white pupils achieved five or more GCSEs at grade C or above, compared with 36% of black students, but the rate of participation in FTE and GST by black 16 year-olds was 6% greater, largely because of the much higher participation rates in full-time education by black learners (Table 3).

Participation rates fall with socio-economic status. Although participation amongst 16 year-olds with parents in unskilled manual occupations almost trebled between 1989 and 2000, they still lag 15% behind those of young people with parents in managerial and professional occupations. Furthermore, twice as many young people from families where parents were employed in manual unskilled work were participating through GST, compared with those from professional/managerial families, with nearly a quarter fewer participating through full-time education. This is most likely the result of the much lower GCSE attainment of those from lower socio-economic backgrounds.

The effect of the decline in popularity of GST on system performance is seen most acutely for those with the lowest levels of academic attainment at the end of compulsory schooling (Table 4). For example, in 1989, 55% of those who achieved one to four GCSEs at Grades D-G were in some form of post-compulsory education and training – 14% in FTE and 41% in GST. By 2002, only 47% of such young people remained in education and training after the age of 16, 32% in FTE and 15% in GST. Thirty per cent were in a job (either full or part time) without training and 22% were NEETs. By contrast, participation rates for those with five or more GCSEs at Grade C or above exceed 90% throughout the period (Table 4).

Table 3: Participation by 16 year-olds in full-time education and government-supported training by social background: 1989-2002.

	1989			1991			1992			1994		
	FTE	GST	TOT	FTE	GST	TOT	FTE	GST	TOT	FTE	GST	TOT
All	48	24	72	58	16	74	66	14	80	72	12	84
Gender												
Male	43	27	70	53	19	72	61	17	78	69	14	83
Female	53	14	67	64	12	74	71	10	81	75	9	84
Ethnic Origins												
White	47	24	71	58	17	75	65	15	80	71	13	84
Black	68	16	84	71	9	80	72	12	84	86	4	90
Asian	76	11	87	76	9	85	84	5	89	87	4	91
Indian	n/a	n/a	n/a	n/a	n/a	n/a	87	4	91	95	3	98
Pakistani	n/a	n/a	n/a	n/a	n/a	n/a	82	5	87	79	6	85
Bangladeshi	n/a	n/a	n/a	n/a	n/a	n/a	73	8	81	81	6	87
Other Asian	n/a	n/a	n/a	n/a	n/a	n/a	88	4	92	90	2	92
Other ethnic groups	60	17	77	67	*	67	81	*	81	75	10	85
Not stated	24	33	57	32	22	54	51	20	71	52	23	75
Parents' Occupation (socio-economic group)												
Managerial/Professional	68	13	81	80	8	88	84	7	91	85	6	91
Other non-manual	60	17	77	71	12	83	77	10	87	83	7	90
Skilled Manual	39	28	67	51	20	71	61	17	78	68	15	83
Semi-skilled manual	35	31	66	44	21	67	54	21	75	61	18	79
Unskilled manual	27	34	61	37	26	63	42	23	65	56	20	76
Other/not classified	36	29	65	47	19	66	54	18	72	61	14	75

	1996			1998			2000			2002		
	FTE	GST	TOT	FTE	GST	TOT	FTE	GST	TOT	FTE	GST	TOT
All	71	11	82	69	11	80	72	10	82	71	9	80
Gender												
Male	68	14	82	65	14	79	67	13	80	66	11	77
Female	75	9	84	73	8	81	76	8	84	75	7	82
Ethnic Origins												
White	70	12	82	67	12	79	70	11	81	69	10	79
Black	84	3	87	82	4	86	84	4	88	82	3	85
Asian	87	4	91	86	3	89	86	5	91	85	4	89
Indian	91	5	96	91	4	95	92	3	95	91	2	93
Pakistani	80	5	85	81	3	84	81	8	89	77	5	82
Bangladeshi	79	4	83	79	*	79	81	8	89	79	9	88
Other Asian	98	*	98	87	3	90	90	*	90	89	3	92
Other ethnic groups	85	3	88	84	6	90	81	10	91	75	7	82
Not stated	56	8	64	64	12	76	62	6	68	55	10	65
Parents' Occupation (socio-economic group)												
Managerial/Professional	86	5	91	85	7	92	82	7	89	n/a	n/a	n/a
Other non-manual	81	8	89	80	8	88	79	7	86	n/a	n/a	n/a
Skilled Manual	64	15	79	61	15	76	66	13	79	n/a	n/a	n/a
Semi-skilled manual	61	16	77	59	14	73	63	14	77	n/a	n/a	n/a
Unskilled manual	61	12	73	50	14	64	59	15	74	n/a	n/a	n/a
Other/not classified	62	12	74	63	10	73	63	10	73	n/a	n/a	n/a
Parents' Occupation (NS-SEC)												
Higher Professional							85	5	90	87	4	91
Lower Professional							79	8	87	79	7	86
Intermediate							69	12	81	69	10	79
Lower Supervisory							61	15	76	58	12	70
Routine							56	16	72	60	12	72
Other							62	10	72	62	11	73

Source: YCS Cohorts 4-11 Sweep 1

Table 4: Participation by 16 year-olds in full-time education and government supported training by prior attainment and school attachment: 1989-2002.

	1989			1991			1992			1994		
	FTE	GST	TOT	FTE	GST	TOT	FTE	GST	TOT	FTE	GST	TOT
All	48	24	72	58	16	74	66	14	80	72	12	84
Year 11 Qualifications												
5+ GCSE Grades A*-C	86	4	90	91	3	94	92	3	95	93	2	95
1-4 GCSE Grades A*-C	46	23	69	56	17	73	66	15	81	69	13	82
5+ GCSE Grades D-G	28	39	67	36	29	64	46	26	72	55	23	68
1-4 GCSEs Grades D-G	14	41	55	22	32	55	28	34	62	35	32	67
None reported	11	36	47	12	27	39	19	26	45	23	20	43
Truancy												
Persistent truancy	8	29	37	15	22	37	21	20	41	23	21	44
Occasional truancy	39	26	65	52	19	71	59	17	76	64	15	79
No truancy	60	20	80	70	13	83	77	12	89	81	9	90

	1996			1998			2000			2002		
	FTE	GST	TOT	FTE	GST	TOT	FTE	GST	TOT	FTE	GST	TOT
All	71	11	82	69	11	80	72	10	82	71	9	80
Year 11 Qualifications												
5+ GCSE Grades A*-C	92	3	95	91	4	95	90	4	94	89	3	92
1-4 GCSE Grades A*-C	68	13	81	62	15	77	64	15	79	59	14	73
5+ GCSE Grades D-G	49	24	73	48	21	69	47	18	65	48	17	65
1-4 GCSEs Grades D-G	34	22	56	34	17	51	38	19	57	32	15	47
None reported	26	20	46	26	18	44	34	15	49	35	11	46
Truancy												
Persistent truancy	25	16	51	24	15	49	26	13	49	23	15	48
Occasional truancy	62	14	76	58	14	72	61	12	73	60	11	71
No truancy	80	9	89	78	10	88	79	9	88	80	7	87

Source: YCS Cohorts 4-11 Sweep 1

The data also indicate the continuing pull of the youth labour market for young people to fill relatively unskilled jobs which seem to offer little in the way of training leading to formal qualifications. Unsurprisingly, those with the poorest attainment and from poorer socio-economic backgrounds are the most likely to be recruited into such jobs. We need to know much more about the young people who leave the 14-19 education and training system to enter the labour market at 16 and 17 years of age. However, the evidence from both the National Adult Learning Surveys and the Labour Force Survey suggests that these young people are the least likely to receive formal learning opportunities that lead to qualifications. This is not to imply that these young people are not learning, but that they are likely to be doing so through non-formal and informal mechanisms which are less likely to lead to the level of qualifications associated with accessing lifelong learning opportunities in adult life.

They complete their compulsory schooling, or one year of post-compulsory education and training, as the learning poor and this is a legacy that endures into their adult life. This is clearly a matter of concern for social policy. For example, a lack of qualifications is associated with lower levels of employability[71].

However, encouraging more young people to stay in the education and training system through, for example, providing inducements such as Education Maintenance Allowances, will not by itself achieve a higher overall level of 'employability', which is a function of both personal characteristics and the types of jobs available in the labour market. It might shift the relative position of young people in the job queue, providing additional opportunities for those whom the system has served least well in the past, but this is likely to be at the expense of others.

Regional variation in participation

There are complex and long-standing regional differences in participation rates and study aims of 16-17 year-olds. For example, in 2002 82% of Welsh 16-17 year-olds with the top third of GCSE results were studying for

[71] See, for example, S. McIntosh (2002) *Further analysis of the returns to academic and vocational qualifications*. DfES RR370. Nottingham: DfES; S. McIntosh (2004) *The impact of vocational qualifications on the labour market outcomes of low-achieving school-leavers.* London, Centre for Economic Performance.

academic qualifications, compared with 92% in Inner London. The regions in England with the lowest rate of participation in FTE at 16-17 – the North East, North West, Yorkshire and Humberside – were also those areas where youngsters with good GCSE results were more likely to take vocational qualifications[72]. Clearly the way young people interact with the post-compulsory education and training system also depends upon local factors in a complex and poorly understood way.

There is some evidence that regional variation in participation is likely to be linked to the state of the local labour market amongst other factors. For example, Banks et al.[73] demonstrated huge differences between work and learning opportunities in Swindon and those in Rochdale or Coventry. Hodkinson[74] also points outs that geography influences the material opportunities that young people are presented with and the ways in which they view those opportunities. Ball et al.[75] document the quite different responses to the local labour market conditions amongst a group of young people in London. For some, poor local employment opportunities were a spur to stay on, whilst for others, a 'used up or impoverished learning identity drives them to seek work and approximately half of this group were unemployed at any one time' (p. 40). However, as Skilbeck et al.[76] indicate, there is no simple relationship between staying on in education and regional employment opportunities. This is an area that requires further investigation but we should be alert to the need to take local factors, such as the state of the labour market, into account when making judgements about the effectiveness and efficiency of the system.

Overall patterns of participation: A summary

The data presented so far give some grounds for believing that the current 14-19 system is performing better than it did twenty years ago. We have moved from a low-participation model to a medium-participation model. The system is also accommodating an increased diversity of young people

[72] J. Payne (2003) *op cit*.
[73] M. Banks, I. Bates, G. Breakwell, J. Bynner, N. Elmer, L. Jamieson and K. Roberts (1992) *Careers and Identities: Adolescent attitudes to employment, training and education, their home life, leisure and politics.* Milton Keynes: Open University Press.
[74] P. Hodkinson (2004) *op cit.*
[75] S. Ball, M. Maguire and S. Macrae (2000) *op cit*.
[76] M. Skilbeck, H. Connell, N. Lowe and K. Tait (1994) *The vocational quest: New directions in education and training*. London: Routledge.

and has, therefore, become more socially inclusive. Nonetheless, certain groups of young people – boys, those with less skilled and less qualified parents or guardians, and white young people – remain significantly less likely to participate at 16. An indicator of low efficiency is that the system still has difficulties retaining learners as they age. In addition, the post-compulsory education and training system still appears to be relatively ineffective at attracting the least well qualified. Substantial improvements in participation at 16 amongst those with the poorest levels of academic attainment and with weakened learner identities will, therefore, be needed to meet the various targets and public sector agreements set by the English government and to satisfy the aspirations expressed in Welsh policy documents. However, beneath the surface of apparent stability in participation rates since the early 1990s, longer-term changes have been taking place in the mode of participation. These are examined in the next section.

4. System characteristics: Participation, progression and attainment in the academic, vocational and work-based pathways

Current policy in England and Wales emphasises the need to create a stronger vocational offer from the age of 14. The long history of developments in vocational and occupationally related learning for 14-16 year-olds in schools was effectively halted by the introduction of the National Curriculum in 1988. The introduction of GNVQs provided a renewed opportunity for vocational learning amongst this age group but the uptake of Intermediate and Foundation GNVQs has been small compared with the uptake of GCSEs. For example, in 2002/03 in England, 33,000 15 year-olds achieved an Intermediate GNVQ and 2,500 a Foundation GNVQ, compared with 308,000 who achieved five or more GCSEs[77] at Grade C or above. In Wales in 1999/2000[78] out of 35,583 pupils in the final year of compulsory schooling, 3,593 registered to take a GNVQ[79].

[77] DfES (2004d) *Vocational qualifications in the UK: 2002/03.* SFR 20/2004 [online]. At: www.dfes.gov.uk/rsgateway/DB/SFR/, accessed 27 September 2004.
[78] This is the last year for which we can find data on KS4 qualifications disaggregated by qualification type in Wales.
[79] Cyhoeddwyd gan (2001) *General National Vocational Qualifications in Wales 1992/93 to 1999/2000.* Datganiad Cyntaf 4/2001 [online]. At: www.wales.gov.uk/statistics, accessed March 2004; National Assembly for Wales Statistical Directorate (2001b) *GCSE/GNVQ and GCE A, AS and*

Considerable diversification of 14-16 provision is currently taking place with the introduction of, for example, applied GCSEs and the implementation of opportunities arising from the Increased Flexibility Programme. The extent to which these new opportunities will be used to provide a coherent alternative vocational learning pathway for learners is open to question. Because of their recent introduction, quantitative data on these initiatives are sparse. Consequently, the main focus in this section is on those who remain in education and training after the end of compulsory schooling.

School/college and work-based routes

In the early 1980s, the UK was characterised by the OECD[80] as having a 'mixed' model of post-compulsory education and training. Such a model was intermediate between the 'dual system' of the German-speaking countries and the school-based[81] model of most other OECD countries. 'In the mixed model, schools represent the largest form of provision but participation is low; schools are complemented by a less formal sector of mainly work-based education.'[82]

The validity of this categorisation is confirmed by examining participation data from the 1970s. For example, in 1975/76[83], only one-quarter of 16-18 year-olds in the UK were attending either school or college full time. Sixty-five per cent were employed (with a proportion of these attending FE colleges on a part-time basis) with 8% unemployed. The collapse of the youth labour market in the late 1970s and early 1980s resulted in both an increase in unemployment and an increase in participation in post-compulsory education and training, primarily through youth training programmes. Thus, by 1984/85, 27% of 16-18 year-olds in the UK were participating in FTE, 42% were in employment, 18% were unemployed and

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Advanced GNVQ results, 2000/01. SDR 55/2001 [online]. At: www.wales.gov.uk/keypubstatisticsforwales/topicindex/topic-archive.htm#performance, accessed September 2004.

[80] OECD (1985) *Education and training after basic schooling.* Paris: OECD.

[81] School is used here in a wide sense to include both schools and various types of further education college.

[82] D. Raffe (1999) A sociological framework for analysing labour-market influences on education. In: W.M. Nijhof and J. Brandsma (eds.) *Bridging the skills gap between education and work*. Dordrecht: Kluwer Academic Publishers.

[83] At this time, data were presented by academic year, i.e. from September in one year to August the following year.

10% were in youth training programmes. This is the epitome of the mixed model:

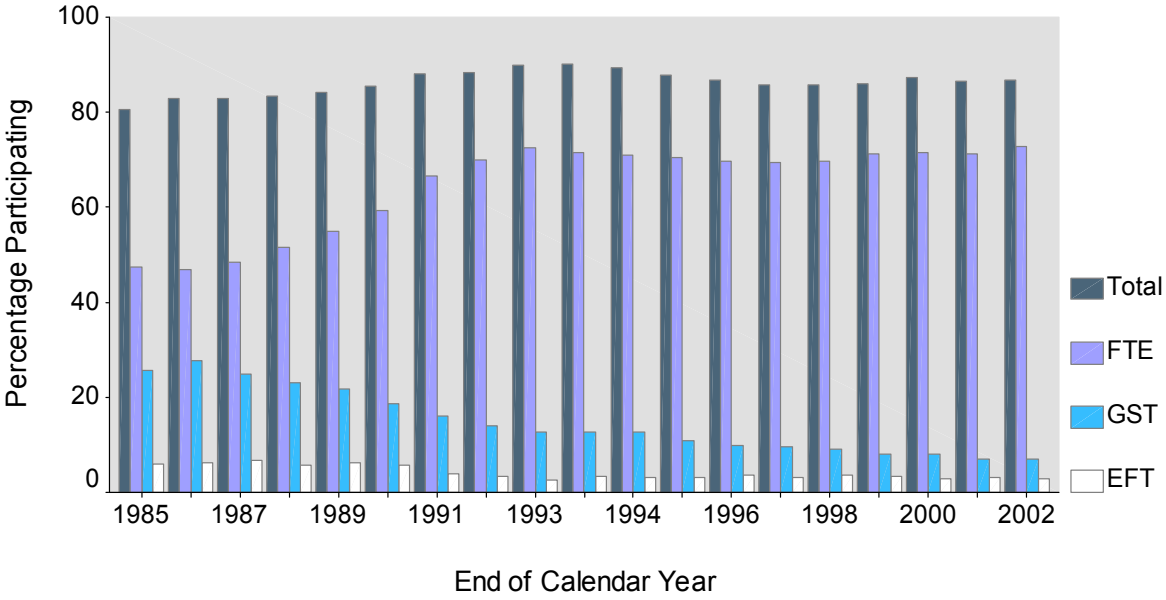
- low overall participation in post-compulsory education and training with most of that participation concentrated in schools and FE colleges;
- back-up from a more informal sector represented by GST, such as the Youth Training Scheme (YTS), and a declining apprenticeship system, which emphasised on-the-job learning supported by some day release to FE colleges.

However, underlying the overall increase in participation seen in the late 1980s and early 1990s was a large increase in the proportion of young people choosing to follow the FTE route. This was accompanied by a decline in participation in WBT routes sponsored by the government and employers (Figure 4). Consequently, the mode of participation in post-compulsory education and training changed radically as participation rates increased, causing the system to shift towards a more school-based model.

The provision made for GST[84] for 16 year-olds changed several times over the time period, for example from Youth Training to National Traineeships, the introduction of MAs and then FMAs and AMAs[85]. However, none of these policy reforms or revamps of provision has completely halted the decline in the proportion of 16 year-olds participating in GST, which fell from a quarter of 16 year-olds in 1984/85 to just under 7% in 2002/03. There is some evidence that this proportion is currently increasing, albeit slowly.

[84] Now called work-based learning for young people.
[85] Still called Modern Apprenticeships in Wales. In England, FMAs were renamed Apprenticeships and AMAs Advanced Apprenticeship in May 2004. In addition to apprenticeship programmes a variety of other WBL opportunities exist in England and Wales including Entry to Employment (E2E) and NVQ Learning in England, and Skill Build in Wales. Active labour market policies such as the New Deal for Young People also provide access to learning opportunities.

Figure 4: The percentage of 16 year-olds participating in different modes of education and training. Source: DfES (2002)[86]



The decline in participation in GST continued after the participation rate in FTE had levelled off in the mid-1990s. Consequently, the proportion of English 16 year-olds not participating in education or training[87] increased from 10% in 1992/93 to 14% by the end of the decade, declining to 13% by 2002/03. In part this reflects a tightening of the youth labour market as the economy recovered from recession.

The Welsh data indicate a similar pattern of participation. In 2001/02, 72% of 16 year-olds and 59% of 17 year-olds were in FTE, compared with 8% and 11% respectively in GST. In 2001/02, 26% of the Welsh 16-18 age cohort were not in education or training and of these just under half (12% of 16-18 year olds) were NEETs. This is slightly higher than the proportion of English 16-18 year-olds in the NEET group (10%).

Institutionally, England and Wales seem, therefore, to be moving towards a more school-based post-compulsory model. The work-based route still

[86] DfES (2002c) *Statistics of education: Education and training statistics for the United Kingdom*. London: HMSO.
[87] Note that this group is not the NEET group. The proportions given here include those in employment but not in receipt of state supported education and training, or EFT leading to a qualification.

exists, its virtues are still actively promoted by government policy in both countries, and it is clearly important as a means of participating for some 14-19 year-olds, especially those with lower levels of attainment at 16 and weaker learner identities. However, viewed in the long run, its popularity has declined considerably, whereas the popularity of participating via the full-time route increased sharply between 1986 and 1993 but has remained static for the last decade.

Mode of participation by pathway

At the end of compulsory schooling, learners are sorted in a predictable manner into different pathways largely on the basis of their GCSE results and other individual characteristics such as their gender, socio-economic status and ethnicity. Successive analyses of the YCS data indicate that the level of GCSE qualification attained at the end of KS4 is a main determinant of the educational career followed post-16: the higher the GCSE point score obtained, the greater the probability of following an academic pathway rather than a vocational one. The result is that vocational students are drawn predominantly from those with GCSE scores in the middle and bottom third of GCSE results (Table 5). Participation in vocational learning amongst those with GCSE scores in the top third of GCSE results has declined steadily since 1989[88].

Based on an analysis of the results for YCS Cohorts 10 and 11, Payne[89] concludes that:

> Other things being equal, the probability of taking vocational rather than academic qualifications was increased by poor GCSE results, being female, being white, truancy, unfavourable attitudes towards school, less well qualified or less skilled parents, living in social rented accommodation, and having attended in Year 11 a secondary modern school or comprehensive with no sixth form. Attending a selective or independent school increased the probability of taking academic rather than vocational qualifications. …. Other things being equal, the probability of taking vocational qualifications rather than none at all was increased by good GCSE results, belonging to a minority ethnic group, no history of truancy or exclusion from school, favourable attitudes to school, well qualified or more skilled parents. Living in owner occupied accommodation, and attending a non-selective school in Year 11.

[88] J. Payne (2003) *op cit.*
[89] J. Payne (2003) *ibid.*, p. 44.

Table 5: Main study aim in Year 12 by Year 11 GCSE results in 2002.

	Total points score in GCSEs		
	Top third %	**Middle third %**	**Bottom third %**
4+ AS/2+ A2s or old A Levels	69	12	1
Level 3 vocational qualifications	9	20	5
1-3 AS/1 A2 or old A Level	15	17	2
Level 2 vocational qualification	1	19	21
Level 1 vocational qualification	+	4	14
Vocational qualification, level not stated	1	3	6
Other academic qualifications only	+	3	4
Not studying for qualifications	5	21	46
No information	+	+	1
Total	*100*	*100*	*100*
Base N	*7,503*	*5,522*	*3,567*

Source: Payne[90] + Less than 0.5% but not zero

Decisions about which pathway to follow post-16 seem to be driven by the maxim that if you have the GCSEs needed to take AS/A Levels then you should do so. This does not mean that some young people with good GCSE results are not choosing to enter vocational pathways – in 2002, 20% of 16 year-olds in GST had five or more GCSEs at grade C or above[91]. They are, however, the exception rather than the rule. This resonates with the results of qualitative research which found that the majority of the students interviewed were looking to pursue an academic career post-16 in their current school if at all possible[92]. The evidence suggests, therefore, that in the **current** English and Welsh 14-19 education and training systems parity of esteem between vocational and academic pathways is a distant prospect.

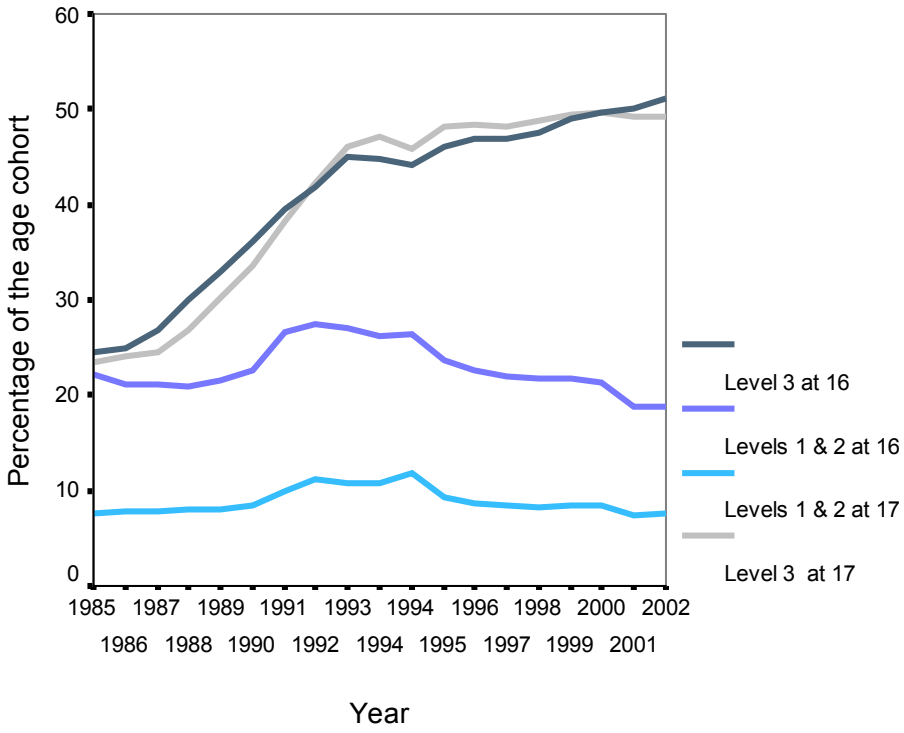
Mode of participation by level of qualification and qualification type

The long-term improvement in GCSE grades is reflected in the increasing proportion of 16-18 year-olds taking Level 3 courses, both academic and vocational, in England[93] (Figure 5). This is offset from the mid-1990s onwards by a steady decline in the proportion of learners taking Level 1

[90] J. Payne (2003) *ibid.,* p. 17.
[91] DfES (2003c) *op cit*.
[92] N. Foskett, M. Dyke and F. Maringe (2004) *The influence of the school in the decision to participate in learning post-16*. DfES RR538. Nottingham: DfES.
[93] No comparable data exist for Wales in the public domain.

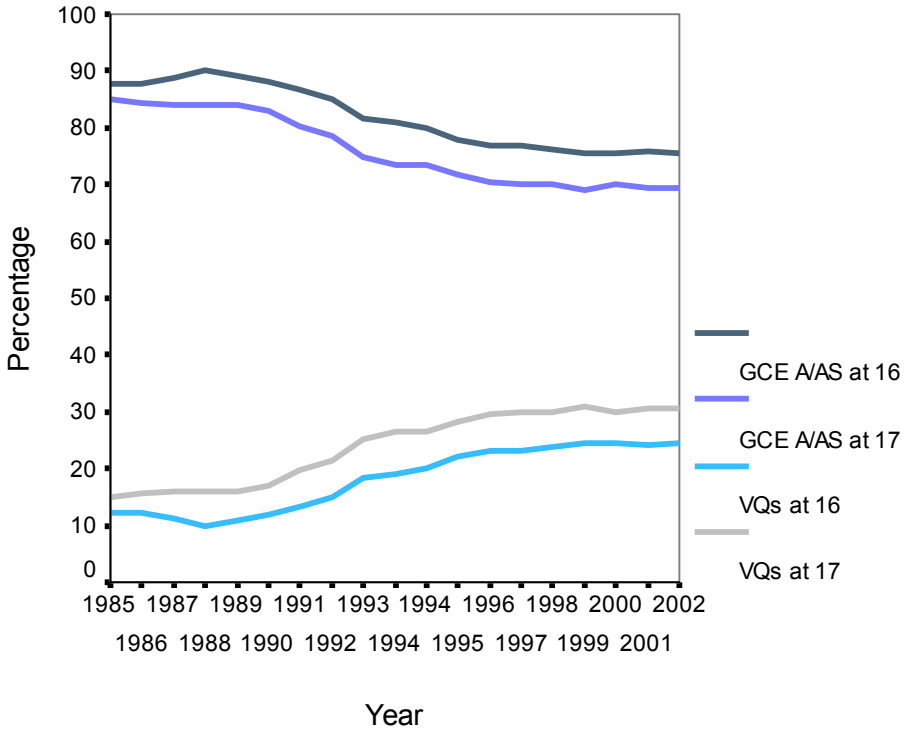
and 2 qualifications; this is symptomatic of both improving GCSE results and the inability of the system to attract lower attaining students at 16, as mentioned above.

Figure 5: Participation rates of 16 and 17 year-olds in Level 3 and Level 1 and 2 programmes: 1985-2002.



The number of young people studying for both A Levels and Level 3 vocational qualifications has increased in both England and Wales. In England, participation rates at Level 3 have increased in vocational programmes and declined in A/AS Levels (Figure 6), though these changes appear to have levelled off by the end of the century. The Curriculum 2000 reforms, representing a move towards a more linked system of qualifications, do not seem, therefore, to have increased the proportion of young people studying for vocational qualifications at Level 3. Currently, three-quarters of those in England working towards Level 3 qualifications are taking A/AS levels.

Figure 6: The proportion of 16 and 17 year-olds studying for Level 3 qualifications taking A/AS levels and vocational qualifications (VQs).



The increase in the absolute number of young people taking AS/A Levels is likely to be the result of both the increase in GCSE attainment and the increasing opportunity to study more applied A Levels, such as business and media studies. Also, the A Level system is extremely flexible, allowing young people to choose a wide variety of subject combinations. For example, the QCA estimates that the most popular combination of three A Levels – mathematics, biology and chemistry – is taken by only just over 4% of A Level candidates[94]. Long-term trends in participation in different AS/A Level subjects will be reported on next year but it is important to maintain a sense of balance. In 2003/03, the two most popular subjects at AS/A Level remained English and Mathematics.

The increase in the proportion of those taking vocational programmes at Level 3 is due in part to the increase in the number of learners taking Level 3 vocational qualifications in schools and sixth form colleges following the introduction of Advanced GNVQs in 1992. The introduction of these

[94] Tim Oates, personal communication.

qualifications, and their successor, AVCEs, enabled schools and sixth form colleges to provide Level 3 learning opportunities for those with weaker GCSE attainment at the end of compulsory schooling. Such learners are attractive to schools, since they are funded at a higher rate than Level 2 learners. Interestingly, participation rates in AVCEs in general FE and tertiary colleges in England have declined since 2000, but this is more than offset by an increase in the proportion of learners taking AS/A Levels and other vocational qualifications at Level 3. The nature of this substitution effect will be examined further in the second year of the Review.

At Level 2, a major change in the late 1980s and early 1990s was the substitution of vocational Level 1 and 2 programmes for academic GCSE retake provision. This switch was especially marked in schools between 1985 and 1995. In 1985, 6.4% of 16 year-old learners in schools were working towards GCSEs compared with 1.8% taking vocational courses at Levels 1 and 2. By 1995, the proportion of 16 year-olds taking GCSEs in schools had declined to 1.8%, whilst the proportion taking vocational alternatives had increased to 5.6%. From 1996 onwards, there was, however, a general decline in the proportion studying for Intermediate and Foundation GNVQs. This meant that by 2002 just 3.1% of 16 year-olds were taking Level 2 courses in school – 0.8% taking GCSEs and 2.3% taking the vocational alternatives. Thus, participation in Level 2 courses in schools by 16 year-olds declined by 60% between 1995 and 2001.

Rates of return analyses consistently find that individual returns to academic qualifications are higher than returns to vocational qualifications at the same level[95]. Thus, treating education and training as an investment, young people who can choose to do so are apparently acting rationally in opting to study for AS/A Levels rather than Level 3 vocational qualifications. This behaviour accords with econometric models[96] which demonstrate that increasing participation in post-compulsory FTE can be partially explained in terms of future returns to education. Young people

[95] See for example L. Dearden, S. McIntosh, M. Myck and A. Vignoles (2000) *The returns to academic and vocational qualifications.* London: Centre for the Economics of Education; S. McIntosh (2002) *op cit*.

[96] C.F. Pratten, D. Robertson and J.R. Tatch (1997) *A study of the factors affecting participation in post-compulsory full-time education and government supported training by 16-18 year olds in England and Wales*. Cambridge: University of Cambridge, Department of Applied Economics; P.C. Rice and D. McVicar (1996) *Participation in further education in England and Wales: An analysis of post-war trends*. London: Employment Department.

are acting as though they appreciate the higher future returns to academic as opposed to vocational qualifications. This is not to say that young people are acting as the rational economic agents posited by human capital theory. Decisions about staying on and taking certain types of qualifications rather than others could be susceptible to changes in fashion: that is it becomes the normal thing, if you have the requisite GCSEs, to stay on at school and take A Levels. Following the behaviour of your peers can lead to a bandwagon effect.

Given the difficulty of obtaining and assessing knowledge about future returns to current possible education and training investments, young people probably rely on noise traders[97], such as members of their peer group, their teachers and their careers advisers, to help them make such decisions[98]. Careers advice in Year 11 is associated with taking vocational qualifications rather than AS/A Levels but the causal link is far from clear[99]. Qualitative research indicates that teachers in schools see the AS/A Level route as the preferred option for their students, with the vocational, work-based route seen as an option primarily for the less able[100]. This was particularly marked if the school had a sixth form, and the research indicates that careers advice in such schools was not impartial. By contrast, those in schools without a sixth form, or in areas of lower socio-economic status, tended to be exposed to a wider range of careers advice about alternative options than were those in schools with sixth forms.

The research evidence also indicates that the ultimate educational aspiration of many young people at the beginning of post-compulsory education and training is to progress to higher education[101]. From the learners' perspective, such a progression route may be more secure if they opt for AS/A Levels than if they take the vocational alternative.

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[97] Noise traders are economic agents, such as stock brokers and estate agents, who infer information about investment returns from past movements of prices.
[98] C.F. Pratten, D. Robertson and J.R. Tatch (1997) *op cit*.
[99] J. Payne (2003) *op cit.*
[100] N. Foskett and J. Hemsley-Brown (2001) *Choosing futures: Young people's decision-making in education, training and career markets*. London: RoutledgeFalmer; N. Foskett, M. Dyke and F. Maringe (2004) *op cit*.
[101] E. Keep and K. Mayhew (2004) The economic and distributional implications of current policies on higher education. *Oxford Review of Economic Policy*, 20, 298–314; N. Foskett, M. Dyke and F. Maringe (2004) *op cit*; J. Payne (2003) *op cit.*

Mixing academic and vocational qualifications

The YCS reveals that about 10% of 16-17 year-olds were taking both academic and vocational qualifications[102] in 2002. Of these about one-half were studying for vocational and academic qualifications at Level 3 and about another quarter were combining GCSEs with studying for a Level 2 vocational qualification. About 8% of those taking Level 1 vocational qualifications were also studying for academic qualifications. In 2002/03 in England, only 5% of candidates who took two or more AS/A Levels also took a vocational qualification. Analysis of weighted data from UCAS/QCA surveys, undertaken after the introduction of the Curriculum 2000 reforms, also indicates that only a small proportion of 16 and 17 year-olds were mixing academic and vocational qualifications[103].

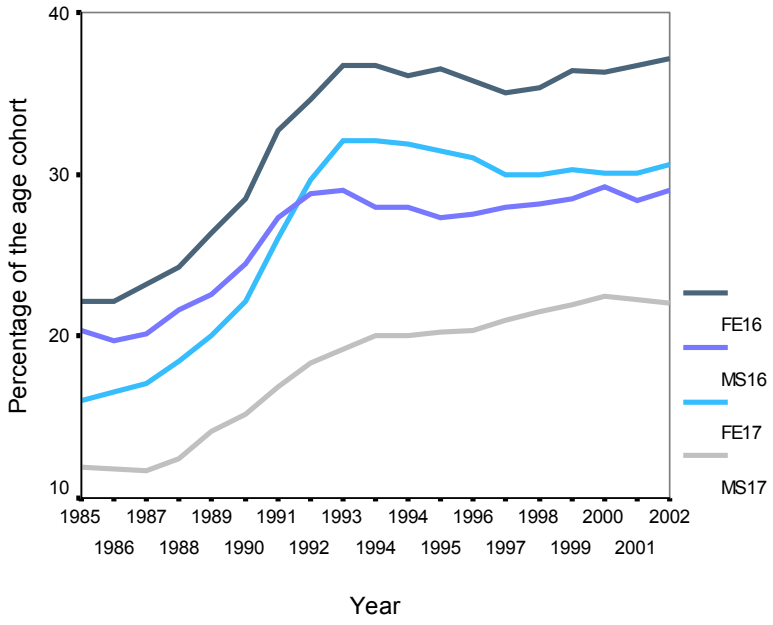
One of the theories behind the Curriculum 2000 reforms was that modularising both AS/A Levels and Level 3 vocational qualifications to form units of a similar size would encourage young people to mix academic and vocational study. This has not happened. At Level 3 the system remains dominated by young people pursuing academic qualifications and at Level 2 by a declining proportion on one-year vocational courses. This speaks of the failure of a 'linked' system of qualifications to deliver a significant increase in the proportion of young people studying for vocational qualifications.

Who teaches whom? The division of labour in the 16-19 education and training system

Historically FE sector colleges have been the main provider of 16-19 education (Figure 7) but a further disaggregation of the data shows that maintained schools are the major source of post-compulsory FTE for 16-18 year-olds. Thus, in 2002/03, 29% of 16 year-olds were in maintained school sixth forms, 6.3% were in independent schools, 9.6% were in sixth form colleges and 27% were in general FE, tertiary and specialist colleges.

[102] J. Payne (2003) *ibid.*
[103] Alison Matthews, personal communication.

Figure 7: Percentage of 16 and 17 year-olds in maintained schools (MS) and further education (FE) sector colleges: 1985-2002.



Amongst English 16-18 year-olds in FTE, there are major differences in qualification aims between educational institutions. In both maintained schools and sixth form colleges, those studying for A/AS Levels form the vast majority of the student body. FE and tertiary colleges continue to be the main providers of vocational learning opportunities at all levels. In FE colleges, 16 year-olds studying for vocational qualifications at Levels 1 and 2 predominate, with the proportion studying for Level 3 vocational qualifications also exceeding the proportion studying for A/AS Levels. In both schools and sixth form colleges, the proportion of 17 year-olds studying for any Level 1 or 2 qualification is very small (in 2002, 1.8% of 17 year-olds in maintained schools and 0.2% in sixth form colleges). By contrast, in further education colleges, 17 year-olds studying for Level 1 and 2 vocational qualifications remain the second largest group of learners after those pursuing Level 3 vocational qualifications.

A further difference between schools/sixth form colleges and FE colleges in England is in the type of Level 3 vocational qualification being pursued. In FE colleges, only 40% of Level 3 vocational learners are taking AVCEs compared with very nearly 100% in schools and sixth form colleges. Clearly, the introduction of these qualifications and their precursor,

Advanced GNVQs, has provided schools and sixth form colleges with the opportunity and incentive to recruit new Level 3 learners. Whether this has been at the expense of an FE college or a private training provider recruiting these learners to a stronger vocational learning[104] opportunity is uncertain.

Comparable data for Wales are not available in the public domain. However, in 2002/03, 60% of all GNVQs and AVCEs were awarded to learners in schools, whereas FE college students were awarded 65% of all vocationally related qualifications. This suggests that there is also a division of labour between schools and FE colleges in Wales.

In schools and sixth form colleges, there has been a significant increase in participation in Level 3 vocational courses, which is fully accounted for by an increase in the number of learners studying for Advanced GNVQs/AVCEs. By contrast, in FE colleges almost twice as many 16 year-olds are studying for other types of vocational qualifications at Level 3 than Advanced GNVQs/AVCEs. The same is the case at Level 1 and Level 2. Unfortunately, the administrative datasets do not provide a breakdown of this category of 'other vocational qualifications'[105].

The data are therefore consistent with a hypothesis that schools and sixth form colleges have become more selective in their intake, substituting Level 3 vocational learners for Level 1 and 2 learners post-16 as the size of the age cohort increased and as GCSE results improved. The result is that within the FTE system, general FE colleges are increasingly shouldering the main responsibility for learners who have performed less well at GCSE. In addition to weaker educational attainment, such learners have backgrounds and other characteristics which are not predictive of future educational success. As we will see, it is this group of learners who are at greatest risk of not progressing in the post-compulsory education and training system. There is an urgent need to collate the available information and research about the sort of pedagogical approaches and learning environments needed to help these young people to be successful.

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[104] G. Stanton (2004) *op cit.*

[105] J. Watson (2004) *op cit.* provides a preliminary analysis of the ISR, which provides some indication of the wide range of vocational qualifications and courses being pursued by learners on Level 1 and 2 provision in FE colleges. More work on this will be undertaken in Year 2 of the Review.

Differentiation within the vocational pathways[106]

The administrative data produced using the Individual Student Record (ISR) and ILR enable a closer examination of participation by 16-18 year-olds in a variety of FE and WBL provision[107] and provide insights over and above those derived from other administrative data and the YCS surveys[108].

In 2001/02, just over 900,000 learners under 19 were engaged in learning at all levels funded by the LSC. This represents about 17% of learners in LSC-funded provision. The largest single group (47.5%) were studying for Level 3 qualifications, both vocational and academic. Level 2 learners formed the next largest group (36.5%), followed by Level 1 learners (18.5%). By 2002/03, the total number of learners under 19 on LSC-funded provision had increased by almost 5% to 943,000. However, the main reason for this was a 26% increase in the numbers identified as studying at Level 1 in FE colleges resulting from the reclassification of basic skills qualifications following the Skills for Life reforms.

Combining the numbers for those on FE provision and WBL makes it clear that the majority of young people aged 16-18 who are learning through LSC-funded provision are involved in vocational programmes: in 2002/03 267,000 learners on LSC-funded provision were participating in Level 3 vocational provision, compared with 171,000 taking A/AS Levels. At Level 2, 312,000 learners were in LSC-funded vocational provision, compared with 19,000 taking GCSEs.

In 2001/02 and 2002/03, the majority of learners aged 16-19 funded by the LSC were in FE provision, rather than in WBL. The difference is especially marked at Level 3 and reflects the low participation rates in Advanced Apprenticeships amongst younger learners. By contrast, participation rates in WBL at Level 2 are almost equal to rates of participation in FE provision, suggesting that these alternative vocational

[106] The analysis in this section relies on data taken from English ISRs and ILRs. Thus, it only applies to LSC-funded WBL and college sector provision.
[107] At the time of writing Work Based Learning for Young People is the phrase used to cover GST and comprises Advanced Apprenticeships, Apprenticeships, NVQ Learning and Entry to Employment.
[108] This data have their limitations. Long-run time series data are not available: the ISR/ILR was introduced only in April 2001. In addition, the ISR/ILR is subject to continuous review and updating. Thus, the figures given for enrolments and starts in statistical first releases are provisional, changing over time as more information from colleges and from WBL providers becomes available.

opportunities are equally desirable. Participation in apprenticeships is discussed in more detail in the section below titled 'Apprenticeship programmes'.

Substitution of one type of qualification for another in the vocational pathway is common in FE and tertiary colleges. This presumably is the result of a search for alternatives that are both more attractive to learners and deemed more likely to raise their chances of success. For example, between 1999/2000 and 2002/03, the number of 16-19 year-olds studying for GNVQs and NVQs at Level 2 declined by 12% and 21% respectively. The fall in NVQ participation is in line with government policy encouraging the move to take NVQs within frameworks. This decline was however offset by a 32% increase in learners taking other vocational qualifications at Level 2. Further analysis of ILR/ISRs may help us to understand the nature of the other vocational qualifications that are increasing in popularity.

At Level 3, similar effects can be seen. Between 1999/2000 and 2002/03 the proportion of learners studying for Advanced GNVQs (AVCEs from 2000/2001) fell by 16%. The decrease in the numbers taking these Level 3 qualifications was particularly pronounced following the introduction of the Curriculum 2000 reforms. The number working towards NVQ Level 3 fell by 8%, though again this is in line with government policy. However, the decline in those working towards these Level 3 vocational qualifications was more than offset by an increase of 5.5% in those studying for AS/A Levels and a 24% increase in those working towards other vocational qualifications at Level 3. This shift probably reflects both an increase in GCSE attainment, which provides learners with the opportunity to take AS/A Levels, and a decline in the popularity of AVCEs associated with the changes in assessment methodology from the Advanced GNVQ[109].

Conclusion

Underneath the apparently static post-compulsory participation rates since the mid-1990s, a range of more subtle shifts in participation have taken place in both England and Wales. These have included:

- a shift to a more school-based model;

[109] A. Hodgson and K. Spours (2003) *Beyond A levels*. London: Kogan Page.

- an increase in participation at Level 3 with a concomitant decline in participation at Levels 1 and 2, which is symptomatic of the ongoing challenge of attracting less well qualified learners to participate;
- an increasing proportion of learners taking Level 3 vocational qualifications, particularly in schools and sixth form colleges following the introduction of Advanced GNVQs;
- a continuing division of labour between schools and sixth form colleges on the one hand and general FE and tertiary colleges on the other, a situation that is possibly being exacerbated by the apparent increase in selection at 16 by schools and sixth form colleges;
- the substitution of vocational qualifications within the National Qualifications Framework (NQF) for academic qualifications, vocationally related qualifications and other vocational qualifications in general FE and tertiary colleges.

All these trends are indicative of a system of education and training that is still in a state of considerable flux. On top of this, there is the long-term increase in success rates across almost all qualifications, which is examined next.

5. System outcomes: Retention, course completion and attainment in the full-time route

The participation rate measures only one dimension of system performance. In addition, we need to take account of retention, achievement and success rates as:

> Drop-out and survival rates provide some indication of the internal efficiency of education systems. Students leave educational programmes before their completion for many reasons – they realise that they have chosen the wrong subject or educational programme, they fail to meet the standards set by their educational institution, or they want to work before completing the programme. Nevertheless, high drop-out rates indicate that the education system is not meeting the needs of clients. Students may find the educational programmes do not meet their expectations or their needs in order to enter the labour market, or that the programmes require more time outside the labour market than they can justify.[110]

[110] OECD (2002) *Education at a glance*. Paris: OECD, p.9.

This is an important issue for the English and Welsh 14-19 system since, as we have already seen, learners leave the system as they age. Understanding the reasons for this will enable us to ascertain what can be done to prevent this happening if this is considered to be socially desirable.

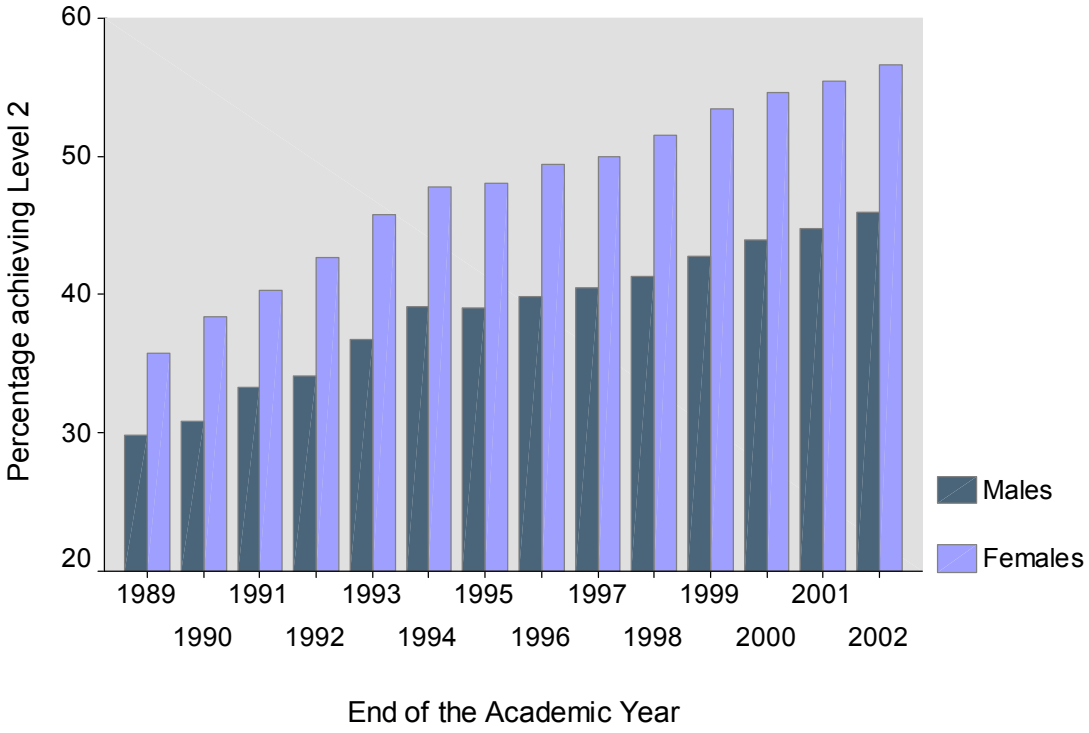
Achievement at the end of compulsory schooling

In England and Wales, the main examination taken by students at the minimum school leaving age is the GCSE[111]. Students may also take vocationally related courses such as the Intermediate GNVQ or the Foundation GNVQ[112]. Notwithstanding the existence of these vocationally related alternatives, the main emphasis in the last two years of compulsory education in England is currently still on general education. The extent to which this will change once applied and hybrid GCSEs become more widely available will need to be monitored.

There has been a steady increase in the proportion of English students achieving a Level 2 qualification (see footnotes 110 and 111 for a definition of Level 2) at the end of compulsory schooling from 32.8% in 1989 to 51.2% by 2002 (Figure 8). Young women's attainment of Level 2 continues to be higher than that of young men[113]. In Wales, there has been a similar rate of overall growth, from 46% in 1997/98 to 51% in 2002/03. As in England, in 2002/03 a greater proportion of young women (57%) than young men (45%) achieved a Level 2 qualification at the end of compulsory schooling[114].

[111] This is awarded at eight grades from A*-G. Typically, students will take eight or more GCSE examinations. Achieving five or more GCSE passes at grades A*-C is equivalent to achieving a Level 2 qualification, while achieving five GCSE passes at grades D-G equates to a Level 1 qualification.
[112] A pass in the Intermediate GNVQ is equivalent to four GCSE passes at grades A*-C, while a pass in the Foundation GNVQ equates to four GCSE passes at Grades D-G. Thus, a student could be considered to have achieved a Level 2 qualification either by passing five separate GCSEs at grades A*-C or by passing an Intermediate GNVQ and one GCSE at Grade A*-C.
[113] In 1989 35.8% of young women achieved Level 2, a value that had risen to 55.5% by 2002. The equivalent values for young men are 298.8% and 46%.
[114] Cyhoeddwyd gan (2003) *GCSE/GNVQ and GCE A, AS, AVCE and Advanced GNVQ results in Wales, 2002/03*. Datganiad Cyntaf 72/2003 [online]. At: www.wales.gov.uk/statistics, accessed March 2004.

Figure 8: The percentage of young men and women achieving a Level 2 qualification in England at the end of compulsory schooling: 1989-2002. Source: DfES (2002c)



In both countries there is, however, considerable variation between LEAs in the proportion of young people achieving a Level 2 qualification by the end of compulsory schooling. In Wales, this ranges from 63% of pupils in Powys and Ceredigion, to 43% in Blaenau Gwent and Merthyr Tydfil. Wrexham, with a rate of 42% is the lowest performing Welsh LEA[115]. English LEAs show a similar range of rates.

One reason why about half of young people are still failing to achieve a crucial Level 2 qualification at the end of compulsory schooling is that a smaller proportion is entered for five or more GCSE/GNVQs than for one GCSE/GNVQ. This means that about 10% to 12% of the age cohort cannot achieve a Level 2 qualification. There are also differences in the entry rate between young men and young women. Young men appear less likely to be entered for GCSE. The difference is less marked in entries for at least one GCSE but is evident in entries for at least five GCSEs with about 4% fewer young men being entered than young women. Young women are even

[115] Cyhoeddwyd gan (2003) *op cit.*

more likely (about 2% to 3% more likely) to be entered for five or more GCSEs if they attend independent schools. A question emerges, therefore, as to the relation between the differential entry rates and the differential attainment between young men and young women[116].

Whilst the proportion not achieving any qualifications by the end of compulsory schooling has fallen over time, and the percentage achieving at least five passes at grades A*-G at GCSE/GNVQ equivalent has increased, approximately 50% of young people in both England and Wales are not reaching the Level 2 standard by the end of compulsory schooling. The significance of this lies in the fact that the best predictor of continuing and successful FTE post-16 is achievement of the Level 2 standard by the end of compulsory schooling.

Achievement in post-compulsory education and training

In official statistics, the success rate is qualifications achieved as a percentage of those started. Success is the product of retention (courses completed as a percentage of those started) and achievement (qualifications achieved as a percentage of courses completed)[117], since it depends on two elements: remaining on a programme until its end and then achieving the qualification. Noticeably, both retention and achievement rates have increased across almost all types of programmes and qualifications in post-compulsory education. This is reflected in, for example, a 10% increase in school expectancy (expected years of schooling under current conditions) in the UK since 1995[118]. The main reason for increasing retention rates in the FTE route post-16 is the increasing proportion of learners enrolling on Level 3 provision. Achievement rates are also rising but the reasons for this are the subject of much dispute, ranging from the examinations becoming easier to teachers becoming more effective at preparing the young people for assessment. There is evidence that achievement rates on the AVCEs were lower than on the Advanced

[116] See, for example, DfES (2004b) *GCSE/GNVQ results and Key Stage 3 to GCSE/GNVQ value added measures for young people in England 2002/03 (final).* SFR 23/2004 [online]. At: www.dfes.gov.uk.rsgateway/DB/SFR/, accessed 27 September 2004.
[117] DfES (2004a) *Further education and work-based learning for young people – learner outcomes in England 2002/03.* ILR/SFR 04 [online]. At: www.dfes.gov.uk/rsgateway/DB/SFR/, accessed June 2004.
[118] OECD (2002) *op cit*.

GNVQs they replaced[119]. However, overall achievement rates on AVCEs are now increasing (Table 6) and this may be due to teachers becoming more used to the assessment methodology and an increasing selection of recruits.

Table 6: Overall achievement rates (as percentages of all candidates who sat the exam) in A Level, double award AVCE and single award AVCE: 2003–2004.

Year	A Level			Double Award AVCE	Single Award AVCE
	England	Wales	UK	UK	UK
2003	95.3	96.4	95.4	85.7	83.3
2004	95.9	96.5	96.0	89.2	85.6

Source: Joint Council for Qualifications[120]

Considerable variation exists, however, in retention and achievement rates between levels and types of qualification and between institutions. In particular, the evidence suggests that achievement rates are lower on full-time vocational courses than on academic programmes. This is primarily the result of lower retention rates on vocational courses.

The characteristics associated with initial participation in post-compulsory education and training are also strongly associated with continuing participation at 17 or 18. Thus, learners are more likely to leave the system if they have low educational attainment at the end of compulsory schooling, are male, are white, have less well qualified and less skilled parents, and have poorer attitudes towards school. These are the characteristics of learners predominantly recruited to vocational programmes at 16. Consequently, it is unsurprising to find that retention and achievement in the vocational pathways are lower than in the academic one.

Detailed data on success, retention and achievement rates are available for the FE sector[121] and from the YCS[122]. Both sets of data indicate that

[119] A. Hodgson and K. Spours (2003) *op cit*.
[120] www.jcgq.org.uk/index2.asp
[121] LSC (2003a) *Further education and work-based learning for young people – learner outcomes in England 2001/02*. Coventry: LSC; LSC (2004b) *Successful participation for all: Widening adult participation*. Coventry: LSC.

success rates for Level 3 vocational programmes are consistently lower than success rates for A/AS Level programmes[123]. The LSC reports a success rate of 75% for A/AS Levels in the FE sector, compared with an average success rate of 52% on Level 3 vocational programmes taken by 16-19 year-olds[124]. Furthermore, success rates on A/AS Level programmes increased by 20% between 1999/2000 and 2002/03 as a result of an increase in both retention and achievement rates. This is almost certainly due to the changes introduced as part of the Curriculum 2000 reforms.

By contrast, success rates on AVCEs in 2001/02 were 5% lower than on the Advanced GNVQs in 1999/2000. This was primarily the result of a decline in retention rates. However, this trend was reversed by 2002/03, with a 9% increase in success rates on AVCEs between 2001/02 and 2002/03 following an increase in both retention and achievement rates. This may be due both to a greater degree of selection of learners (overall participation in AVCEs has declined) and to teachers becoming more used to the changed assessment methodology and demands of the AVCE.

By 2002/03[125] achievement rates on full-time Level 3 vocational courses, such as AVCEs, were similar to those on A Level courses[126]. (The achievement rate on NVQ Level 3 programmes is improving but is still 7% lower than on AVCEs.) The major difference in success rates between A/AS Levels and AVCEs is therefore the result of the lower retention rate on the vocational programme: in 2002/03 this was 20% lower.

Success rates on Level 1 and 2 vocational courses in the FE sector are slightly higher than those on Level 3 vocational courses. For example, in 2002/03, success rates on Intermediate GNVQ and Foundation GNVQ programmes were 61% and 60% respectively[127].

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[122] For example: DfES (2003d) *Youth Cohort Study: Activities and experiences of 17 year olds: England and Wales*. SFR 35/2003 [online]. At: www.dfes.gov.uk/rsgateway/DB/SFR/, accessed 27 September 2004; J. Payne (2003) *op cit.*

[123] However, a degree of care needs to be exercised when interpreting the administrative data derived from ISRs and ILRs. What is recorded is enrolment on courses, not head counts of individual learners. Thus participation in a vocational programme leading to a single qualification will be counted differently from participation in an academic programme that leads to three separate A Levels. Thus, the statistics on retention and achievement rates in this section refer to success at qualification level, not success at an individual level.

[124] DfES (2004a) *op cit.*

[125] DfES (2004a) *ibid.*

[126] For A/AS Levels 85%, for AVCE 80% and for NVQ 73%.

[127] LSC (2003b) *Further education and work based learning for young people – learner outcomes in England 2001/02.* Coventry: LSC.

The lower success rates on vocational programmes are also confirmed by analyses of the YCS data[128]. About 50% of those who start a Level 3 vocational programme have obtained the qualification after two years of study. Thirty per cent have obtained or are continuing to study for a vocational qualification at a lower level, and 16% either have left or have obtained no qualification. At Level 2, 56% achieve a vocational qualification after one year and 70% after two years of study. About 12% leave at the end of the first year without obtaining the qualification.

This evidence suggests, therefore, that the lower retention rates on the vocational programmes should not be equated solely with dropping out. Many learners who give up a vocational qualification seem to switch to learning at a lower level. Whether this should be viewed as an inefficient use of resources or as a healthy process of young people finding what is right for them is a matter for debate.

Progression in the full-time vocational route

A policy aspiration for young people who do not achieve a Level 2 qualification by the end of compulsory schooling is that they will (a) have done so by the end of their first or second post compulsory year and (b) then progress to Level 3 achievement. Success rates on Level 2 provision in the post-compulsory education and training system are currently about 60% but the evidence suggests that there is only limited progression to and achievement on subsequent Level 3 programmes. We are unsure of the reasons for this.

Analysis of YCS Cohort 10 data also provides information about progression from Level 1 and Level 2 vocational programmes. By age 18-19 virtually none of those taking Level 3 qualifications had progressed to Level 4 vocational qualifications[129]. Amongst YCS Cohort 10, 56% of those

[128] J. Payne (2001b) *Student success rates in post-16 qualifications: Data from the England and Wales Youth Cohort Study*. DfEE RR272. Nottingham: DfEE; J. Payne (2003) *op cit.*

[129] However, many students taking vocational courses aspire to extend their learning careers into higher education rather than entering the labour market once they have completed their courses. See A. Wolf (1997) The consumer perspective: Tripartism as a response to market pressures. In: G. Stanton and W. Richardson (eds.) *Qualifications for the future: A study of tripartite and other divisions in post-16 education and training*. London: FEDA; J. Payne (2001a) *Patterns of participation in full-time education after 16: An analysis of the England and Wales Youth Cohort Study*. DfEE RR307. Nottingham: DfEE; J. Payne (2003) *op cit*.

studying for a Level 1 qualification at age 16-17 had moved on to a higher level by the second post-compulsory year, the majority to Level 2 but 13% to Level 3. By the third post-compulsory year, 49% were still studying for a higher level vocational qualification. However, the key progression pathway from Level 2 to Level 3 vocational qualifications does not appear to be particularly effective. For example, amongst those studying for a Level 2 vocational qualification in the first year of post-compulsory education, 41% progressed to Level 3 in the second post-compulsory year. However, only 28% had either gained the Level 3 qualification or were still studying for it by the third year of post-compulsory education. The reasons for this low progression rate are unclear[130].

Conclusion

Retention, achievement and success rates are increasing. Consequently, even though participation rates have remained static, overall system performance, as measured by success in gaining qualifications, is improving. This is reflected in the increase in the proportion of the workforce holding qualifications at Levels 2 and 3, and an improving qualification supply relative to some OECD countries[131].

What causes the lower success rates on vocational courses is poorly understood, though it is likely to be the result of a complex amalgam of personal, curricular and institutional factors. In part the lower success rates on vocational courses may be an artefact of the design of the qualifications in the different pathways and the way that data are collected. We know from the YCS data that in the first six months of post-compulsory education, the qualifications with the highest drop-out rates are AS/A Levels. However, young people tend to drop one of these qualifications and continue studying for the two or three other ones that make up their programme of study. By contrast those who give up studying for a vocational qualification at this stage drop their whole learning programme. The consequence is demonstrated with reference to YCS Cohort 11: 70% of those who drop an A Level subject in the first half of Year 12 continue

[130] J. Payne (2003) *op cit*.
[131] H. Steedman, S. McIntosh and A. Green (2004) *op cit.*

studying for A Levels, whilst 65% of those who drop a Level 3 vocational qualification at this stage give up studying for qualifications all together[132].

The YCS indicates that success rates on vocational courses are higher in FE colleges than in schools. This may be linked to the more marginal nature of these programmes and their students in schools, and possibly to weaker delivery. Groups with an increased risk of giving up a vocational qualification early in their post-compulsory learning careers included those studying for lower-level vocational qualifications, women, those with a history of truancy or unfavourable attitudes towards school, young people from lone parent families and white young people. Furthermore, and perhaps most surprisingly, analyses using the YCS provide no evidence of any association between prior educational attainment, as measured by GCSE scores, and success rates on vocational programmes. A study by the Further Education Development Agency (FEDA)[133] did find some evidence of a link between retention on GNVQ programmes within schools and colleges and GCSE scores, but this did not explain the considerable variation in retention rates between centres. Receiving careers advice in Year 11 also appears to have no effect on the risk of giving up a vocational qualification[134].

Martinez[135] found that there were apparently no substantial differences between students who remained on vocational programmes and those who dropped out in terms of a range of demographic factors or in terms of motivation. Unwin et al.[136], drawing on the work of Martinez and Hughes and Turner[137], suggest that factors such as the suitability of a course, its intrinsic interest, timetabling, the overall quality of teaching, and excessive and poorly organised assessment may have an effect on retention rates. Other research also reports that assignment deadlines and coursework loads are important in decisions about whether to stay on[138]. A large-scale

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[132] J. Payne (2003) *op cit*.
[133] FEDA (1998) *Non-completion of GNVQs*. London: FEDA.
[134] J. Payne (2001b) *op cit.*; J. Payne (2003) *op cit.*; Ofsted (2004) *Vocational A Levels: The first two years*. London: Ofsted.
[135] P. Martinez (2001) *Improving student retention and achievement: What do we know and what do we need to find out?* London: LSDA.
[136] L. Unwin, A. Fuller, J. Turbin and M. Young (2004) *What determines the impact of vocational qualifications? A literature review*. Nottingham: DfES.
[137] M. Hughes and P. Turner (eds.) (2002) *Mapping research into the delivery of work-based learning*. London: LSDA.
[138] M. Bloomer and P. Hodkinson (1999) *op cit;* P. Martinez and F. Munday (1998) *9000 voices: Student persistence and drop-out in further education*. London: FEDA.

survey of 3,391 GNVQ students confirms the importance of the workload required to complete portfolios as a major reason for unsuccessful course completion, especially amongst the less able and least motivated[139]. A review of the relationship between assessment and motivation to learn in the learning and skills sector also argues that inappropriate summative assessment procedures may be a reason for poor completion rates[140]. Set against this is a series of studies which all report that GNVQ students preferred coursework-based assessment to examinations[141]. Nonetheless, the evidence does suggest that the burden of coursework-based assessment may be a cause of learners failing to complete their vocational programmes and attain the qualification.

In the wider educational literature, there is considerable support for the idea that positive and consistent feedback and formative assessment aid the formation of a positive learner identity and foster success[142]. However, Ecclestone[143] speaks of the extreme instrumentalism that assessment practices on GNVQ courses foster with the result that formative feedback processes became little more than a 'pre-emptive extension of summative checking, tracking and evidencing … an auditing approach to feedback'. This can be linked to the risk averse culture in institutions supplying vocational education and training produced by the linking of summative assessment to accountability systems.

Good relationships with teachers that rebuild the confidence of previously unsuccessful learners have been identified as a factor promoting successful completion of Foundation GNVQ programmes[144]. Here the context of a less demanding course and 'aiming low'[145] may be beneficial to less confident learners. However, meeting public policy requirements would then involve

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[139] P. Davies (1998) Completing GNVQs. *College Research,* 1 (3), 27–31.
[140] H. Torrance and J. Coultas (2004) *Do summative assessment and testing have a positive or negative effect on post-16 learners' motivation for learning in the learning and skills sector?* London: LSDA.
[141] J. Solomon (1996) Student learning on a GNVQ science course: motivation and self-esteem. *School Science Review,* 77(80), 7–44; I. Abbott (1997) Why do we have to do key skills? Student views about General National Vocational Qualifications. *Journal of Vocational Education and Training*, 49 (4), 617–630; M. Bloomer (1998) 'They tell you what to do and then they let you get on with it': the illusion of progressivism in the GNVQ. *Journal of Education and Work*, 11 (2), 167–186.
[142] See, for example, P. Black and D. Wiliam (1998) Assessment and classroom learning. *Assessment in Education*, 5 (1), 7–74; Torrance and Coultas (2004) *op cit.* for reviews.
[143] K. Ecclestone (2002) *Learning autonomy in post-16 education: The politics and practice of formative assessment*. London; New York: RoutledgeFalmer, p. 167.
[144] A-M. Bathmaker (2001) 'It's the perfect education': lifelong learning and the experience of Foundation-level GNVQ students. *Journal of Vocational Education and Training*, 53 (1), 81–100.
[145] K. Ecclestone (2002) *op cit*.

coupling the positive learning identity fostered through participation in such Level 1 provision to progression and successful completion of Level 2 and, ideally, Level 3 programmes. The evidence reviewed above suggests that this is happening to only a very limited extent.

Motivation would seem a priori to be an important factor in explaining differential retention and achievement rates on vocational programmes. For example, a study that emphasised the importance of the second chance learning opportunities being offered by Intermediate GNVQ courses, identified commitment and motivation to succeed as the key ingredient for success[146]. However, using motivation as a variable to explain why some young people drop out merely attributes 'that which cannot be explained to the internal character trait motivation, rather than exploring what engages and sustains motivation'[147].

Non-completion is the result of a complex decision-making process that may be linked to the employment status of learners[148] and the process of dropping out, which must be viewed against the wider circumstances of the young person. For many, leaving is a positive choice at that particular juncture in their lives[149]. Hopefully, such young people will have the opportunity to re-engage with learning later in their lives. However, the data do not currently exist to evaluate the extent to which this occurs, though the uptake of access courses suggests it may happen, at least for some.

Overall, then, the literature provides, at best, some hints at the factors that might be responsible for the lower retention and achievement rates on vocational courses, but the evidence is very sparse. The findings suggest that attention needs to be paid to issues of learning environment design, course delivery, pastoral support and assessment procedures if retention and achievement rates on vocational courses are to be improved. However, we know very little about the key design features and principles that should

[146] H. Steedman and P. Rudd (1998) GNVQ – a second chance for success? *Journal of Further and Higher Education*, 22 (3), 307–314.
[147] H. Torrance and J. Coultas (2004) *op cit*, 22.
[148] G. Adamson and G. McAleavey (2000) Withdrawal from vocational courses in colleges of further and higher education in Northern Ireland. *Journal of Vocational Education and Training*, 52 (3), 535–552.
[149] M. Bloomer and P. Hodkinson (1999) *op cit*.

underpin such innovations[150]. Clearly this is an area where much more research is needed to develop more efficient and effective vocational learning programmes.

6. Apprenticeship programmes

This section considers rates of participation in and outcomes of apprenticeship programmes[151]. Apprenticeship, as a mode of participation, is currently available to young people between the ages of 16 and 25 and thus extends beyond the 14-19 education and training system. However, it is worth considering participation across the whole of the 16-25 age range as it dispels some myths about participation by younger learners in the age group. This section is divided into three parts. The first examines participation rates disaggregated by age, gender and sector. The second examines achievement rates and the final section discusses the overall performance of the apprenticeship system.

In terms of making judgements about participation in apprenticeship, it is important to visualise the stock of apprentices as representing a balance between the inflow of starters and the outflow of completers and non-completers. The size of the stock, measured as the average number in learning, can be increasing as the inflow, measured as the average number of new starts, is decreasing, because it takes time to complete the apprenticeship programme.

Participation in Apprenticeship programmes

The size of the stock of those in apprenticeship programmes is increasing. In 1999/2000, there were 195,400 MAs in learning in England. This had increased by almost 15% to 224,300 by 2002/03[152]. However, this growth was confined to MAs at Level 2, where the average number of those in

[150] See G. Hayward, S.-A. Oh, C. Stasz and S. Wright (2004) *Outcomes and processes in vocational learning: A review of the literature.* London: LSDA for a more detailed discussion.
[151] Apprenticeship is only one type of WBL undertaken by young people in England and Wales. However, given its policy importance and the relative lack of data about other programmes we have focused on it this year. Other work-based programmes will be explored further next year.
[152] The values given here are year averages. LSC (2003b) *Further education and work based learning for young people – learner numbers in England 2002/03*. ILR/SFR02 [online]. At: www.lsc.gov.uk, accessed October 2004.

learning increased by 77% over this period. By contrast, the stock of AMAs decreased by 17%. Starts on AMAs decreased by 38% from 76,800 to 47,300 between 1999/2000 and 2002/03. By contrast, starts on MAs at Level 2 increased by 31% from 88,300 to 115,700 over the same period.

Table 7 provides information on starts on MAs at Level 2 in the ten largest sector frameworks in 2002/03. Some of the most popular Apprenticeships at Level 2 are in service sectors, such as retailing, customer service and health and social care, with no history of apprenticeship. In such sectors, a large proportion of recruits are over the age of 19. In sectors such as motor industry (which includes motor vehicle mechanics), engineering, construction and hairdressing, which have a long history of apprenticeship, the majority of recruits are aged 16 and 17. In most sectors over three-quarters of Apprentices are employed, the exceptions being business administration and early years care and education. However, the original policy objective to have all MAs employed has not been fulfilled for a significant proportion of those on Apprenticeships.

Table 7: Apprenticeship (Level 2) starts: England. (Largest ten sectors by starts, apprentice age at start, gender and employment status)

Sector Framework	Total starts	16 %	17 %	18 %	19-24 %	Female %	Employed at start %
Hospitality	12,710	10.6	15.3	18.7	55.3	52.1	97.5
Business administration	11,066	28.0	29.2	17.1	25.4	76.2	61.3
Hairdressing	8,935	52	27.1	9.9	9.9	92.8	90.6
Retailing	8,863	15.5	20.8	18.0	45.4	66.8	87.4
Customer service	8,284	6.2	12.6	16.1	64.6	67.8	94.2
Construction	6,350	40.1	30.2	12.7	16.8	0.8	88.5
Health & social care	5,056	6.5	11.6	18.4	63.0	90.1	90.5
Engineering manufacture	4,267	20.8	30.2	17.4	31.4	5.2	83.7
Early years care & education	4,033	35	30	14.9	19.9	97	45.7
Motor industry	3,393	49.6	27.9	11.0	11.0	1.4	77
Total – all England starts	90,401	25	22.1	15.6	37	53.2	83.3

Source: Fuller (2004) based on LSC, Table 1, ILR 2002-2003, June 2003

Table 8 provides the same information for the 12 most popular AMA sectors. Overall, the number of starts on AMAs is less than half the total starts on MAs. The more popular sector frameworks are now those where there is a tradition of apprenticeship, such as engineering manufacture and

the motor industry. In these sectors the number of AMA starts is the same as or greater than the number of FMA starts. Further, a higher proportion of 16 and 17 year-olds start in these sectors than in the service sectors, the exception being the travel sector. The high level of employment achieved by AMAs is in line with the original policy objective.

There is also a continuing stereotypical gender division amongst apprentices across the various sectors (Tables 7 and 8). The YCS data indicate that male apprentices make up 70% of Apprentices in hand craft occupations and three-quarters of females are in either personal services or clerical and secretarial occupations[153].

Table 8: Advanced Modern Apprenticeship starts: England. (Largest 12 sectors by starts, apprentice age at start, gender and employment status)

Sector Framework	Total starts	16 %	17 %	18 %	19-24 %	Female %	Employed at start %
Engineering manufacture	4,746	31.6	23.1	19.3	25.7	2.7	95.5
Motor industry	4,572	44.3	24.5	15.7	14.9	1.3	97.1
Customer service	3,224	2.3	4.6	11.2	81.9	68.6	98.2
Electrical installation electrotechnical	3,146	39	26.2	15.8	18.9	0.4	95.6
Hospitality	2,913	3.5	6.7	8.9	81	48.8	98.7
Early years care & education	2,569	4.6	14.3	20.4	60.1	97.5	90.4
Business administration	2,441	6.7	11.3	17.9	63.3	79.6	93.6
Health & social care	2,079	4.3	5.5	9.8	80	88	97.2
Travel	1,505	26.6	22.9	20.2	30	90	79.4
Hairdressing	1,432	16.2	12.6	20.9	50.1	93.6	97.2
Retailing	1,327	0.5	3.6	10.7	85.1	63.9	99
Construction	1,247	26.1	20.8	18.4	34.8	2.1	92.1
Total – all England starts	39,876	18.3	15.7	16	49.9	40.2	95.2

Source: Fuller (2004) based on LSC, Table 1, ILR 2002-2003, June 2003

The data in Table 8 indicate a continuing demand for craft and technician level skills certified by Level 3 qualifications in the manufacturing sectors[154]. There is also the continuing pattern of recruiting new young

[153] J. Payne (2003) *op cit*.
[154] This is supported by the findings of the LSC *Skills in England 2003* survey, which identifies a lack of traditional craft skills as the major cause of skills shortage vacancies reported by employers. Also see LSC (2004a) *National employers skills survey 2003: Key findings*. Coventry: LSC.

entrants to Apprenticeships in these sectors. However, in the service sectors, existing employees tend to be recruited to the schemes rather than new entrants[155]. Consequently, Apprenticeship is being used, at least to some extent, in these sectors 'as a vehicle for subsidising the development of existing workforces with public funds'[156].

Achievement on Apprenticeship programmes[157]

Overall completion rates on Apprenticeship frameworks are improving (Table 8). However, there remains considerable variation between sectors and between levels (Tables 9 and 10). In 2002/03, the last year for which we have complete data:

- across all AMAs, under half of learners achieved either the full framework or the Level 3 NVQ;
- across all FMAs, more than six out of ten apprentices left without achieving any qualifications at all, an outcome that is lower than in the FMA's predecessor, the YTS.

Table 9 shows that in only three sectors, engineering manufacture, hairdressing and motor industry, are learners staying on the Apprenticeship (Level 2) programme for more than one year (the minimum stay recommended by the Cassels Report[158]). However, there is no significant correlation between the length of stay on a Level 2 Apprenticeship and successfully completing the framework or the NVQ. In terms of employment status on leaving, the early years care and education sector fares worst, with over half of leavers being unemployed on leaving the programme. In two sectors, health and social care, and early years care and education, about one in five participants achieve the NVQ but not the full framework. This may reflect the regulatory push in these sectors to develop a fully qualified workforce by putting existing workers as well as

[155] T. Anderson and H. Metcalf (2003) *Modern Apprenticeship employers: Evaluation study.* DfES RR417. Nottingham: DfES; Fuller (2004) *op cit*.
[156] Fuller (2004) *op cit*. p. 8.
[157] Given the different ways that the numbers are calculated, it is not possible to compare retention, achievement and overall completion rates on apprenticeship programmes directly with those in LSC-funded full-time FE provision.
[158] DfES/LSC (2001) *op cit*.

new recruits through NVQ programmes, with Apprenticeships being used as a funding vehicle to achieve this goal[159].

Table 10 provides information for the ten most popular Advanced Apprenticeship sectors. Overall nearly six out of ten are not achieving the key component of their programme, an NVQ Level 3. However, this does represent an increase in the proportion of young people achieving a Level 3 qualification compared with the YTS (16%). Of the sectors listed, only two have success rates of over 50%: engineering manufacture and travel. Moreover, the majority of the successful leavers from these sectors complete the full framework. Only two sectors, engineering manufacture and electrical installation, show an average length of stay of over two years (the minimum length of stay recommended by the Cassels report). Two of the sectors, retailing and hospitality, have particularly low success rates with only 12% and 15% respectively completing the full framework. Interestingly, the travel sector has the shortest average length of stay and the highest success rate. One reason for this may be that entrants to the sector have higher levels of prior educational achievement than for many of the other sectors[160].

[159] Fuller (2004) *op cit*.
[160] Fuller (2004) *op cit*.

Table 9: Success rates on MA programmes by age group: 2001/02 to 2003/04.

Programme type	Age at start of learning	2001/02				2002/03				2003/04 (periods 1 to 9)			
		Frame-work (%)	NVQ only (y%)	Frame-work or NVQ (x%+y%)	Total leavers Nos.	Frame-work (x%)	NVQ only (y%)	Frame-work or NVQ (x%+y%)	Total leavers Nos.	Frame-work (x%)	NVQ only (y%)	Frame-work or NVQ (x%+y%)	Total Leavers Nos.
AMA	16-18	31	10	41	33,500	38	10	49	29,300	35	14	48	17,300
	19+	21	10	31	31,800	27	12	39	31,300	27	15	43	20,200
	All	26	10	36	65,400	32	11	44	60,600	31	14	45	37,500
FMA	16-18	24	11	35	60,300	25	13	38	65,600	28	12	40	46,600
	19+	19	12	31	31,400	21	14	35	39,300	26	14	40	29,300
	All	22	11	34	91,800	24	13	37	104,900	27	13	40	75,900

Source: Learning and Skills Council: Work Based Learning Success Rates[161]

Table 10: Foundation Modern Apprenticeship: Leavers, employment on leaving, length of stay and attainment: 2002/03.

Sector framework	Total leavers	Employed on leaving %	Average actual length of stay in weeks	Attainment of framework %	Attainment of NVQ only %	Attainment of framework or NVQ %
Hospitality	9,465	82.4	37	18	14	32
Business administration	9,604	62.4	46	31	11	42
Hairdressing	5,639	79.4	53	28	8	36
Retailing	8,394	71.1	39	20	11	31
Customer Service	6,556	80.9	40	23	11	34
Construction	3,492	76.1	43	12	13	25
Health & social care	3,981	83	46	15	17	32
Engineering manufacture	2,265	80	59	27	14	41
Early years care & education	2,541	47.6	43	19	21	41
Motor industry	2,023	62.3	53	14	9	22

Source: Fuller (2004) based on LSC, Table 2, ILR 2002-2003, June 2003

[161] www.lsc.gov.uk/National/Documents/SubjectListing/SectorData/BenchmarkingData/default.htm, accessed September 2004)

Table 11: Advanced Modern Apprenticeship: Leavers, employment, length of stay and attainment: 2002/03.

Sector framework	Total leavers	Employed on leaving %	Average actual length of stay in weeks	Attain-ment of frame-work %	Attain-ment of NVQ only %	Attain-ment of frame-work or NVQ %
Engineering manufacture	4,317	90	140	52	7	59
Motor industry	3,639	91.9	94	40	6	46
Customer service	3,470	85	55	24	12	35
Electrical installation & electrotechnical	1,792	92.5	145	44	4	48
Hospitality	3,371	88.2	60	15	5	20
Early years care & education	2,185	85.7	71	28	16	44
Business administration	3,745	89.9	77	33	16	49
Health & social care	2,263	90.8	66	24	17	40
Travel	1,306	99.3	51	55	6	61
Hairdressing	2,189	92.4	76	29	8	38
Retailing	1,546	85.3	60	12	7	20
Construction	1,933	92.5	59	25	19	44

Source: Fuller (2004) based on LSC, Table 2, ILR 2002-2003, August 2003

The most recent data indicate an overall improvement in success rates for MAs, with 2% more FMAs completing the full framework in 2002/03 than in 2001/02, and 6% more AMAs[162]. Overall this means that in 2002/03 about 5,000 more people completed the full FMA framework and 2,500 the full AMA framework[163] than in 2001/02. However, there was considerable variation across sectors. For example, total NVQ success rates increased by 9% on AMAs in the business administration sector and by 12% in hairdressing and beauty therapy. However, in construction successful completion of AMA frameworks fell by 7%, whilst completion of the NVQ Level 3 increased by 6%.

The reasons for the low success rates on apprenticeships, as with the full-time vocational programmes, are poorly understood. A possible explanation for the low success rates is that too many young people are starting an apprenticeship without the prior attainment needed to complete

[162] LSC (2004b) *op cit.*
[163] Actual figures for 2001/02 are for FMAs 20,200 and for AMAs 17,000. For 2002/03 the equivalent figures are 25,250 and 19,450.

what should be a rigorous training programme. YCS data indicate that those enrolling on GST have significantly lower GCSE results than those staying in FTE[164] and 64% of trainees were starting AMA programmes without a full Level 2 qualification[165]. Inadequate prior attainment could result in a young person lacking the necessary basic and cognitive skills to complete necessary coursework. In addition, if the FMA, in particular, is acting as an additional social inclusion pathway for younger learners[166], then the learners being recruited will have a profile that, in the absence of considerable support, militates against successful completion of learning programmes.

The length of stay on apprenticeships is affected by the time of enrolment[167]. Those who enrol immediately after completing Year 11 or Year 12 stay longer than those enrolling later in the year. Later enrollers may be less committed to the apprenticeship they have chosen, which may be a second choice option. Any lack of commitment would increase the risk of leaving early.

The quality of training being provided may also affect length of stay. Successive reports from the Adult Learning Inspectorate (ALI) express concern about the quality of provision on the work-based route. The Common Inspection Framework (CIF) places greater emphasis on learner success rates as a quality criterion than the inspections previously conducted by the Training Standards Council, and emphasises the benefits to the individual learner in making judgements about quality. Furthermore, apprenticeship frameworks require theoretical understanding and the development and assessment of key skills. These developments have switched the emphasis from the assessment of competence in a work role to the development and application of knowledge and skills in a work context. The inspection process is therefore looking for a wider range of learning activities and observable learning in the workplace[168].

In part, lower grades awarded under the ALI/Ofsted inspection regime can be attributed to providers taking time to adjust to the demands of the CIF.

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[164] DfES (2003c) *op cit*.
[165] DfES (2003c) *op cit*.
[166] L. Unwin and A. Fuller (2003) *op cit.*
[167] Payne (2003) *op cit*.
[168] M. Hughes (2002) *Making the grade: A report on standards in work-based learning for young people*. London: LSDA, p. ii.

Furthermore, justifiable concerns can be expressed about the extent to which success rates fully capture the learning that is taking place on apprenticeships. Nonetheless, there is evidence of a lack of capacity amongst WBL providers, exemplified by the low proportion of qualified staff and inadequate levels of staff development. This leads to inadequate assessment of initial learning needs and a lack of the ongoing formative assessment needed to support learning[169].

Certain features of provision seem to be associated with better outcomes. For example, those who receive written training plans stay longer on apprenticeships than those who do not[170]. Higher retention rates in the sectors that have a tradition of apprenticeship may also be indicative of the quality of training on offer[171]. However, there is apparently no correlation between length of stay and provision of off-the-job training[172].

The quality of provision may also be reflected in the lack of clarity amongst MAs surveyed in YCS Cohort 11 about the programme that they were following. For example, 44% of MAs in YCS Cohort 11 were unsure which MA they were enrolled on and over one-fifth stated that they were studying for no qualifications[173]. It could be, of course, that these MAs were simply unaware that they were taking qualifications and this could be linked to the nature of the programme they were following. James, for example, found that apprentice chefs learning entirely through a work-based route were less aware of the NVQ Level 2 they were working towards than those attending the day-release programme at the local FE college. Those attending college received a weekly reminder about the qualification they were working towards. The others were reminded about the qualification only when the workplace training provider visited them[174].

Fuller and Unwin argue that offering apprentices structured learning opportunities with on- and off-the-job learning is a key ingredient of a

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[169] M. Hughes (2002) *op cit*.; S. James (2004) *Learning to cook – knowledge and skill construction in the workplace.* Unpublished PhD thesis. Oxford: Department of Educational Studies, University of Oxford.
[170] J. Payne (2003) *op cit*.
[171] A. Fuller and L. Unwin (2003b) Learning as apprentices in the contemporary UK workplace: creating and managing expansive and restrictive participation. *Journal of Education and Work*, 16 (4), 5–25; Hayward et al. (2004) *op cit.*; T. Spielhofer and D. Sims (2004) *Modern Apprenticeship in the retail sector: Stresses, strains and support* [online]. At: www.nfer.ac.uk/research/downloads/SKAJan04.doc, accessed March 2004.
[172] J. Payne (2003) *op cit*.
[173] J. Payne (2003) *op cit*.
[174] S. James (2004) *op cit*.

successful apprenticeship programme[175]. Encouragingly, 60% of MAs in YCS Cohort 11 stated that they had a written training plan, four-fifths reported receiving on-the-job training and 55% reported receiving off-the-job training. However, amongst those who stated that they were studying for no qualifications, only 45% had a written training plan, 34% had received off-the-job training and nearly a quarter indicated that they had received no training at all. Under such circumstances it is unsurprising that poorly qualified, less committed apprentices become disillusioned and give up[176].

A lack of demand and commitment by employers may also result in poor success rates. The *Learning and Training at Work* survey[177] indicated that 57% of employers with five or more employees were aware of AMAs and 45% were aware of FMAs. However, of those that were aware, only 5% were involved in AMAs and 4% in FMAs. Overall, this means that only 3% of employers with five or more employees were involved in AMAs and 2% in FMAs[178], and only 5% of MAs were directly sponsored by single employers[179]. The majority were recruited by training providers who then persuaded employers to take on apprentices. This reliance on training providers to supply apprentices is in stark contrast to past practices where apprentices were taken on by employers because they were needed. If employers are being persuaded to take on new employees for whom they have no real need, then their commitment to the training needs of those young people and to the apprenticeship framework is likely to be low.

Furthermore, if the driving force behind apprenticeship recruitment 'is the agencies of government, supported by local networks of training providers'[180] rather than employer demand, it must be tempting for training providers to recruit inadequately qualified young people to apprenticeship programmes in order to (a) meet government targets and (b) maintain income. Linking apprenticeships to the state paraphernalia of targets and

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[175] A. Fuller and L. Unwin (2003b) *op cit*.
[176] J. Payne (2003) *op cit*.
[177] DfES (2002b) *Learning and training at work 2002.* SFR 02/2003 [online]. At: www.dfes.gov.uk.rsgateway/DB/SFR/, accessed 27 September 2004.

[178] N. Brown, M. Corney, and G. Stanton (2004) *Breaking out of the silos: 14-30 education & skills policy*. London: Nigel Brown Associates, p. 40.
[179] P. Ryan and L. Unwin (2001) Apprenticeship in the British 'training market'. *National Institute Economic Review*, 178, 99–114.
[180] A. Fuller and L. Unwin (2003a) Creating a 'Modern Apprenticeship': a critique of the UK's multi-sector, social inclusion approach. *Journal of Education and Work*, Vol. 16, 1, 5–25, p. 9.

public sector agreements, rather than to employer demand, creates an incentive structure in which young people may be over-recruited to apprenticeship programmes or recruited to inappropriate programmes[181]. This could lead to a situation where there are more 'apprentices' than training places and so to unemployed and disillusioned 'apprentices' who do not have the incentive to complete the programme.

Poor completion rates could also result from the use of the apprenticeship system by employers to train their existing staff. The age profile of modern apprentices, with over 50% of the intake in some sectors being aged 19 to 24, lends some credence to this argument (Tables 7 and 8). If employers are seeking to develop just the firm-specific skills of their employees, then elements of the framework, such as the technical certificates or the Key Skills, may well be irrelevant. Indeed, a complete NVQ might also be irrelevant to the immediate skill needs of an employer. However, further research on which employers are involved in apprenticeships and why is clearly needed to test this explanation[182].

Finally, low completion rates could be a consequence of young people moving around the labour market as they try out different 'careers'. Some sectors, such as hospitality and retailing, are well known for their high turnover of staff. Two studies[183] of early leaving from an AMA programme found that the main reason was that apprentices had changed their job and not because they were dissatisfied with the programme or the vocational qualifications they were working towards, a finding echoed in a study on non-completion of NVQs and NVQ units[184] by younger workers[185].

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[181] M. Hughes (2002) *op cit*.
[182] D. Raffe (1999) *op cit*.
[183] IFF Research Ltd (2000) *Modern Apprenticeships: Exploring the reasons for non-completion in five sectors*. Nottingham: DfES.
[184] P. Thornhill (2001) *A study into reasons for younger worker dropout from full NVQs/NVQ units*. Nottingham: DfES.
[185] The idea of poor completion rates resulting from apprentices moving on to better jobs has certainly become popular amongst policymakers and their agents seeking to defend the poor success rates on MA programmes. However, such an explanation is something of a double-edged sword since it is indicative of a labour market in which it is relatively easy to move and upgrade jobs without formal qualifications.

Conclusion

Despite beacons of good practice, at a system level apprenticeship does not appear to be working well. The overall weak performance of the current system, the continual rebranding of the provision, the ongoing plea for more employers to participate and the successive inquiries into apprenticeship all attest to the ongoing difficulty of constructing and maintaining a viable work-based apprenticeship route in England and Wales. A high-quality apprenticeship system should provide a rigorous and substantive learning experience, through which a young person can both develop industry-specific skills and receive a more general education and training. As such, it would combine the best of on- and off-the-job training in an 'expansive learning environment'[186]. Consequently, apprenticeship is an expensive form of formation training in which employers only reap the benefits of their participation in the latter years of the process. Apprenticeship is, therefore, only a sensible approach to vocational education and training when there is a real demand amongst employers for skilled and qualified staff. However, in the current apprenticeship system, employer demand is mediated by training providers in a way about which we know very little.

The limited success of MAs seems to result in part from two factors that have bedevilled the development of previous work-based routes (Unwin, 1997). The first is a lack of commitment from employers to invest in the vocational education and training of young people. This runs from the lack of employer involvement in the original design of the MA frameworks, especially in sectors with no tradition of involvement with apprenticeship[187], to a lack of concern with providing adequate structured opportunities for apprentices to learn both on- and off-the-job. There are of course some beacons of good practice but these seem to be few and far between. There are particular problems in those sectors with no history of apprenticeship, such as retailing[188].

Second, the policymaking process results in a post-compulsory learning market which sets providers (and employers seeking young workers)

[186] A. Fuller and L. Unwin (2003b) *op cit*.
[187] H. Gospel and A. Fuller (1998) The Modern Apprenticeship: New wine in old bottles? *Human Resource Management Journal*, 8 (1), 5–22.
[188] A. Fuller and L. Unwin (2003b) *op cit;* T. Spielhofer and D. Sims (2004) *op cit*.

against each other as they compete for learners to meet targets. A consequence of this, Unwin argued, was the danger that young people with inadequate preparation would be started on MA programmes with employers who could not or did not intend to meet the full MA requirements[189]. The fact that 64% of young people who started AMAs in 2002 lacked a full Level 2 qualification and the poor completion rates for both the full frameworks and the NVQ component speak to the reality of this danger[190]. In addition, an active youth labour market offers incentives and opportunities for young people to enter paid employment rather than follow an apprenticeship.

The aspiration of the MA policy was to produce an apprenticeship system that rivalled anything to be found on the continent. However, the requirements of frameworks themselves are highly variable in terms of content, length of training, entitlement to off-the-job training and conditions of service[191]. In addition, the policy deliberately extended apprenticeship to sectors that both lack the ability to deliver high-quality learning environments and that appear to have no real need for Level 2 and 3 qualifications to meet the skill needs of the available jobs[192]. In contrast to systems on the continent, the involvement of all social partners in deciding the content of the apprenticeship programmes is also absent.

So, on almost every measure of quality associated with European apprenticeships, Modern Apprenticeships fall short[193]. This is mainly due to lack of appropriate regulation. Modern Apprenticeships are underpinned by a mixture of, 'leaflet law … ministerial powers, legislated in the 1970s, to modify labour market programmes'[194]. In the absence of regulation, the inevitable result is variable quality and low levels of achievement in the work-based route. This complete absence of targets for employers in

[189] L. Unwin (1997) Reforming the work-based route: Problems and potential for change. In: A. Hodgson and K. Spours (eds.) *Dearing and beyond: 14-19 qualifications, frameworks and systems*. London: Kogan Page.
[190] LSC (2003b) *op cit*.
[191] L. Unwin and J. Wellington (2001) *Young people's perspectives on education, training and employment: Realizing their potential*. London: Kogan Page.
[192] A. Fuller and L. Unwin (2003a) *op cit.*; E. Keep and K. Mayhew (2004) *op cit*.
[193] H. Steedman (2001) *Benchmarking apprenticeship: UK and continental Europe compared* [online]. Centre for Economic Performance, LSE. At: cep.lse.ac.uk/pubs/download/dp0513.pdf, accessed April 2004.
[194] P. Ryan and L. Unwin (2001) *op cit*. p. 104.

relation to the work-based route stands in marked contrast to the range of targets for the supply side[195].

7. Conclusion

The descriptive analysis presented above demonstrates that over the last twenty years England and Wales have witnessed a major restructuring of the educational careers of 16-18 year-olds. Participation rates increased sharply from the middle of the 1980s to the early 1990s and then stabilised. Underlying this overall trend was a large increase in the proportion of young people choosing to follow the FTE route. This resulted in a continuing decline in participation in WBL sponsored by the government and employers. FE and tertiary colleges continue to be the main providers of vocational learning opportunities at all levels.

Underneath these general trends, more subtle shifts are occurring in the level and type of qualification being studied for, as young people and institutional providers search for the most appropriate courses to meet their potentially conflicting needs. The effect is a continuation of deep divides between the status of different types of qualification and, possibly, other kinds of educational differentiation, such as differentiation according to the type of school attended and the programme being followed. The interaction between the labour market and the education and training system is crucial in understanding the continuation of such status hierarchies.

The combination of a static participation rate with a rising success rate suggests that the overall performance of the 14-19 system is increasing. However, the attritional properties of the current system, the lower success rates in the vocational programmes, and the poor recruitment and retention of lower attaining learners all require further investigation. In addition, we need to develop a more detailed picture of participation in the academic pathways. These are the initial priorities for this part of the Review in the next year.

[195] N. Brown, M. Corney and G. Stanton (2004) *op cit*; E. Keep (2004a) *op cit.*

In terms of datasets, we have managed to make considerable progress in developing long-term time series at an aggregate level for England and, to a lesser extent, Wales and Scotland[196]. These have provided the core of the descriptive analysis we have undertaken to date. The lack of omnibus statistics covering the whole of the 14-19 phase is, however, a problem. We now need to move to an individual level to build statistical models of progression retention and attainment. This means finding the appropriate datasets above and beyond the YCS.

[196] Data collected for Scotland will be used as part of the international comparisons we will make next year.

Part IV

Summary of Evidence, Key Questions and Future Work

Tentative conclusions from the first year

At the end of its first year, the Nuffield Review shows 14-19 education and training in England and Wales to be both complex and fluid.

The Review has revealed the intensive activity taking place in the 14-19 phase – by government in developing policy and publishing policy documents, by funding agencies and inspectorates in reshaping the institutional framework, by curriculum bodies and examination boards in developing new qualifications, by schools and colleges in endeavouring to meet the needs and aspirations of many different young people, by employers in their demands upon and contribution to education and training, by private training providers in offering WBL and WRL, and by higher education institutions as they link with and respond to changes in schools, colleges and workplaces.

The intensity of this activity arises in part from the many ideas which vie for influence in the shaping of education and training for 14-19 year-olds as problems are identified, societal and individual aspirations change, and attempts are made to extend education and training to all young people irrespective of background and achievement. Inevitably, with such an agenda, there will be strong differences of opinion, and equally inevitably, therefore, issues demanding careful thought, intensive debate, moral deliberation and painstaking empirical research.

In its initial survey of this complex and controversial landscape, the Review sees both successes and problems. On the positive side, as Parts I to III indicate, some aspects of system performance in England and Wales are moving forward: more young people are participating in education and training in the 14-19 phase, more are studying at Level 3, and GCSE, A Level, and some vocational examination results are improving. The curriculum has in recent years become more flexible and diverse and a great deal of effort has been made by schools, colleges and other providers to improve provision and learning experiences for young people. Added to this, for the first time, is a government intention to create a 14-19 phase of education and training. As we saw in Part II, many education professionals have, for several years, argued for the creation of an inclusive, flexible and

coherent 14-19 phase, although it remains to be seen whether emerging government policy will meet all these aspirations.

On the other hand, as we have also outlined in earlier sections of the Report, many deep-seated structural and historical issues remain to be addressed and new ones arise as the impact of intense policymaking activity in this area is felt. While more young people are entering post-16 education, the number who remain in education throughout the 14-19 phase still declines with age and there remain certain groups (e.g. boys and white young people whose parents are less skilled and qualified) who are significantly less likely to participate. Post-16 institutional competition and selection appear to feed, and to feed on, social divisions. The academic/vocational divide continues to exercise powerful effects in terms of learners' choices, returns to learning and opportunities, and there are still lower achievement rates in vocational courses than in academic courses at the same level. Despite good performance in certain sectors (e.g. engineering), the work-based route remains relatively marginal, is often of low quality, has poor achievement of qualifications and has not succeeded in gaining the genuine employer engagement and commitment enjoyed by many other European systems. The 14-19 landscape has become yet more complex with some policies pulling in different directions to others.

Overall, despite steady improvements in attainment rates for 14-19 year-olds, participation of 16-19 year-olds in education and training remains largely static, some provision is of debatable quality and significant groups of young people appear to be being left behind or alienated from education and training. As Part III points out, these factors, taken together, can be seen as symptoms of what is termed a 'medium participation system'.

Issues, key questions and future work

The Review, through its working days, commissioned papers and further statistical analysis has, during its first year, highlighted the following issues and key questions that will guide much of its work over the next two years.

1. Values and purposes

The aspiration to create a 14-19 phase raises fundamental questions about the education young people experience in this phase and the extent to which this leads both to individual success and to preparation for full participation in adult and working life. Such questions are of particular significance within the English and Welsh systems, where there is little or no tradition of common expectations for this age group and where there are prevailing assumptions that learners with different levels of attainment should experience different curricula.

What educational values and criteria should guide future 14-19 developments?

2. System performance 14-19 and the availability of data

The performance of 14-19 education and training in the UK has, over recent years, demonstrated contradictory trends in participation, progression and attainment. Some aspects are improving while others are not. Notably, problems continue to be experienced in vocational education and in the work-based route, areas vital to any future improvement in overall system performance. As Part III indicates, there are considerable shortcomings in the intelligence available to assist policymaking in terms of discontinuities, gaps and the fact that data are not yet collected to reflect 14-19 education as a coherent phase. In particular, we lack important quantitative and qualitative data on lower-level provision and successful pedagogic strategies within this provision, on the role of training providers and employers in the work-based route, on regional differences in participation and on detailed progression patterns within the 14-19 phase.

What additional data do we need in order to understand more thoroughly learner movement and performance within the emergent 14-19 phase and how might these data be obtained and used to inform policy and practice?

How might we make further use of international comparative data as a lens on 14-19 system performance in the countries across the UK?

3. Learners' highly differentiated experiences of 14-19 education and training

Various groups of young people currently have highly differentiated experiences of 14-19 education and training. These different experiences have a direct impact upon their life chances. Just over half the cohort at age 16 experience the type of success in their GCSEs that allows them to progress with comparative ease through A Levels and on to higher education. A significant minority, however, experiences little sense of success in the early part of the 14-19 phase and this is undoubtedly a contributory factor in their disengagement from education and training. Others attempt to progress but often do not fully complete their post-16 studies, particularly in the vocational pathways. It will be important to assess proposals for reform of the curriculum and qualifications system in terms of whether they can provide motivational and valued learning experiences for all learners and address the diverse needs of the whole cohort to prevent such disengagement. However, evidence presented thus far to the Review suggests that addressing equity in participation, progression and attainment will require more than curriculum and qualifications reform. Wider issues related to the way that the labour market operates and the way education and training providers behave will also need to be understood and taken into consideration in any reform of the phase.

Despite attempts to create links between different types of qualifications, 14-19 education and training remains deeply divided. It has been argued in the Review that this very English dualism of academic versus vocational impoverishes both sides of the divide – those in vocational education do not have the right, nor are they encouraged, to undertake general education and study subjects which can broaden the mind (for example the arts and humanities) and those in academic education often have little experience of the applied and practical.

An important means of understanding how the system operates in practice is to see it from the learner's point of view. The Review has already begun to explore this perspective and intends to examine it in more depth in the second year. This examination will not only focus on learners' experience of learning but also on how they engage in decision-making in what is becoming a more complex phase of education and training.

What kind of curricula and learning experiences might be needed in the 14-19 phase to meet the needs and aspirations of all young people and of wider society?

In what ways has the learner's voice been articulated in relation to research, policy and practice in 14-19 education and training, and how might young people's contribution in these areas be enhanced?

4. Institutional division and selection

The Review has highlighted the impact of post-16 institutional divisions and selection. A sharp organisational divide at 16 plus may not sit happily with the concept of a coherent 14-19 phase which aims to promote progression and equity. Competition between school sixth forms, sixth form colleges and general further education and tertiary colleges, and the relatively hidden processes of post-16 selection, appear to fuel social divisions and make the provision of independent guidance, advice and counselling problematic. Furthermore, there is, arguably, a fault line running through government policy as it tries to encourage institutional collaboration and a more planned and rational approach to 16-19 education and training (and increasingly 14-19 pathways) while, at the same time, establishing autonomous city academies, new sixth forms and specialist schools. Attempts at institutional collaboration have to work within what is still a fiercely competitive landscape.

What institutional arrangements might be necessary to underpin clear and effective progression routes for all 14-19 year-olds?

How far will current government reforms (e.g. those proposed by the Tomlinson Working Group on 14-19 Reform and those resulting from the role of the LSC in planning and funding 14-19 education) address the underlying issues affecting equity, participation, progression and attainment in an emerging 14-19 phase?

5. Weak approaches to vocational education and employer engagement

It is broadly recognised that successful national systems of upper secondary education have strong approaches to vocational education and training. During its first year, the Review has confirmed what is already widely known – that England and Wales do not yet possess such a system. Successive reforms of vocational qualifications, the most recent being *Curriculum 2000*, have produced what has been termed 'weakly vocational' qualifications; vocational education for 14-19 year-olds often conflates purposes of social inclusion with purposes of acquiring higher levels of skill; employer engagement in 14-19 education and training is both uneven and inadequate; some argue that attempts to expand apprenticeships are overshadowed and contradicted by the higher-profile target of 50% participation in higher education; and the concept of a 'demand-led approach', so ubiquitous in policy documents about skills and lifelong learning, appears to be narrowly confined to meeting the 'needs of employers' rather than the more broadly defined 'needs of employment'. The Review has also highlighted the importance of recognising the role of the labour market at national, regional and local levels, particularly in relation to the currency of vocational qualifications and learner choices.

What can be done to strengthen vocational education and training and to what extent can this be achieved by current or proposed reforms?

6. The policy process and policy learning: historical and comparative perspectives

The Review has highlighted changes and tensions in the way that government exercises power in the formulation, implementation and management of policy – the breakdown of classical green paper/white paper consultation processes and the increased stream of different types of policy documents; the centralisation of power within government combined with devolution of responsibilities to new assemblies at the regional and national levels; the micro-management and politicisation of policy, and a greater emphasis on accountability with liberal use of steering mechanisms, such as targets, alongside the rhetoric of devolving resources and responsibility 'to the front line'. The Review discussed the way that policy

is formulated, implemented and managed and intends to explore further different ways of measuring and managing performance in the 14-19 phase, to avoid what have been termed 'perverse policy outcomes'. The Review has also pointed to frequent discontinuities in policy development, with a reluctance by governments to learn lessons from experience, and an increased tendency to rush policy processes. The Review seeks, therefore, to suggest ways in which 'policy learning' can play a greater role in the policy process.

The Review continues to be committed to both historical and international comparative perspectives as a means of 'policy learning' and as a useful way of judging system performance. In particular, it is interested in examining in more depth developments in Wales, where the education system has traditionally shared the qualifications and institutional arrangements of England but now appears to be diverging in terms of 14-19 education policy.

What lessons about policies, policymaking and policy implementation for the 14-19 phase can be learned both from the past and from the different policy processes in and across the countries which make up the UK and beyond?

How might we measure performance – across the 14-19 system as a whole; at the level of individual institutions; and at the level of young people themselves – while avoiding 'perverse policy outcomes'?

Part V

Impact and Involvement

Impact and Involvement

The Review is disseminated in several ways:

Core Group

The Core Group's membership includes representatives of academic, professional and government bodies, through whom the work and conclusions of the Review are fed back to their respective organisations. (Membership is listed in Appendix 10.)

Website

The papers, developed from the discussion papers and the subsequent discussions, are placed on the website. There is an interactive section, accessible to the core group and others who have been invited to join. The interactions are carefully monitored and used to guide the various reports of the Review.

Conferences

The Review has given or is aiming to give papers arising out of the Review at major conferences, not only academic conferences (British Educational Research Association, September 2004; Scottish Educational Research Association, November 2004; European Seminar on Qualification Systems, European Parliament, Strasbourg, September 2004; American Educational Research Association, April 2005; European Educational Research Association, September 2005), but also those of the various stakeholders (such as teachers and lecturers' organisations, and employer and business organisations). The conference 'round' has already begun.

The Review has organised the launch of the 2003-04 Annual Report at the RSA on 3 November 2004, to which invitations have been sent to key people in government, the professions, business, schools, colleges and universities.

A joint seminar with David Raffe and colleagues from the University of Edinburgh is being planned for spring 2005.

Annual Report

There will be in October each year an annual report of the year, based on the commissioned papers, reviews of research, contributions from invited people and the core group. The aim of the annual report will be to identify key issues in the light of the evidence available, to identify key questions which need to be pursued in the light of this evidence, and to make recommendations. The annual report will also be available on the website.

Policy involvement

Close contact has been established with, and visits have been made to or are planned with, the teams and officers in key government departments and agencies: HMT, the DfES, the QCA, the LSC and the Welsh Assembly. Close links have been established with the NFER and the LSDA. In each case the people concerned have welcomed the Review and wish to co-operate. Formal meetings are taking place.

Networks of teachers and researchers

Findings from the Annual Report will be disseminated widely to both practitioners and researchers through the various networks that the directors are members of, including the UCAS Curriculum Development Group, London Region Post-14 Network and the ESRC Centre on Skills, Knowledge and Organisational Performance.

Newspapers

Members of the press have been invited to the launch of the Annual Report and we plan to write articles for both the educational and general press.

Future developments

In addition to the current practice of working days, the Review next year intends to take evidence on a range of issues using a more select committee style approach. This will enable us to interact with policymakers at both national and local level, thereby raising the profile of the Review in the policymaking community.

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Appendix 1: Abbreviations

A Level	Advanced Level
ALI	Adult Learning Inspectorate
AMA	Advanced Modern Apprenticeship
AQA	Assessment and Qualifications Alliance
ASDAN	Award Scheme Development and Accreditation Network
AS Level	Advanced Supplementary Level
AVCE	Advanced Vocational Certificate of Education
BERA	British Educational Research Association
BTEC	Business Technology Enterprise Council
CEE	Certificate of Extended Education
CGLI	City and Guilds of London Institute
CIF	Common Inspection Framework
CPVE	Certificate of Pre-Vocational Education
CSE	Certificate of Secondary Education
DES	Department of Education and Science
DfEE	Department of Education and Employment
DfES	Department for Education and Skills
DoVE	Diploma of Vocational Education
DTE	Department for Training and Education (Wales)
DTI	Department of Trade and Industry
DWP	Department for Work and Pensions
EdStats	World Bank database of education statistics
EFT	Employer Funded Training
ESRC	Economic and Social Research Council
EuroStat	Statistical Office of the European Union
FE	Further Education
FEDA	Further Education Development Agency
FMA	Foundation Modern Apprenticeship
FTE	Full-Time Education
GCE	General Certificate of Education
GCSE	General Certificate of Secondary Education
GNVQ	General National Vocational Qualification
GST	Government Supported Training
HESA	Higher Education Statistics Agency
HMT	Her Majesty's Treasury
ICT	Information and Communications Technology
IEA	International Association for the Evaluation of Educational Achievement
ILR	Individual Learner Record
IPPR	Institute for Public Policy Research
ISCED	International Standard Classification of Education
ISR	Individual Student Record
IT	Information Technology
KS	Key Stage
LEA	Local Education Authority
LSC	Learning and Skills Council
LSDA	Learning and Skills Development Agency
MA	Modern Apprenticeship
MS	Maintained Schools
NASUWT	National Association of Schoolmasters Union of Women Teachers
NCVQ	National Council for Vocational Qualifications

NEET	Not In Education, Employment or Training
NIACE	National Institute of Adult Continuing Education
NFER	National Foundation for Educational Research
NQF	National Qualifications Framework
NS-SEC	National Statistics – Socio-Economic Classification
NVQ	National Vocational Qualification
OECD	Organisation for Economic Co-operation and Development
Ofsted	Office for Standards in Education
OUDES	Oxford University Department of Educational Studies
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
QCA	Qualifications and Curriculum Authority
RR	Research Report (DfES)
SCAA	School Curriculum and Assessment Authority
SEAC	Schools Examination and Assessment Council
SEB	Scottish Examination Board
SSC	Sector Skills Council
StAR	Strategic Area Review
TEC	Training and Education Council
TVEI	Technical and Vocational Education Initiative
UCAS	Universities and Colleges Admissions Service
UNESCO	United Nations Educational, Scientific and Cultural Organization
WBL	Work-based learning
WRL	Work-related learning
YCS	Youth Cohort Study
YTS	Youth Training Scheme

Appendix 2: Relevant Government Publications – England

This selection includes white and green papers and other key strategy documents from 1995 onwards, with a wider selection of documents from September 2003. The aim is to give an overview of key policy proposals focusing on:

1. substantive policy proposals (as opposed to pure discussion);
2. proposals which result in significant policy developments in a number or areas – curriculum, qualifications and assessment (for more detail on this see Appendix 3), institutional provision and arrangements, social inclusion and participation – and/or have a clear influence on later documents.

From September 2003, this appendix aims to give an insight into the range and number of policy developments which affect 14-19 education and training, but does not try to be comprehensive.

For a more extensive and detailed list of publications see: S. Wright and A. Oancea (2004) *Policies for 14-19 education and training in England from 1976 to the present day: a chronology*. Nuffield Review Briefing Paper 2 [online]. At: www.nuffield14-19review.org.uk/files/documents21-1.pdf.

1995	**DTI: *Competitiveness: Helping business to win* (White Paper)** • Three-track system: A and AS Levels; Vocational A Levels (Advanced GNVQs); NVQs/Modern Apprenticeship (work-based) • New General Diploma in England and Wales to ensure pupils have good GCSE passes in essential subjects (English, Mathematics, Science and Welsh in Welsh-medium schools) plus two other 'good GCSEs or their vocational equivalents' • Introduction of 'new pre-vocational options' for 14-16 year olds
1996	**DfEE: *Self-government for schools* (White Paper)** • Greater freedom for grant-maintained schools to manage own affairs • End of role of LEAs in controlling and running schools but continued role in 'promoting quality in schools, coordinating school networks and developing good practice' i.e. organising education outside schools, planning supply of places, allocating and monitoring school budgets etc. • Extension of specialist school programme
1996	**DfEE: *Learning to compete: Education and training for 14-19 year olds* (White Paper)** • Introduction of 'employer-designed and led' national traineeships from September 1997 • Part One GNVQs in all schools wishing to provide them from 1998 • 'More innovative' approach to 14-16 vocational education to complement National Curriculum • External inspection for work-based training providers • Introduction of learning credit entitlement for all aged 14-21 covering further education, training and careers guidance up to and including Level 3, but no proposals for corresponding entitlement to financial support • Common principles for funding schools, colleges and private trainers

1997	**DfEE: *Excellence for all children: Meeting special educational needs* (Green Paper)** • Commitment to inclusion in mainstream schools of 'all children who will benefit from it' • 'Centres of excellence' (formerly special schools) working directly with children with complex special educational needs and also providing support to mainstream colleagues
1997	**DfEE: *Excellence in schools* (White Paper)** • Standards Task Force and Standards and Efficiency Unit at the DfEE and Education Action Zones (targeted support and development 'where most needed' in inner city areas) • General Teaching Council to represent teaching profession • Annual league tables of schools' performance • Targets for schools to be set by LEAs; interventions by LEAs in schools 'at risk' of failure; Ofsted inspections of LEAs • Phasing out of grant-maintained schools and introduction of new system of three categories of school: 1) aided, 2) community and 3) foundation. Proposals for extensive network of specialist schools, plans for abolishing 163 remaining grammar schools deferred • Family learning schemes, home-school contracts, better information for parents, greater representation of parents on governing bodies and LEAs • Proposals for 'accelerated learning'
1997	**DfEE: *The Learning Age* (Green Paper)** • Removal of barriers to participation, e.g. through Individual Learning Accounts (originally to include capacity for student and employer as well as state contributions) • University for Industry (part of call for more flexible education and training provision) • Improved information and guidance: more focused careers service, Learning Direct telephone helpline • Greater employer investment to be secured by Further Education Funding Council (FEFC)
1999	**DfEE: *Learning to succeed: A new framework for post-16 learning* (White Paper)** • Reform of structure of post-16 education and training and Training and Enterprise Councils (TECs) into single structure, including sixth forms: 'Creation of a single body to oversee national strategies for post-16 learning, the funding to provide the focus needed and the emphasis on quality to lever up standards' • Local LSCs, to supersede TECs in April 2001 • Single advice and support service to steer 13-19 year olds through the system; 'Investors in Young People' further developed and renamed Connexions • Refocus of careers service provision on 'those in greatest need'
1999	***Report of the working group on adult basic skills: Skills for life*** • Development of national basic skills curriculum for adults (16+) with nationally defined standards of skills at Entry Level, Level 1 and Level 2, and revision and streamlining of basic skills qualifications on the basis of these national standards • Target of 95% of 19 year-olds to have 'adequate levels of literacy' and 90% to have 'adequate levels of numeracy' by 2010 • 'Gateway' for young people to include initial basic skills assessment, targeted support for those with basic skills needs and time off to study (if employed)

2001	**DfEE: *Skills for Life. The national strategy for improving adult literacy and numeracy skills*** • Strategy to decrease the number of adults in England with literacy and numeracy difficulties: national core curriculum, screening and diagnostic testing, and new national tests for literacy and numeracy • Incorporation of literacy and numeracy education into all learning undertaken by young (16-18) adults • Identification by Connexions personal advisers and other frontline staff (e.g. local authority social services) of 16 year-old school leavers with literacy and numeracy skills needs; such learners to be directed to local training and support programmes
2001	**DfES: *Schools: Building on success* (Green Paper)** • 'Earned autonomy' of successful schools • Expansion of specialist school network to extend diversity within secondary system • New pathways for pupils beyond 14 suited to talents and aspirations of individuals
2001	**DfES: *Schools: Achieving success* (White Paper)** • Expansion of private sector role (permitting and if necessary instructing LEAs to involve outside partners to help failing schools) • Extension of specialist and beacon school programmes (at least 40% schools to have or be working towards specialist status by 2005), proposal to allow for all-age city academies and schools on city academy model in disadvantaged rural areas • Deregulatory measures to allow flexibility for governance, extended autonomy (on pay and conditions and curriculum) for 'successful' schools, plans for legislation to enable 'excellent schools' to 'support and partner' weak/failing schools • Minimum performance levels for GCSE attainment: at least 25% pupils in all schools should obtain 5 GCSE A*-C by 2006 • Increased opportunities through more vocational routes, and enhanced status for vocational awards, to meet needs of more 14-19 year-olds • Review of 14-19 education
2001	**DfES: *Success for all: Reforming further education and training*** • Move to plan-led funding: three-year funding arrangements between LSC and providers with funding tied to college development plans; for FE colleges extra funding linked to achievement of improvement targets. Less frequent inspection for colleges achieving 'beacon status.' • Performance-related funding: additional funding available for high-performing institutions • Strategic Area Reviews (StARs) by each local LSC from April 2003 to ensure the 'right mix of provision … to meet learner, employer and community needs' • DfES Standards Unit to improve quality of teaching and learning and to identify and disseminate good practice and good learning materials and training programmes • Target for majority of full-time and part-time college teachers and lecturers to be fully qualified by 2005/06, to be extended to other providers in sector over time
2002	**DfES: *14-19: Extending opportunities, raising standards* (Green Paper)** • Long-term proposal: new matriculation diploma (overarching award) for all – at three levels – to include common strand of literacy, numeracy and information and communications technology (ICT); main qualifications and programmes; and 'potentially' participation in 'active citizenship, wider interests and work-related learning'. Working group to be set up to look at this • Greater flexibility with restriction of compulsory elements of national curriculum and more vocational qualifications for 14-16 year-olds • Better support and guidance at end KS3 – schools and Connexions to have a role – with possibility of individual learning plans

	• Closer collaboration between schools, colleges, training providers (different collaborative arrangements to be tested in 14-19 Pathfinder projects)
2003	**DfES*: 14-19: Opportunity and excellence* (White Paper)** • More choice for students: e.g. flexibility in KS4 curriculum; institutions to work together to provide more options • For 14-16 year-olds: compulsory National Curriculum reduced to English, maths, science, ICT, work-related activity and development of enterprise capability; 'entitlement' to study language, humanities subject, arts subject, design and technology • Entitlement for all to study literacy, numeracy and computer skills till 19 to Level 2 • Development of Vocational GCSEs and hybrid GCSEs • '…more manageable assessment, which recognises all of the young person's achievements' • Long-term development of unified framework with overarching award of some sort • Appointment of 14-19 Working Group under Mike Tomlinson
2003	**DfES: *The future of higher education* (White Paper)** • Strengthened links between further and higher education, development of foundation degrees, better progression pathways • More flexibility in courses to meet needs of more diverse student body • Fair Access package, including grants for students from lower-income families, abolishing up-front payment of tuition fees, universities to draw up access agreement (to be overseen by independent access regulator) before being able to increase student fees, grant support for part-time students
2003	**DfES, DTI, DWP and DTI: *21st Century skills* (White Paper)** • Proposals to encourage more 14-19 year-olds to study mathematics and science and to set up a National Centre of Excellence in Mathematics • 'We will … create programmes of vocational education and training from age 14 up to higher education, which support progression through the vocational route' • Outline of appointment and remit of the Tomlinson working group • Entitlement to five days' enterprise learning for all Year 10 pupils by 2006 • Stronger links between schools and employers and testing of new ways to engage employers in 14-19 learning • Skills Alliance to ensure joint working between government departments and agencies • Proposal for 'learning communities' to raise community as well as individual expectations about the value of learning and skills
Sept 2003	**DfES: *Principles underpinning the organisation of 16-19 provision*** • Identifies five key principles to underpin StARs and to form a benchmark against which DfES will assess reorganisation proposals: high quality; distinct provision for the needs of the 16-19 age group; diversity to ensure curriculum breadth; learner choice; affordability, value for money, cost effectiveness
Sept 2003	**Ofsted/ALI: *Literacy, numeracy and English for speakers of other languages*** • Evaluates quality and standards in literacy and numeracy and English for speakers of other languages in a range of post-16 education and training contexts • Reports rapid increase in number of literacy, numeracy and ESOL learners under *Skills for Life* reforms meant serious shortage of qualified and experienced teachers • Finds that few providers monitor retention or achievement rates or effectiveness of their learner support; quality of provision often 'unsatisfactory'

Nov 2003	**DfES/LSC: *Success for all: The first year*** • Reports on progress achieved under Success for All strategy in last 12 months • Finds StARs taking place in all 47 local LSC areas, review of training missions, collaborative approaches under 14-19 Pathfinder scheme and 14-16 Increased Flexibility partnerships • Proposes that national roll-out of curriculum material and approaches for first four curriculum areas (following trials and pilots) begin September 2004 • Finds improvement in college success rates for all qualifications and in college inspection results
Dec 2003	**LSC/DfES/Ofsted/ALI: *Measuring success in the learning and skills sector*** • Consults on development of 'a coherent set of success measures that can properly recognise and celebrate learners' achievements and evaluate the effectiveness of providers across the learning and skills sector' to be implemented from 2005/06
Feb 2004	***Interim report of the Working Group on 14-19 Reform*** • Advocates group award offered at different levels to replace current separate qualifications: common core to be studied by all, and different options to be selected by students; overarching award at the end supplemented by detailed transcripts of achievement • Advocates greater flexibility (according to ability) over age at which elements can be taken at particular levels
Mar 2004	**QCA/LSC: *Principles for a credit framework for England*** • Sets out principles to underpin the development of a credit framework for adults in England (to align with existing credit frameworks) • Proposes consistent assignment of credit value and level to units (credit value to be determined on basis of learning time) • Proposes that level descriptors at all levels cover intellectual skills and attributes, processes and accountability
Mar 2004	**HMT/DWP/DfES: *Supporting young people to achieve: Towards a new deal for skills*** • Sets out long-term proposals for simplified system of financial support for all 16-19 year-olds in England to replicate model currently used for young people in FTE living at home: 1) regular financial support direct to parents/carer or independent young person; 2) incentive such as educational maintenance allowance. New system to be based on 'realistic' proxies of independence (e.g. employment or income) rather than course of education. • States, 'the Government will be looking at further ways to encourage employers to support time off for training for young people' • Proposes minimum level for trainee pay of £70/£80 per week (current level of £40 below severe hardship income support payments) • Sets out plans to extend support for 19 year-olds to finish courses (the current cut off for Child Benefit, Child Tax Credit and Income Support is at 19)
April 2004	**DfES: *Opportunities and excellence progress report*** • Notes that legislative changes needed for greater flexibility in KS4 curriculum are now made. From September 2004, English, maths, science and ICT remain compulsory; all students are taught citizenship, religious education, physical education, careers education and sex education; there is a new category of 'entitlement areas' including arts, design and technology, humanities, modern foreign languages; and there is a new requirement for WRL for all pupils at KS4 • Announces £60m 'Enterprise Education Entitlement' from 20050/6 to provide all KS4 pupils with the equivalent of five days' enterprise activity and £16m to fund 250 enterprise advisers and enterprise pathfinder projects

	• Makes extension of careers education programme to Years 7 and 8 compulsory from Sept 2004 • Announces national roll-out of Educational Maintenance Allowance from September 2004 • Announces that all providers are to have three-year development plans agreed with the LSC including targets for improvements in learner numbers, success rates, teacher qualifications and employer engagement • Introduces of Modern Apprenticeship entitlement for 16-18 year-olds
June 2004	**LSC/DfES/Ofsted/ALI: *New measures of success: Priorities for development*** • Identifies, on the basis of responses to *Measuring Success,* four priority areas for development • Sets measure of learner success to be applied to all providers of accredited post-16 courses; new measure of value added for all 16-19 learners undertaking graded qualifications at Level 3; new measure of distance travelled for 16-19 learners based on prior attainment at KS4; new performance measures (including targets for employer engagement for providers and information on learners' destinations); and measures of value for money • Develops measures related to non-accredited learning, learner satisfaction and staff data
July 2004	**DfES: *Five-year strategy for children and learners*** • Sets secondary education main aim of raising quality of education and widening range of choices available. • Sets targets of 95% of schools being specialist or academy by 2008 and of 200 academies by 2010: 'At the heart of our reforms is the development of independent specialist schools in place of traditional comprehensives – a decisive system wide advance…' • Announces eight 'key reforms' for schools including: guaranteed three-year budgets for all schools geared to pupil numbers from 2006; freedom for all secondary schools (except 'failing' schools) to own land and buildings, employ staff, reform governing bodies and form partnerships with outside sponsors; more places in popular schools; reduced inspection burden and bureaucracy associated with review; school refurbishment/rebuilding programme • Proposes review of role of FE in a demand-led system
Sep 2004	**Admissions to Higher Education Steering Group: *Fair admissions to higher education: recommendations for good practice*** • Recommends universities should set out more clearly the criteria on which offers will be made (including weighting given to prior academic achievement and potential demonstrated by other means) • Recommends long-term development of 'holistic assessment' (to consider factors other than examination results) and trial of admissions tests • Recommends revision of current application system based on predicted grades

Appendix 3: Changing Qualifications – England

This chronology covers the changing qualifications for 14-19 year olds from the late 1960s, and changes in the bodies involved in designing and awarding these qualifications. Several ongoing themes run through attempts at qualification reform:

- Single subject examination or group awards?
- Tracking or unified system of qualifications?
- Specialisation (academic subject/occupational) or general education/general vocational preparation?
- Catering for students who leave at 17
- 'Pre-vocational' options for 14-16 year-olds
- Making qualifications appropriate and relevant for employers and employment.

For more details see: S. Wright and A. Oancea (2004) *Policies for 14-19 Education and training in England from 1976 to the present day: a chronology*. Nuffield Review Briefing Paper 2 [online]. At: www.nuffield14-19review.org.uk/files/documents21-1.pdf.

Late 1960s	Alex **Peterson** proposed reduction of content of A Level syllabus so students could study four subjects spanning arts and sciences. Proposals rejected by government.
1976	Introduction of **Certificate of Extended Education (CEE)** (pilot stage) to meet needs of 'non-traditional' sixth formers – i.e. Certificate of Secondary Education (CSE) graduates.
1977	***Further Education Curriculum Review and Development Unit*** established by DES to consider range of full-time pre-employment courses available.
1978	**Waddell Report *School Examinations*** • Recommended single examination at age 16 to replace the GCE and CSE • Recommended greater teacher responsibility for assessment and continued teacher role in syllabus development
1978	**White Paper (DES): *Secondary school examinations: A single system at 16 plus*** Proposed single new examination – General Certificate of Secondary Education (GCSE) – at 16 plus, to cater for top 60% of ability range in each subject (same group who took GCE and CSE). No timescale for implementation.
1979	**Keohane Report: *Proposals for a Certificate of Extended Education*** • Recommended development and introduction of single subject CEE (still at a pilot stage) for 17 year-olds staying on in school for one year after school leaving age • Recommended changes to Schools Council proposals for CEE to make the examination more acceptable to employers, including proficiency tests in reading, writing, spoken English and numeracy – 'basic skills' – for all subjects; and making it more vocationally oriented containing work with industry and work experience
1979	**Further Education Unit *A Basis for Choice*** • Proposed a common core of vocational preparation with profile assessment and records of achievements rather than examinations for 16-17 year-olds • Proposed a broad pre-vocational education. Identified not detailed syllabus

	content but objectives and learning processes that had relevance whatever the preferred content (this influenced the CPVE)
1982	**DES: *17+ a new qualification*** • Proposed a new pre-vocational qualification – the Certificate of Pre-Vocational Education (CPVE), to incorporate a broad programme of general education, development of personal attributes and counselling to help students find out what sort of work they would be suited to, with options available for those drawn to technical or clerical work
1983	***Secondary Examinations Council*** and ***School Curriculum Development Committee*** formed to replace Schools Council for Curriculum and Examinations.
1983	***Business and Technician Education Council (BTEC)*** established through the merger of BEC (Business Education Council) and TEC (Technician Education Council).
1983	Launch of **Certificate of Pre-Vocational Education (CPVE).** Single-subject model of CEE rejected. Vocationally biased one-year course, allowing students to sample different 'vocational areas'. Evolved into the Diploma of Vocational Education (DoVE) (administered by CGLI and offered at three levels), which was replaced by GNVQs.
1985	**White Paper (DES): *Better Schools*** • Detailed main features of forthcoming GCSEs – to replace CSEs, GCEs at Ordinary Level (O Levels) and joint 16-plus examinations • Announced pre-vocational courses pre-16 (e.g. City and Guilds) would be continued as complement to GCSE • Established working party to draft national criteria for pre-vocational and vocationally oriented examination courses leading to the CPVE for pupils not pursuing A Levels (intended to replace courses by CGLI, BTEC, the Royal Society of Arts, CEE etc.) • Announced introduction of Advanced Supplementary Levels (AS Levels): involving half the time occupied by A Levels, to either complement or contrast with them. AS Levels introduced 1987, first examined 1988
1985	Introduction of ***Certificate of Pre-Vocational Education (CPVE):*** one-year course administered by Joint Board for Pre-Vocational Education set up by BTEC and City and Guilds. Joint Board dismantled 1990-91; from then CPVE administered only by CGLI. Common core, options for developing skills in selected occupational areas, 'job seeking and enterprise skills'
1986	Introduction of **General Certificate of Secondary Education (GCSE)**. First awards 1988.
1986	**DeVille Report: *Review of Vocational Qualifications in England and Wales*** Recommended setting up of **National Council of Vocational Qualifications (NCVQ**) to establish new qualifications based on national standards defined by industry and to develop a new national qualification framework of NVQs at Levels 1 to 5 based on assessment of competence.
1986	**White Paper (DE/DES): *Working together – education and training*** Announced creation of new framework of National Vocational Qualifications in England, Northern Ireland and Wales to be developed and supervised by a new National Council for Vocational Qualifications. Framework of NVQs introduced from 1986.

1986	**BTEC** introduced its own **First Diploma** (strongly vocationally oriented, with less emphasis on the pre-vocational than CPVE). Initially available in FE colleges but not in schools.
1987	***Schools Examination and Assessment Council (SEAC)*** established to scrutinise and approve all syllabuses and examinations leading to public awards to age 16 with right to extend powers to post-16 examinations.
1988	Introduction of ***National Record of Vocational Achievement*** for young people training on government's youth training programme, to be used as planning instrument and for recording achievement beyond success in examination courses.
1988	**1988 Higginson Report: *Advancing A Levels*** Recommended five 'leaner and tougher' subjects rather than three and more assessment by coursework; proposal rejected by Conservative Government.
1991	**White Paper (DES): *Education and training for the 21st Century*** • Recommended development of 'general NVQs' by NCVQ to cover broad occupational areas. GNVQs intended both as route to further study and route of access to world of work and to be of equal standing to academic qualifications at the same level • Proposed framework of vocational qualifications with clearer paths between qualifications. Triple-tracked educational provision: 'academic', 'general vocational' and 'vocational/occupational'
1991	**DoVE** introduced by CGLI as successor to CPVE. More occupationally specific than CPVE but with opportunities to develop core skills. Three-level framework proposed (Foundation for 14 to 16 years; Intermediate for one year post 16; and National for two years post 16) but highest level never developed. By mid-1990s largely taken by 14-16 year-olds.
1992	Introduction of ***General National Vocational Qualification (GNVQ)*** pilots in five areas***.*** Introduced nationally in 1993.
1992	**White Paper (DES): *Choice and Diversity*** Proposed merger of National Curriculum Council and SEAC to form School Curriculum and Assessment Authority (SCAA).
1994	Pilot of **Modern Apprenticeship** programme (at Level 3). Rolled out fully in 1995.
1994	**White Paper (DTI): *Competitiveness: Helping Business to Win*** • Three-track system: A and AS Levels; 'Vocational A Levels' (GNVQs); NVQs/Modern Apprenticeship (work-based) • Proposes new 'General Diploma' in England and Wales to ensure pupils have good GCSE passes in essential subjects (English, Mathematics, Science, Welsh in Welsh medium schools) plus two other 'good GCSEs or their vocational equivalents' • Announces introduction of 'new pre-vocational options' for 14-16 year olds
1995	**Capey Report: *GNVQ Assessment Review*** Recommends simplification of assessment and grading of portfolios and unit tests and more reliance on external assessment (revised GNVQ developed and piloted from 1997)

1995	**Beaumont Report: *Review of 100 NVQs and SVQs: A report*** • Criticisms included too bureaucratic, paper-heavy, unfriendly language, lack of information for end users, and poor communication between different agencies involved in NVQ administration and delivery • Recommended that the focus of funding for NVQs should be shifted from whole qualifications to individual units because individual units often more important for employers and individuals than whole qualifications
1996	**Dearing Review: *Review of qualifications for 16-19 year olds*** • Advocated six 'core skills' to be incorporated into post-16 curriculum. Subdivided into 'key skills' (application of number, communication and information technology) and 'wider skills' (team-working, interpersonal skills, problem-solving and managing one's own learning) • Recommended development of AS Level in 'key skills' but no qualification for wider skills • Recommended introduction of National Traineeship as work-based option for school leavers and employees, building on design features of MA but focusing on NVQ Level 2 • Recommended making applied and vocational courses available to pupils aged 14 plus who did not find school relevant • Recommended review, restructuring and relaunch of National Records of Achievement • Recommended development of 'national certificate' at Levels 2 and 3 or 'national diploma' award at Level 3 ('main qualifications', 'complementary studies' and key skills) in the longer term to encourage broader studies
1996	**White Paper (DfEE): *Learning to compete: Education and training for 14-19 year olds*** Part One GNVQs in all schools wishing to provide them from 1998.
1997	**1997 *Education Act* (last piece of educational legislation by the Conservative Government)** Set legal framework for establishing National Qualifications Framework (NQF introduced 1998; accreditation of qualifications for inclusion in NQF started 1999).
1997	Introduction of **Foundation Modern Apprenticeship (FMA)** at Level 2 replacing most youth training provision at this level (Modern Apprenticeship renamed AMA).
1997	Pilot of new **Key Skills Qualification**, with units in communication, application of number, and information technology (IT), in range of schools, colleges and training providers 1997-99.
1997	NCVQ and SCAA merge to form ***Qualifications and Curriculum Authority (QCA)*.**
1999	**Report of the Working Group on Adult Basic Skills: *Skills for Life*** Proposed development of national basic skills curriculum for adults (16 plus) with nationally defined standards of skills at Entry Level, Level 1 and Level 2, and revision and streamlining of basic skills qualifications on the basis of these national standards.
1999	***Qualifying for Success* consultation**. Proposals for changes to curriculum and qualifications 16 plus: • New AS Level to be equivalent to first half of full A Level • Broader A Level syllabus and new 'synoptic' assessment at A Level, with limits on amount of assessment by coursework • Revisions to GNVQ (including more external assessment)

	• Key Skills no longer required for gaining GNVQ, to be certificated separately • New Key Skills qualification – including ICT, communication and application of number – to be available for all
2000	***Curriculum 2000* reforms (announced May 1999 following *Qualifying for Success* consultation)** • Slimmed down version of National Curriculum • Framework including GCSEs, GNVQs, Key Skills qualification, broader A Level structure with simplified progression between AS Levels (renamed A1) and A Levels (renamed A2). Advanced GNVQ renamed Advanced Vocational Certificate of Education (AVCE) – now rebadged as Vocational A Level and with a structure aligned more closely with A Levels • Aim to broaden curriculum and encourage mixing of academic and vocational subject choices
2001	Modern Apprenticeship divided into **Advanced Modern Apprenticeship (AMA)** at Level 3 and **Foundation Modern Apprenticeship (FMA)** at Level 2. Many other GST schemes wound down and 'rebadged' as FMA.
2001	**Cassels Report: *Modern Apprenticeships: The Way to Work*** • Recommended introduction of 'technical certificates' (in addition to NVQ and Key Skills) into MA frameworks • Noted need to avoid duplication between different elements of the framework
2002	**Green Paper (DfES): *14-19: Extending Opportunities, Raising Standards*** • Long-term proposal for new 'matriculation diploma' – overarching award – for all by age 19. To incorporate main qualifications (based on existing national qualifications, e.g. GCSE, A Level, Modern Apprenticeship), a common strand of literacy, numeracy and ICT to at least Level 2, and 'potentially … active citizenship, wider interests and work-related learning'. At three levels: Intermediate (Level 2), Advanced (Level 3) and Higher ('broader and more advanced achievement'). • Recommendation to set up a working group to develop • Shorter-term proposals: more vocational qualifications for 14-16 year-olds including vocational GCSEs and hybrid qualifications (combining traditional subjects with vocational qualifications); for 16-19 year-olds, continued implementation of Curriculum 2000 reforms
2003	**DfES: *14-19: Opportunity and Excellence*** Proposal for developing unified framework in long term with overarching award of some sort. Idea of matriculation diploma dropped (not valued by universities or employers). Appointment announced of 14-19 Working Group under Mike Tomlinson.
July 2003	**Working Group on 14-19 Reform: *Principles for reform of 14-19 learning programmes and qualifications*** • Outline proposals for consultation • Proposal for baccalaureate-style framework, but need to incorporate flexibility and opportunities for progression • Common template for all 14-19 programmes: general core, specialist learning, supplementary learning • Framework of diplomas at Entry Level, Level 1 (Foundation), Level 2 (Intermediate), and Level 3 (Advanced)

Aug 2003	Launch of **Entry to Employment programme** – new work-based programme for young people not yet ready or able to enter MAs, to enable progression to FMA, employment or further vocational learning.
Feb 2004	**Working Group on 14-19 Reform: *14-19 Curriculum and qualifications reform. Interim report.*** • Proposal for group award offered at different levels to replace current separate qualifications: common core to be studied by all and different options to be selected by students; overarching award at the end supplemented by detailed transcripts of achievement • Proposal for greater flexibility (according to ability) over age at which elements at particular levels can be taken • Proposal for overall reduction in assessment burden and greater role for teachers in assessment. • Final report of Working Group due autumn 2004.
Feb 2004	***Making mathematics count: The report of Professor Adrian Smith's inquiry into post-14 mathematics education*** • Proposes DfES reconsider issue of enhanced financial incentives to teachers of mathematics (and other shortage areas) • Recommends two-tier GCSE to replace current three-tier system and redesignating mathematics a double award • Recommends revision of assessment regime for AS/A2 Levels under Curriculum 2000 reforms
May 2004	**LSC/DfES: *21st century apprenticeships – End to end review of the delivery of modern apprenticeships*** • Advocates introduction of Youth Apprenticeship for 14-16 year-olds and removal of age cap of 25 • FMA to be renamed 'Apprenticeship' and AMA 'Advanced Apprenticeship' • Advocates making apprenticeship framework more flexible. Framework should incorporate 1) a 'sector core' (NVQ, technical certificate, literacy and numeracy skills where necessary) and 2) a choice of components 'relevant to employers' collective needs'

Appendix 4: Key Publications from 1999 – Wales

This appendix highlights key policy documents for Wales produced since devolution in 1999. It includes more detail from 2003, but does not attempt to be comprehensive.

For further details on recent policy developments in Wales see: David Egan (2004) *14-19 developments in Wales: Learning pathways*, WP19 [online]. At: www.nuffield14-19review.org.uk/files/documents

1999	**Welsh Assembly Government Education and Training Action Group for Wales: *An education and training action plan for Wales*** Proposals: • 'A common post-16 education and training structure, based upon real partnership' to 'enlarge choice and link into local economic needs' • 'To ensure that all training and education provision takes suitable account of the labour market information provided by the Future Skills Wales project and subsequent local, regional and national needs assessment' • To establish National Council for Education and Training for Wales accountable to the Assembly, with strong board-level representation for business and other interests, with lead responsibility (with the Higher Education Funding Council for Wales) for resourcing of all publicly funded education and training post-16 • 'To press on to establish a national credit-based qualification and quality assurance framework, with all providers of training and education expected to take steps to improve performance year on year' • To introduce local Community Consortia for Education and Training (to develop partnerships, promote integration of provision, better respond to needs, and secure parity of esteem for academic, vocational and workplace training) • To establish Careers Wales – national all-age information advice and guidance service
2000	**Welsh Assembly Government: *Extending entitlement: Supporting young people in Wales*** • Support for young people in Wales to be structured around entitlement for all young people to a range of services (education, training and work experience; accreditation of all forms of achievement; independent careers advice and guidance; personal support and advice; recreation and social opportunities) • Each local authority area to develop a young people's strategy in partnership with other statutory and voluntary agencies; young people to contribute to design of strategy and to monitoring its effectiveness • Discussions of possibility of post-16 youth allowance
2001	**Welsh Assembly Government: *The learning country; a paving document.*** • Announces all-age basic skills strategy (pre and post 16) • Announces pilot of Welsh Baccalaureate • Proposals to 'transform provision for 14 to 19 year olds': overall curriculum entitlement; barriers between vocational and academic pathways, between stages at which qualifications and examinations are conventionally taken, and between providers should be broken down • Community-focused schools: schools as community resources (to be used outside school hours for health promotion and family support services as well as education)

	• 'We remain committed to non-selective, comprehensive school provision in Wales. This pattern of provision serves us well. Yet we are equally determined to adopt new ways of enabling schools to be successful. Some of these may involve the private sector.' • Plans for greater freedom for schools performing well and plans to intervene in case of 'failing schools'
2002	**Welsh Assembly Government: *A winning Wales. The national economic development strategy for the Welsh Assembly Government*** • Proposes '…more emphasis on technological skills, communication skills, problem solving and teamwork while embedding a culture of self-confidence, initiative and the ability to adapt and learn' • Changes to post-16 learning in Wales: more coherent and flexible range of provision. Priority of network of learning providers to meet needs of employers and learners, new approaches to bring more people into learning, development of 'clear and flexible progression routes' • Welsh Assembly Government to work with LEAs and schools to ensure under 16s provided with skills and abilities to contribute to workforce of the future
2002	**Welsh Assembly Government: *Skills and employment action plan for Wales 2002***. • Introduction of credit-based qualification framework – system to be operational by Sept 2003 • Pilot of Welsh Baccalaureate 'to provide a broader qualification option including vocational learning and key skills' in 18 schools and colleges from September 2003 • Proposal to 're-vamp work-based training programmes (Modern Apprenticeships, National Traineeships, Modern Skills Diploma for Adults) using an all-age approach, to improve their attractiveness and quality'; pilots from 2003 • Successor scheme to Individual Learning Accounts – 'Individual Learning Accounts Wales' – targeted at learners aged 18 plus: means-tested, £100-£200 to pay for course recognised by National Council ELWa at Level 3 or below (can cover course fees, registration fees, examination fees and approved study and revision guides)
2003	**Welsh Assembly Government Department for Training and Education: *Learning country: Learning pathways 14-19 action plan*** • Proposes range of 'learning pathways' with balance between knowledge, practical and wider skill elements to be appropriate to individual learners' needs (move away from exclusively academic or vocational routes) • Locally devised options menus (aim of wider choice for pupils) • 'Work focused, community or voluntary opportunities and experiences' for all pupils • 'Learning coach' to offer impartial advice and support to learners in making their choices and through their 14-19 pathway • Development of 'community learning networks': ethos of learning in whole community to support 14-19 year-olds (community learning champions, family learning initiatives) • 14-19 networks at local level: to plan local 14-19 provision, establish common timetables, transport arrangements, develop option menu for locality and develop 14-19 Network Development Plans. • Taster period at end of KS3 and start of KS4, to last a whole year for some individuals, to enable individuals to experience range of courses/subjects (accreditation through Credit and Qualifications Framework) • Adapt Progress File to record progress 14-19

2003	**ELWa: *Implementation plan: Credit and qualification framework for Wales*** • Three-year implementation plan for credit and qualification framework for Wales. Pilot of credit common accord from summer 2004, harmonisation of higher education programmes into credit and qualification framework for Wales by 2005, development of unitised credit database for programmes within and outside the NQF by autumn 2006 • Single framework for all post-16 and higher education in Wales, aim to encourage lifelong learning, to allow flexibility for learners and transfers between qualifications and career paths, to provide a clear picture of what learners can do and a framework for employers to express the skills and qualifications applicants need • Credit common accord to ensure quality assurance systems in place for ascribing and awarding of credit
2003	**National Assembly for Wales: *Community focused schools. Circular no: 34/2003*** • Guidance to schools 'and their key partners' on how to develop range of services 'to meet the needs of their pupils, their families and the wider community' (powers to governing bodies to provide such services under sections 27 and 28 of Education Act 2002) • Range of activities includes lifelong learning, childcare, Welsh language teaching, health and social services, cultural and sporting activities, IT facilities for community use, out-of-hours learning for pupils, shops and other services in rural areas • Governing body has ultimate responsibility for deciding whether school offers additional services and what form services should take • Separate community activities budget; community use of school facilities not funded from school's delegated budget (must be self-financing or funded from alternative sources)

Appendix 5: Working Days and Working Papers

Working Day I
17 December 2003

Aims and philosophical issues

Chris Winch	*Some philosophical and policy considerations concerning vocational and prevocational education*
Richard Pring	*Aims and purposes: Philosophical issues*

The historical dimension

Bill Bailey	*Historical roots and lessons*
Jeremy Higham	*Continuity and discontinuity in the '14-19 curriculum'*

The comparative dimension

David Raffe	*Learning from the Scottish experience*
Tom Leney	*Aims and purposes: International and comparative aspects*

Working Day II: Patterns of participation, progression and achievement: What do we need to know and what do we still need to find out?
23 February 2004

Alis Oancea and Geoff Hayward	*Patterns of participation and attainment 14-19*
Joan Payne	*Participation, retention and qualification achievement in education and training from 16 to 19: Data from the England and Wales Youth Cohort Study*
Judith Watson	*Using individual learner data to investigate progression*
John Bynner	*Participation and progression: Use of Birth Cohort Study data in illuminating the role of basic skills and other factors*
Alison Fuller	*Expecting too much? Modern Apprenticeship: Purposes, participation and attainment*
Prue Huddleston	*Learning on the edge: Second chance learning for 14-19 year olds*
Phil Hodkinson	*Learning careers and career progression*

Working Day III: 14-19 provision and organisation

1 April 2004

Geoff Stanton	*The organisation of full-time 14-19 provision in the state sector*
John West	*Work-based education and training for 14-19 year olds*
Malcolm Maguire	*Guidance issues and the role of Connexions*
John Harwood	*Reflections on the role of the Learning and Skills Council*
Peter Davies and Mick Fletcher	*The role of Strategic Area Reviews (StARs) and potential implications for 14-19 education and training*

Working Day IV: 14-19 policy, process and players: A critical review

25 May 2004

Susannah Wright and Alis Oancea	*What policies have there been in 14-19 education and training and how have they shaped the system?*
Ann Hodgson and Ken Spours	*Towards a better understanding of the policy process in 14-19 education and training: Policy, politics and the exercise of power*
Ian Finlay and David Egan	*What policy trajectories are the national governments in England, Wales, Northern Ireland and Scotland following and are they converging or diverging?*
William Richardson	*14-19 year olds in education: What are the policy drivers and where is this leading?*
Ewart Keep	*Reflections on a curious absence: The role of employers, labour market incentives and labour market regulation*

Working Day V: Performance management system for 14-19 education and training from a current and future perspective

5th July 2004

Ewart Keep	*The multiple dimensions of performance: Performance as defined by whom, measured in what ways, to what ends?*
Panel	Bob Butcher (Department for Education and Skills) David Egan (University of Wales Institute, Cardiff) Stuart Gardner (Learning and Skills Council) Tim Oates (Qualifications and Curriculum Authority) David Raffe (University of Edinburgh) Maggie Scott (Association of Colleges)

Appendix 6: Analysis of Entry Requirements for A Level in the UCAS Courses Database

Course Requirements that require Grade A at A level for running published courses for 2005 entry

Number of Running published courses for 2005 entry 53542
Number of Institutions in the UCAS scheme 324

The JACS principal subject groups are listed below. Further information about the JACS coding system can be found at www.ucas.com/higher/courses/coding.html

The courses that are counted within the subject group counts are only single courses, joint courses or the 'major' subject within a major/minor combination.

Table One show the number of courses and institutions that require a specific number of A grades at A Level for entry as per JACS principal subject area.

Table One

		Medicine and Dentistry (A)	Medical Related (B)	Biological (C)	Veterinary/Agriculture (D)	Physical Sciences (F)	Maths/Computer Sci (G)	Engineering (H)	Technologies (J)	Architecture/Building (K)	Social Studies (L)	Law (M)	Business/Admin (N)	Mass Communication (P)	Linguistics/Classics (Q)	European Language ®	Other Languages (T)	History/Philosophy (V)	Art and Design (W)	Education (X)
Courses requiring A	Inst	10	9	21	0	19	22	12	1	2	21	12	15	4	22	9	4	20	8	2
	Course	15	15	145	0	110	187	97	2	2	170	37	99	6	69	45	28	70	18	5
Courses requiring AA	Inst	14	4	10	3	11	16	7	2	2	11	11	6	0	13	6	2	11	6	0
	Course	20	6	30	5	29	72	60	4	2	71	43	22	0	89	38	10	45	11	0
Courses requiring AAA	Inst	3	1	3	2	4	2	1	0	0	2	7	1	0	1	0	0	1	0	0
	Course	4	1	15	2	11	3	1	0	0	4	16	1	0	2	0	0	1	0	0

Table Two displays the number of courses and institutions that require **grade ranges** containing A grades at A level for entry as per JACS principal subject area.
NB - grade ranges were only used if each part of the range contained at least one A grade e.g. AAB-ABB is collected however a grade range ABB -BBB is not.
Grade ranges containing a lower case refer to AS level qualifications.

Table Two

		Medicine and Dentistry (A)	Medical Related (B)	Biological (C)	Veterinary/Agriculture (D)	Physical Sciences (F)	Maths/Computer Sci (G)	Engineering (H)	Technologies (J)	Architecture/Building (K)	Social Studies (L)	Law (M)	Business/Admin (N)	Mass Communication (P)	Linguistics/Classics (Q)	European Language ®	Other Languages (T)	History/Philosophy (V)	Art and Design (W)	Education (X)	
Courses requiring a range	Inst	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	range requiring at least one Grade A at A level
ABB-AAC	Course	0	0	0	0	5	15	0	0	0	0	0	0	0	0	0	0	0	0	0	
Courses requiring a range	Inst	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	
AAB-ABaa	Course	0	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Courses requiring a range	Inst	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AABe-ABBe	Course	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Courses requiring a range	Inst	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	range requiring at least two A grades at A level
AAB-ABC	Course	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Courses requiring a range	Inst	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
AAC-ABB	Course	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
Courses requiring a range	Inst	1	1	3	0	4	5	5	0	0	5	0	4	0	6	0	1	4	2	0	
AAB-ABB	Course	2	1	7	0	11	10	88	0	0	16	0	14	0	20	0	1	18	2	0	
Courses requiring a range	Inst	0	1	0	0	0	2	1	0	0	1	0	0	0	0	0	0	0	0	0	
AAA-BBB	Course	0	0	0	0	0	21	7	0	0	2	0	0	0	0	0	0	0	0	0	
Courses requiring a range	Inst	0	0	1	0	0	1	1	0	0	1	0	0	0	0	0	0	2	1	0	
AAA-ABB	Course	0	0	1	0	0	1	5	0	0	8	0	0	0	0	0	0	5	1	0	
Courses requiring a range	Inst	0	2	5	1	2	5	3	0	1	4	7	2	0	3	1	2	3	2	0	range requiring at least three A grades at A level
AAA-AAB	Course	0	23	9	2	9	36	27	0	2	17	18	2	0	19	1	29	18	4	0	
Courses requiring a range	Inst	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
AAA-AABB	Course	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	
Courses requiring a range	Inst	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
AAA-AAAB	Course	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
Courses requiring a range	Inst	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	range exceedding three A grades at A level
AAA-AAAA	Course	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Table Three displays the total number of courses that have grade information and the total number of courses as per principal subject area.

Table Three

Total Number of Courses	Inst	31	129	149	68	112	156	119	74	78	159	109	190	118	120	73	60	113	193	99
with information	Course	70	1875	3944	619	3144	4098	2659	286	658	5380	1318	4977	1905	2782	2488	748	2959	3814	1080
Total Number of Courses	Inst	**31**	**141**	**156**	**76**	**114**	**176**	**123**	**77**	**83**	**175**	**118**	**204**	**128**	**126**	**76**	**60**	**117**	**204**	**115**
	Course	**71**	**2055**	**4220**	**691**	**3283**	**4767**	**3018**	**339**	**759**	**5774**	**1379**	**5515**	**2044**	**2917**	**2613**	**775**	**3059**	**4288**	**1276**

Appendix 7: Datasets Relevant to 14-19 Education and Training

Dataset	Accessibility	Comments	How has it/will it be used by the Review?
Longitudinal studies and large-scale surveys			
Youth Cohort Studies: large-scale stratified random samples of young people post 16 taken almost each year since 1984. England and Wales	Available through data archives; reported in statistical releases	Eleven cohorts of pupils in Year 11 covered so far. Limitations: lack of continuity in research team, declining response rate at first sweep, attrition of earlier cohorts at subsequent sweeps.	Used in the Nuffield Review working papers and in Part III of the Report
British Birth Cohort Studies: National Survey of Health and Development (1946), National Child Development Study (1958) and 1970 Birth Cohort Study	Available through UK Data Archive	Detailed on family background but lacks fine-grained detail on educational participation and attainment; long-time lapse between waves	Used in Nuffield Review working papers
DfES Longitudinal Study of Young People in England: to begin 2004. Sample of 20,000 young people including 5,000 of ethnic minority background	Will be available through data archives (but some restrictions and disclosure controls)	Large sample size, good representation of ethnic minorities, more detail on education than other surveys	Early results may be available before Year 3 of the review
Labour Force Survey – Great Britain **Labour Force Survey – Northern Ireland**	Available through data archives	Large scale surveys – information on the labour market: employment, occupation, wages, qualifications, ethnic origin etc. The Great Britain survey covers (quarterly) 120,000 people aged 16 plus. A known problem is the measurement error in the gross flows estimates.	The review will be drawing on it in Year 2 for regional analyses
British Household Panel Survey	Available through data archives		Potentially useful in Year 2 of the Review (socio-economical data)

Survey of Young People in Scotland	Reports available from the Scottish Executive Education Department	Data collected by the National Centre for Social Research, aiming to follow young people from the age of 16 to 24. Covers two samples: 1997 and 2003	
Scottish School Leavers Survey/ Scottish Young People's Survey/ Scottish Qualified School Leavers Survey	Available through data archives	Cohort study of school pupils in the fourth year of secondary education (age 16). Changes in the ownership and organisation (reflected in the changes of name) created inconsistencies over time.	
Individual Learner Datasets			
PLASC: the pupil-level annual school census (1996-2002 involved statistics for a school as a whole; from 2002 information about pupils on an individual basis). England only.	No public access to individual data; data available at regional and LEA level	Collected by DfES. Comparisons with early years difficult because of changes in types of schools over time and changes in information collected	Data from PLASC underpin DfES administrative data used by review. Access to PLASC will be negotiated in Year 2 of the Review for addressing questions about progression.
ILR (Individual Learner Record): for students in all institutions funded by LSC. Replaced Individual Student Records (introduced nationally 1995) in 2002; also incorporated the information in the former National Trainee Database	Restricted access to ILR data (anonymised data available to researchers on application); aggregate data published	Data collected three times for each teaching year by LSC; aggregate data published by LSC about seven months after data collection	Some data from ILR used in this year's Report, but underpins LSC aggregate data. ILR data used in working paper; further work using ILR data will be commissioned.
Higher Education Records – HESA	No public access to individual-level data but data are used to produce national statistics		Only national statistics likely to be used by Review
University and Colleges Admissions Service data	Public access to aggregate data only, not to data on individual learners		Commissioned research using UCAS data will be completed during the next year of the Review
LEA and university loans company/services data	No public access		

Examination Databases			
QCA examinations data	No public access		Access will be negotiated in later years of the Review
SEB – Scottish Examination Board data, now held by the Scottish Qualification Authority	No public access		
Other 'administrative' datasets and statistics			
DfEE/DfES: Statistics of education – examinations results and participation data	Public access through the Research and Statistics gateway	Compilation of data from a number of sources listed above	Used in this year's Report.
DfEE/DfES: Database of Training Statistics	Public access to anonymised data only (on request)	Data on the take-up and completion of government training schemes. One follow-up six months after leaving the scheme, with 25%-50% response rate. Data are linked on the basis of National Insurance number.	Underpin some of the releases used in this year's report.
National Statistics Office	Public access (through www.statistics.gov.uk)	Compilation of data	Used in this year's Report.
School and College Statistics in Wales: statistics held by National Assembly for Wales	Public access		Used in this year's Report.
Scottish Office Education and Industry Department data			
Actuarial and census data			
e.g. General Register Office data; Population Projections Database; UK Electoral Statistics	Public access to some; some access through data archives	Limited detail on educational participation and attainment	Mid- and end-year estimates used by the review to calculate participation rates

International studies and datasets			
e.g. OECD – EuroStat, ISCED, PISA; IEA – Trends in International Mathematics and Science Study, PIRLS; World Bank – EdStats; UNESCO	Public access to published aggregate data (e.g. OECD *Education at a Glance)*, some international studies and datasets available through data archives	Only aggregate data available, time series can be constructed from some datasets	Some international datasets will be used by the Review in future. Also referred to in the current Annual Report

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(4) National Assembly for Wales Statistical Directorate (2001a) *Children and young people (aged under 18) – Data sources. Statistical Bulletin SB2/2001* [online]. At: www.wales.gov.uk/keypubstatisticsforwales/topicindex/topics.htm, accessed September 2004.

Appendix 8: Problems Arising From the Use of Administrative Datasets

In this appendix we begin the process of highlighting the strengths and weaknesses of the various administrative datasets we have been collecting and using from England, Wales and Scotland. In terms of accessibility and completeness, the English datasets are the most complete.

Fluctuations and gaps in data collection and aggregation

1. The administrative data were obtained from a multitude of sources, each with different data collection procedures, and with different purposes, usually not research oriented. They are therefore not necessarily mutually compatible for further aggregation purposes. In particular, at the moment there are no omnibus statistics and data collection procedures that encompass the 14-19 phase.

2. There are ongoing changes in the population estimates by age, as well as discontinuities in the way the age information is collected. For example, the English 1990 and 1991 data are based on the DES's annual School Examinations and FE Surveys, and thus they are subject to sampling errors. In 1992 a mixture of sources was used, the survey data being complemented by data from the examination boards, while starting with 1993 data have been provided solely by the examining boards and groups. Similarly, for secondary schools in Scotland, a breakdown of pupil numbers by age was collected in the schools census (September) up to 1993/94, but thereafter the age breakdown is only an estimate. Further, some of the datasets include randomly allocated ages, based on the distribution of known ages of students (FE figures). It is to be noted, for comparative purposes, that in the Scottish statistics, age is taken as at 31 December each year, i.e. three months after the census date, in order to exclude those pupils who leave school at the winter leaving date. In England and Wales, age is as at 31 August each year. The lack of accurate population estimates results in a high degree of uncertainty being expressed in the administrative data reports about the estimates of participation rates.

3. There have been important changes in data collection procedures that impose caution in interpreting the time series. For example, due to such changes, any interpretation of time series on Scottish FE and higher education spanning 1994/95 needs to be very cautious. Smaller-scale changes, such as those in the design of the school census (e.g. whether information about age is collected), or those in the definition of sectors (following the Further and Higher Education Act 1992) also have had an impact on the emerging patterns.

4. Further problems for the calculation of participation rates are generated by the classification of pupils by mode of attendance, sector and qualification aims. A common problem in all three countries derives from the greatest proportion of vocational courses being confounded in an 'other vocational' category whose size dwarves that of any other path, but about which no further details are available. The definition of the

'school sector' and of the different types of schools varies in the original data. School data prior to 1994 are thus not strictly comparable with those for later years. The variation is often related to changes in the school system itself. For instance, in England up to 1993, sixth form colleges were included in the 'comprehensive' schools category; on 1 April 1993 they moved to the FE sector and ceased to be included in this category; at other times, it is rather a matter of (re-)definition (for instance, from 1996 the category 'grammar schools' changed into 'selective schools', in an attempt to better reflect the criteria used to delineate types of schools – the admissions policy and the funding status) or regrouping (grant-maintained schools and LEA maintained schools data are sometimes reported separately and sometimes aggregated as comprehensive and grammar). Data are generally inconsistent for modern schools and special schools.

5. No headcount figures on students in FE were found. The data used in this report to illustrate the breakdown by qualification aims in Scotland are based on enrolments and thus could not be transformed into participation rates in relation to the total population. Wherever the sources provided headcounts for FE, they were obtained by adjusting the enrolment figures.

Comparability of data across countries

There are important differences between the assumptions and procedures for data collection in Scotland and those in England and Wales. These need to be considered before making any comparative judgement. Examples of such differences are the following:

1. Differences in the age census date. Whilst in England and Wales the age is taken as at 31 August before the beginning of each academic year, in Scotland the age information is as at 31 December each year. There is therefore a time lag between the figures in the three countries that is potentially important in fine-grained analyses of patterns of participation. In addition, there is a fluctuation in reporting from using the calendar year to using the academic year as the base.

2. The definitions of the categories employed in the collection and integration of data also vary across countries. Full time and part time are differently defined. Also, the definition of courses and levels and their grouping into either further education or higher education may vary, given the different qualification frameworks in Scotland and England. It is extremely difficult, therefore, to make any comparative judgements, especially in terms of attainment.

3. Moreover, the policy initiatives and the changes in the data collection procedures in the three countries are asynchronous (see Appendices 2 and 4 for policies in England and Wales), and the divergent trend following devolution indicates that the difference will become even greater.

Appendix 9: Advisory Committee Membership

Nick Pearce	Director, Institute for Public Policy Research
Professor David Raffe	Professor, Centre for Educational Sociology, Department of Education and Society, University of Edinburgh
Dr Catrin Roberts	Assistant Director, Education, Nuffield Foundation
Dr Geoff Stanton	Independent Education Consultant
Dr Cathy Stasz	Senior Behavioural Scientist, RAND Corporation
Dr Hilary Steedman	Senior Research Fellow, Centre for Economic Performance, London School of Economics
Professor Lorna Unwin	Director, Centre for Labour Market Studies, University of Leicester
Sir David Watson	Vice Chancellor, University of Brighton

Appendix 10: Core Group Membership

Cumulative list of members

Kate Anderson	Director of Research, Learning and Skills Development Agency
Bill Bailey	School of Education and Training, University of Greenwich
Kathy Baker	Policy Adviser, General Teaching Council
Tony Barnhill	Head of Student Recruitment, University of Ulster
Bahram Bekhradnia	Director, Higher Education Policy Institute
Stephen Ball	Karl Mannheim Professor of Sociology of Education, Institute of Education, University of London
Steve Besley	Edexcel
Maggie Blyth	Youth Justice Board
Tony Breslin	Chief Executive, Citizenship Foundation
Dave Brockington	ASDAN Trustee
Jane Buckley	Chief Executive, Changemakers
John Bynner	Director, Centre for Research on the Wider Benefits of Learning
John Chapman	Independent Education Consultant
Juliet Chua	Education, Training and Culture, HM Treasury
Sheila Cooper	Girls' Schools Association
John Craig	Researcher, Demos
Michael Cresswell	Director General, Assessment and Qualifications Alliance
Chris Dark	Headteacher, Peers Technology College, Oxford
Peter Davies	Research Manager, Learning and Skills Development Agency
Arthur De Caux	Senior Assistant Secretary, Education Department, National Association of Head Teachers
John Douglas	Head of 14-19, Newham LEA
John Dunford	General Secretary, Secondary Heads Association
David Egan	Cardiff School of Education
Victor Farlie	Chief Executive, Capital
Susan Fifer	Head, Learning and Assessment Policy, City and Guilds
Ian Finlay	Senior Lecturer, Department of Educational Studies, University of Strathclyde
Mick Fletcher	Research Manager, Learning and Skills Development Agency
Nick Foskett	Professor of Education and Head of School of Education, University of Southampton
John Fox	Independent Education Consultant
Alison Fuller	Reader in the School of Education, University of Southampton
Andy Furlong	Professor of Sociology, University of Glasgow
Stuart Gardner	Learning and Skills Council
Denis Gleeson	Research Director, Institute of Education, University of Warwick
Howard Gospel	Professor of Management (Emeritus), King's College, University of London
Paul Grainger	Principal, Widnes and Runcorn Sixth Form College
Sonja Hall	Principal Officer (Education), National Association of Schoolmasters Union of Women Teachers

John Harwood	Senior Associate Fellow, Institute of Governance and Public Management
Mark Hewlett	Centre for the Study of Comprehensive Schools, University of Leicester
Jeremy Higham	14-19 Research Group, School of Education, University of Leeds
Helen Hill	Principal Officer, Education, National Union of Teachers
Phil Hodkinson	School of Continuing Education, University of Leeds
David Hopkins	Department for Education and Skills
Prue Huddleston	Director, Centre for Education and Industry, Warwick University
Tina Isaacs	Qualifications and Curriculum Authority
Jo Jamieson	PLUS Development Adviser
Martin Johnson	Research Fellow in Education, Institute for Public Policy Research
Tom Jupp	Independent Education Consultant
Paul Lewis	Faculty of Economics and Politics, University of Cambridge
Geoff Lucas	Secretary, The Headmasters' and Headmistresses' Conference
Stephen Machin	Director, Centre for the Economics of Education, University College London
Malcolm Maguire	National Institute for Careers Education and Counselling
Clare Makepeace	Education Training and Culture, H M Treasury
Alison Matthews	Principal Researcher, 14-19 Curriculum, Qualifications and Curriculum Authority
Marian Morris	Principal Research Officer, National Foundation for Educational Research
Caroline Neville	National Director of Policy and Development, Learning and Skills Council
Judith Norrington	Director of Curriculum and Quality, Association of Colleges
Tim Oates	Head of Research, Qualifications and Curriculum Authority
Joan Payne	Independent Education Consultant
Penny Plato	Senior Consultant 14-19, Surrey LEA
Sonia Reynolds	Director, Dysg
William Richardson	School of Education and Lifelong Learning, University of Exeter
Paul Ryan	Management Centre, Kings College London
Maggie Scott	Curriculum and Quality Adviser, Association of Colleges
John Shaw	Headteacher, Meden School and Technology College
Anne Sofer	Nuffield Foundation Trustee
Gordon Stobart	Reader, School of Curriculum, Pedagogy and Assessment, London Institute of Education
Judith Stradling	Vice Principal, Curriculum and Students, City of Bristol College
Patricia Sweeney	Post-14 Network Development Officer, London Institute of Education
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Kate Taylor	Working Group on 14-19 Reform
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James Turner	The Sutton Trust
Peter Walsh	The Sutton Trust
Judith Watson	Senior Research Fellow, School of the Environment, Brighton University

John West	Independent Education Consultant
Matthew White	Department for Education and Skills
Jane Williams	Department for Education and Skills
John Wilson	Begbroke Directorate, University of Oxford
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