

# **Raising the Participation Age in Education and Training to 18**

## **Review of Existing Evidence of the Benefits and Challenges**

*Thomas Spielhofer, Matt Walker, Kerensa Gagg,  
Sandie Schagen and Sharon O'Donnell*

*National Foundation for Educational Research*

Research Report No  
DCSF-RR012

---

*Raising the Participation Age in  
Education and Training to 18*  
*Review of Existing Evidence of the  
Benefits and Challenges*

---

*Thomas Spielhofer, Matt Walker, Kerensa Gagg  
Sandie Schagen and Sharon O'Donnell*

*National Foundation for Educational Research*

The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Children, Schools and Families.

© National Foundation for Educational Research 2007  
ISBN 978 1 84775 057 0



# Contents

<b>Executive Summary</b>	<b>1</b>
<b>1. Introduction</b>	<b>7</b>
<b>2. Search strategy and methods</b>	<b>9</b>
2.1 Introduction	9
2.2 Search methodology	9
2.3 Search strategy	10
2.4 Selection process	11
2.5 International review	12
2.6 Review processes	12
2.7 Focus of reviewed literature	12
2.8 Analysis	13
<b>3. Recent trends in post-16 participation</b>	<b>14</b>
<b>4. Characteristics of non-participants</b>	<b>17</b>
4.1 Introduction	17
4.2 Young people in JWT and NEET	17
4.3 Likely learning routes for non-participants	19
<b>5. The international picture</b>	<b>21</b>
5.1 Introduction	21
5.2 Compulsory education and training participation laws in other countries, states and provinces	21
5.3 The impact of raising the participation age	23
5.4 Key strategies to support raising the participation age	24
5.5 Challenges of raising the participation age	25
<b>6. The Benefits of Participation in Post-16 Education and Training</b>	<b>27</b>
6.1 Introduction	27
6.2 The benefits of participation	27
6.3 The impact on wages	28
6.4 The impact on labour market participation	32
6.5 The impact on educational outcomes	34
6.6 The impact on post-compulsory participation	35
6.7 The impact on civil involvement	35
6.8 The impact on health and well-being	36
6.9 The impact on life satisfaction	36
6.10 The impact on offending behaviour and crime	37
<b>7. Conditions for Success</b>	<b>38</b>
7.1 Introduction	38
7.2 Managing incentives and sanctions	38
7.3 Making sure young people receive high-quality guidance and support	39
7.4 Providing better, more engaging pre-16 provision	41
7.5 Providing a range of post-14 and post-16 pathways	41

7.6 Tracking young people	42
7.7 Addressing social challenges	43
<b>8. Summary and Conclusions</b>	<b>44</b>
8.1 Evidence reviewed	44
8.2 Young people likely to be affected	44
8.3 Likely benefits	45
8.4 Challenges	46
8.5 Further research	47
<b>References</b>	<b>49</b>
<b>Appendix 1 Keywords used in searches</b>	<b>56</b>
<b>Search strategy</b>	<b>56</b>
<b>Appendix 2 Framework for reviewing relevant research</b>	<b>60</b>
<b>Appendix 3 International policy context</b>	<b>61</b>
<b>Appendix 4 Table of International countries</b>	<b>67</b>

# Executive Summary

Compulsory education in England currently ends at 16 years of age. Young people are encouraged to continue in education and training beyond that date, and a majority do so. However, it is possible for young people to leave school at 16 and go straight into jobs without training (JWT), while others may be NEET (not in employment, education or training).

In March 2007, the government launched a Green Paper called Raising Expectations (DfES, 2007c), which proposes that, from 2015, all young people should be required to participate in some form of education or training until they reach the age of 18. It is important to note, however, that this is not the same as raising the school-leaving age. The education or training could be 'in a school, college, with a work-based learning provider, or as part of a job'; it could be full-time, 'or part time if a young person is in full time employment'.

The Department for Children, Schools and Families (DCSF, formerly the Department for Education and Skills (DfES)) commissioned an external review of national and international research evidence to explore the likely impact, benefits and challenges associated with the proposed change. The external review was carried out by the National Foundation for Educational Research (NFER), and this document presents the main findings.

## Key findings

- Although some countries have introduced systems similar to that proposed in the Green Paper, there was very little direct evidence of the impact on young people. Evidence of the impact of raising the school-leaving age (in England or in other countries) was examined, but it cannot be assumed that participation in education or training will necessarily have the same impact.
- Young people most likely to be affected by the proposed legislation are those who, in the absence of the proposed policy, would have probably been NEET or in JWT. Given the characteristics of these young people (few or no qualifications, and often a negative experience of school), it seems likely that – when participation to 18 becomes compulsory – most will move into jobs *with* training, vocational courses or courses leading to qualifications at level 2 or below.
- The main benefit for young people of further participation is in terms of increased future earnings. Even though there is evidence that vocational qualifications at level 2 or below have little economic impact generally, research suggests that they are likely to considerably benefit young people who leave school with no qualifications. Young people who participate in post-16 education or training are also more likely to be in employment at a later date.

- Although the proposal is for *compulsory* participation, the Green Paper acknowledges that it will be better to encourage young people to participate of their own free will. To achieve this, evidence suggests it will be necessary to offer a range of suitable post-16 pathways; to ensure the availability of high-quality guidance and support; and to offer good, alternative pre-16 provision which will engage young people and encourage them to want to continue learning post-16.
- It will be necessary to track young people, and enforce participation in cases where they refuse to engage voluntarily. Countries which operate a similar system use sanctions such as fines (for young people and/or their parents) and withholding driving licences, but as yet there is limited direct evidence indicating how successful these sanctions are.

## Aims and research methods

The main aim of this external review was to collect and analyse national and international data relating to:

- the expected benefits of making education or training compulsory to the age of 18 (including the likely impact on attainment)
- the challenges likely to be involved in implementing the proposed legislation, and enforcing participation in post-16 education or training
- the range of options which will encourage young people to continue with education or training post-16, and the support they will need to enable them to make effective choices.

In addition to searching bibliographic databases and internet sources, international contacts were asked to provide relevant information. There was little or no direct evidence of the likely impact of introducing a system of compulsory education or training to the age of 18; in many cases change had only recently been introduced, and it was as yet too early to find evidence of impact.

A significant number of papers related to change in the ‘learning leaving’ age, but in many cases this applied specifically to raising the school-leaving age, and it cannot be assumed that the findings of such studies would apply directly in the proposed English context. Evidence relating to voluntary participation (the impact on young people who choose to continue learning beyond the minimum leaving age) was also reviewed, although this too may not apply directly in the proposed new context.

With direct evidence lacking, the best alternative strategy was to examine evidence on related topics and consider what light it might shed on a situation which would in some respects (though not all) be similar.

## Young people likely to be affected

Currently, a large majority of young people aged 16 (87.2 per cent) and aged 17 (77.5 per cent) are already in education or training (DfES, 2007a&b). The young people likely to be affected by the Green Paper proposals are the minority who would otherwise be NEET or in JWT. It is important to understand the characteristics of these young people, in order to know how best to encourage them to participate in education or training.

Research evidence indicates that young people who are NEET have not enjoyed school (Coles *et al.*, 2002; EdComs, 2007; Maychell *et al.*, 1998; Payne, 2000), and leave without obtaining any, or only minimal, qualifications (Bynner, 2004; EdComs, 2007; McIntosh 2004). They tend to be white (Payne, 2000), to come from lower socio-economic backgrounds (Rennison *et al.*, 2005), and have low levels of career exploration skills and self-awareness (Morris *et al.*, 1999). Their parents have low qualification levels, aspirations and awareness of post-16 options and may therefore be ill-equipped to advise and encourage their sons and daughters (Rennison *et al.*, 2005).

There are relatively few studies relating to young people in jobs without training. However, recent evidence suggests that although they share many of the characteristics of the NEET group, their qualification levels are not quite as low, and there are fewer barriers to engagement in learning. When leaving school, they tend to be motivated by gaining employment and earning money as soon as possible (Anderson *et al.*, 2006; EdComs, 2007).

Given the characteristics of these two groups (between which there is considerable movement) it seems likely that – when participation to 18 becomes compulsory – most are likely to move into jobs *with* training, vocational courses and courses leading to qualifications at Level 2 or below. A key challenge will be to provide opportunities which are both suitable and attractive to them.

## Likely benefits

The main benefit for young people of further participation in education or training is in terms of increased earning power. There is substantial evidence that participation in education and training leads to higher wages (for example, Oreopoulos, 2002; Oreopoulos, 2006a&b; Leigh and Ryan, 2005; McIntosh, 2004; Walker and Zhu, 2003), but studies relate to raising the school-leaving age, or (in a few cases) to voluntary participation in vocational training; it cannot be assumed that the proposed requirement to participate in education or training to 18 would necessarily have the same impact. The evidence suggests that vocational qualifications do not yield the same economic benefits as academic qualifications (Dearden *et al.*, 2002; Dickerson, 2006), and that the benefits of some vocational qualifications at Level 2 or below are negligible (Dearden *et al.*, 2004; Dickerson, 2006; McIntosh, 2002).



However, McIntosh (2004) found that they do have a significant impact on young people who left school with no previous qualifications. This is particularly important given the fact that many of those currently NEET or in JWT have no or very few qualifications. Furthermore, the wage and employment returns of the new Diplomas (DfES, 2005) are not yet known; given their blend of theoretical and applied learning, it is possible that they may be valued more highly than existing vocational qualifications.

It is reasonable to assume that staying on in education or training will lead to improved qualifications, which will in turn lead to increased future earnings. However, relatively few studies have examined the link between staying on and improved educational outcomes. Some positive evidence has been found (Meghir and Palme, 1999; Oreopoulos, 2006a), although this was within a context of raising the school-leaving age.

There is evidence that young people who stay in education or training post-16 are more likely to be in employment at a future date (Access Economics Pty Limited, 2005; Bynner, 2004; McIntosh, 2004). However, it should be noted that the link is not necessarily causal; that the studies were in a context of voluntary participation; and that one related to *successful* participation (i.e. the achievement of qualifications) rather than participation per se.

Two studies (Meghir and Palme, 2004; Oreopoulos, 2005) provided evidence to suggest that some young people who were ‘compelled’ by legislative change to stay on at school might subsequently participate in post-compulsory education.

## Challenges

Young people who currently choose not to participate will include some at least whose experience of pre-16 education was mainly negative. Although the proposal is for *compulsory* participation, the Green Paper acknowledges that it will be better to encourage young people to participate of their own free will. The main challenge therefore is to make young people *want* to stay in post-16 education or training.

The research evidence suggests that a number of strategies will need to be adopted to achieve this end. First, there needs to be a range of post-14 and post-16 pathways which will be both suitable and attractive to the young people (GHK, 2005). Plans for the new Diplomas, and the apprenticeship entitlement will contribute to this. But young people will not take advantage of new opportunities unless they are fully aware of them, and able to choose the most appropriate pathway. This highlights the importance of high-quality guidance and support (Davies and Webster, 2005), and the need to involve family members in discussions with professional advisors, so that decisions can be made in the light of full knowledge of the options, as well as the young person’s interests and skills (Blenkinsop *et al.*, 2006).

The evidence confirms that young people are less likely to remain in (voluntary) education and training post-16 if their pre-16 experience of education has not been positive (Sabates *et al.*, 2007; McIntosh, 2001). An unsuitable curriculum or teaching style may lead to disaffection and the desire to leave education at the earliest possible opportunity. It is, therefore, important to offer good, alternative pre-16 provision which will engage young people and encourage them to want to continue learning after reaching the school-leaving age (EdComs, 2007; Golden *et al.*, 2006).

Although voluntary participation is undoubtedly preferable, a statutory requirement for participation to 18 has to incorporate some method of tracking young people and enforcing participation, in cases where they refuse to engage voluntarily. Countries, states or provinces where a similar system exists apply a number of sanctions such as fines (for the young people and/or their parents) and the withholding of driving licences. Unfortunately, there appears to be as yet no evidence indicating how successful these sanctions are. There is evidence (Oreopoulos, 2005) that raising the school-leaving age may have limited impact if enforcement is weak. The implication is that ‘strong’ enforcement would be needed for effective implementation of the proposals.

## Further research

As there appears to be no country where a similar system has been introduced and thoroughly evaluated, it is necessary to rely on mainly indirect evidence, but further research in the following areas could prove valuable:

- A survey of young people in JWT to help clarify their characteristics, and the strategies that would encourage them to engage in post-16 participation.
- A survey of employers, to ascertain how they intend to respond to the proposals (i.e. by offering jobs with training, by employing over-18s only or by releasing the young people they employ to enable them to engage in education or training elsewhere).
- An analysis of statistical data from countries where the learning leaving age has been raised.
- A longitudinal study of the first cohort of young people to be affected by compulsory participation; to follow them from Year 9 (when they choose key stage 4 courses) or even earlier, and monitor the guidance received, decisions made, courses followed and finally post-16 outcomes.

## Research methods

The review focussed on work published since 2000, since this coincides with the reform of 14-19 education and training. In order to include current ongoing and new emerging research, the searches included electronic information sources and ‘grey’ literature such as conference reports and committee papers.

Search methods included:

- bibliographic database searches of education/social science research databases
- hand searches of previous reviews and bibliographies
- internet and Google searches
- e-mail and personal requests to researchers working in this area.

In addition, named contacts in relevant countries were asked to provide brief summaries of recent developments, together with any references to any published research on related issues.

# 1. Introduction

Compulsory education in England currently ends at 16 years of age. Young people are encouraged to continue in education and training beyond that date, and a majority do so. However, it is possible for young people to leave school at 16 and go straight into jobs without training (JWT), while others may be NEET (not in employment, education or training).

In the 21<sup>st</sup> century world, with rapidly developing technologies and growing international competition, there is a need for improved skill levels, which means raising the level of attainment and therefore of participation in education or training. Initiatives such as the introduction of the new Diplomas from 2008 and the Foundation Learning Tier in 2010 should encourage greater participation, and it is expected that, by 2015, 90 per cent of 17-year-olds will choose to take part in education or training.

In order to increase the proportion yet higher, it was felt that some degree of compulsion would be needed. The government, therefore, launched a Green Paper called *Raising Expectations* (DfES, 2007c), which proposes that all young people, from 2015, should be required to participate in some form of education or training until they reach the age of 18.<sup>1</sup> It is important to note that this is not the same as raising the school-leaving age. The education or training could be ‘in a school, college, with a work-based learning provider, or as part of a job’; it could be full-time, ‘or part time if a young person is in full time employment’.

Officials at the Department for Children, Schools and Families (DCSF, formerly the Department for Education and Skills (DfES)) undertook a review of evidence to inform the development of the Green Paper. They commissioned an external review of national and international research evidence to build on this and to provide information to complement the feedback obtained in a consultation exercise launched with the Green Paper. The external review was carried out by the National Foundation for Educational Research (NFER), and this document presents the findings.

The main aim of this external review was to collect and analyse national and international data relating to:

- the expected benefits of making education or training compulsory to the age of 18 (including the likely impact on attainment)
- the challenges likely to be involved in implementing the proposed legislation, and enforcing participation in post-16 education or training

---

<sup>1</sup> As an intermediate step, the minimum age for leaving education or training would be raised to 17 in 2013.

- the range of options which will encourage young people to continue with education or training post-16, and the support they will need to enable them to make effective choices.

Chapter 2 below outlines the methods used in undertaking the review. The next five chapters (3-7) summarise the substantive findings relating to topics closely associated with the issue of raising the age of participation. Finally, Chapter 8 offers conclusions and recommendations based on the review.

## **2. Search strategy and methods**

### **2.1 Introduction**

This chapter describes the review's search strategy and methods. It outlines the search methodology used in order to identify relevant research, the selection process applied for including and excluding material and the way in which relevant studies were analysed and appraised.

### **2.2 Search methodology**

In order to meet the key aims and objectives of the review, the search parameters outlined in Table 1 were adopted. The search focussed primarily on literature published since 2000, because of the policy developments which have occurred since that year, including QCA's 11-19 reform programme and significant changes to the key stage 4 curriculum. More specifically, there has been:

- the introduction of Connexions (2001)
- the introduction of the Increased Flexibility for 14-16 year olds Programme (2002)
- the introduction of the Education Maintenance Allowance (EMA) to provide financial support for learners continuing in post-16 education (2004) and training (2006)
- the introduction of Young Apprenticeships (YAs) for 14 to 16 year-olds in England (2004)
- the publication of the 14-19 Education and Skills White Paper (2005)
- the increased focus on Personalised Learning and Individual Pathways.

Although the review focussed on work published since 2000, it included some key documents that were published prior to that date, if they were deemed to provide substantive evidence not available in more recent publications.

**Table 1. The search parameters**

<b>Overall focus</b>	Empirical research and wider literature that provides evidence of the benefits of raising the participation age to 18.
<b>Time scale</b>	Work published from 2000 onwards (UK databases were searched as far back as 1970, since issues relating to the raising of the school-leaving age (ROSLA) in 1972 might have some bearing on the proposed changes).
<b>Age range</b>	Young people aged between 16 to 18 (some studies focusing on younger students were included if directly relevant to the key questions).
<b>Geographical scope</b>	Documents referring to the English education system and those from other countries where reports are available in English (including those from European countries, Australia, Canada, and the USA).
<b>Sources</b>	Published literature reviews, articles, reports, books and monographs, conference reports, committee papers and information on current research studies.

In order to include current ongoing and new emerging research, the searches included electronic information sources and ‘grey’ literature such as conference reports and committee papers.

### **2.3 Search strategy**

Relevant research literature was identified within the search parameters using a number of complementary search methods. A range of different educational and sociological databases were searched. Search strategies for all databases were developed using terms from the relevant thesauri, where these were available, in combination with free-text searching. The keywords used in the searches, together with brief descriptions of each of the databases searched, are outlined in the Appendix 1.

Search methods included:

- Bibliographic database searches of education/social science research databases:
  - Australian Education Index (AEI)
  - British Education Index (BEI)
  - Canadian Business and Current Affairs (CBCA)
  - The Educational Resources Information Center (ERIC)
- Hand searches of previous reviews and bibliographies to identify any articles or reports that might be of relevance to the review. Where

documents retrieved by the searches provided secondary references to other relevant reports or articles, those were also pursued.

- Internet and Google searches. Many of the documents were identified through on-line searches.
- E-mail and personal requests to researchers working in this area. These were made to key individuals and contacts identified by the research team and DCSF in other organisations and institutions.

## **2.4 Selection process**

Given the necessity for the findings from this review to inform current research and policy imperatives, the reviewing process sought to identify the key documents which would shed light on the research questions. The team defined a set of critical assessments by which the process of selection or rejection of research studies was made.

The initial focus was on identifying studies that shed light on the direct benefits of raising the participation age. This necessitated a search for research findings from countries where the participation age had been raised. However, the research team was unable to find such literature, because in those countries where the participation age had been raised this had happened only recently and research evidence was not yet available. The selection process, therefore, focused on the indirect benefits of, or matters related to, raising the learning leaving age. This included, for example, analysing the characteristics of young people who choose not to continue to participate in education or training post-16, the barriers and incentives to continued participation, and the benefits of compulsory participation in education or voluntary participation in training after the age of 16. Research was included if it offered any insights into the influences on young people involved in choosing post-16 pathways, and/or on the timing of such decisions or of support for the process of continuing in education or training.

Studies were rejected where they yielded nothing specifically on the benefits of staying on in education or training, voluntarily or otherwise, or if they yielded nothing on the reasons why young people choose to participate. Only documents published in English or German were included in the study, although the focus was on English language documents. No investigation was made of German language databases.

Approximately 100 potentially relevant items were retrieved for closer scrutiny following the searches. Of these, 65 met the criteria for detailed inclusion in the review (outlined previously and in Section 2.6 below). A number of other sources, including policy documents and statistical evidence were drawn on to provide supporting evidence.



## 2.5 International review

In addition to the literature review outlined above, the NFER's International Information Unit, which incorporates the Eurydice Unit for England, Wales and Northern Ireland, used its direct links with other countries in the Eurydice network to obtain relevant information from countries, states or provinces:

- in which the school-leaving had recently been raised, or was currently being raised, such as Italy and Hungary
- which already had, or was in the process of establishing, a system similar to that proposed for England, such as Germany, Belgium, and the Netherlands. Queensland (Australia), Western Australia and New Brunswick (Canada).

International Unit researchers contacted named links in the relevant countries and asked for brief summaries of recent developments, together with any references to any published research on related issues. Such evidence, where available in English or German, was obtained and reviewed along with documents identified via the literature search.

## 2.6 Review processes

Research studies were scrutinised by team members using a common framework (see Appendix 2) in order to ensure commonality and comprehensiveness in the review process. The framework was designed to generate information for three purposes:

- *Cataloguing and reporting* – basic descriptive information (such as full publication details) as well as a category descriptor (concerning the broad substantive focus of a study and the key questions that it addressed in relation to the proposed review) were included in order to facilitate cataloguing and subsequent analysis and reporting.
- *Evaluation* – as well as descriptive information, this framework was designed to generate evaluative information about the depth of detail provided about the different aspects of each study (methodology, key findings).
- *Evidence-based analysis* – the third purpose of the framework was to enable the generation of ideas about the contribution that individual papers made to the evidence base (i.e. key findings, overall relevance/researcher's view of implications).

## 2.7 Focus of reviewed literature

The research, within the set parameters, encompassed smaller qualitative research, regional studies and large-scale international quantitative projects. Most of the research related to either: a) voluntary participation in post-16 education or training (largely within the context of the UK); or b) extended

compulsory school-based education (research evidence from the UK and other countries). However, the literature revealed some valuable ideas that informed the research team's understanding of the likely benefits and challenges of raising the participation age to 18.

Overall, there were few studies that provided an overview of the *range* of benefits associated with increasing the leaving age; most focused on single issues such as the economic returns to education. No studies were found on the direct benefits of raising the participation age to 18 in education *or* training. The lack of direct research evidence of the key benefits of making education or training compulsory to the age of 18 means that, although understanding of this complex area has been progressed, there is still much to be researched.

The research studies that met the criteria for inclusion yielded information on:

- the characteristics of non-participants, especially those who are NEET
- changes to participation laws in certain countries
- the benefits of post-16 schooling
- the likely challenges to raising the participation age
- the conditions for ensuring that more young people participate in post-16 learning.

Some limited information was also available on:

- the characteristics of young people in JWT
- the benefits of continuing in training post-16
- the role of incentives and sanctions in encouraging participation.

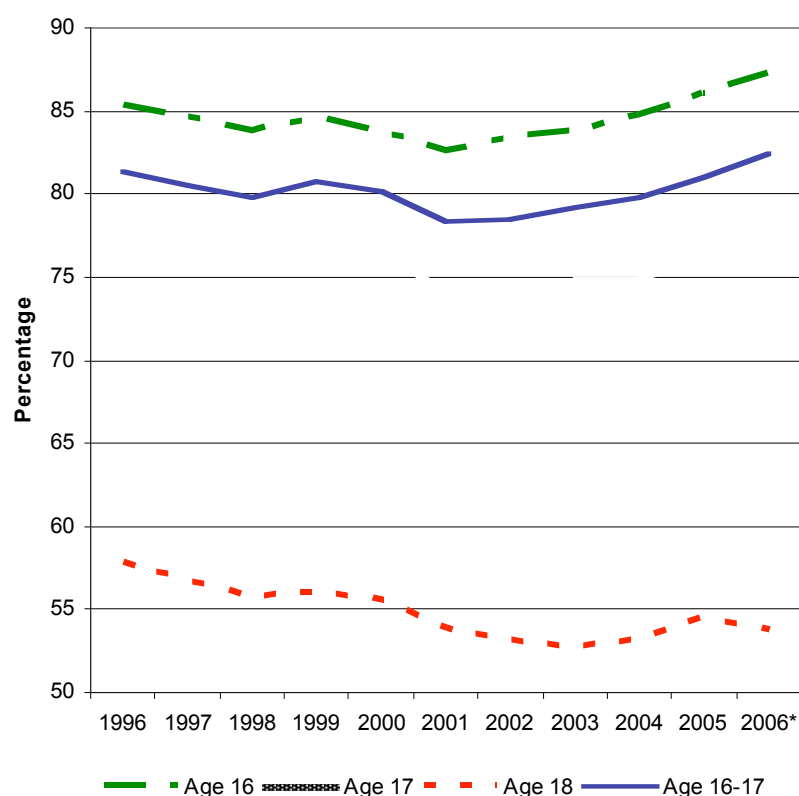
## **2.8 Analysis**

The research team assimilated the available evidence and summarised the key points that the studies were providing. This process allowed the key messages from the literature to emerge. These findings were then separated into four sections, the characteristics of non-participants, evidence on changes to the participation age in other countries, evidence of the benefits of participation, and the conditions required to maximise the impact of the proposed policy. The findings are discussed in subsequent chapters. Prior to this exploration, however, trends in post-16 participation in education and training since 1995 are examined in Chapter 3 below.

### 3. Recent trends in post-16 participation

It is appropriate, within the context of this review, to examine the trends in post-16 participation rates in education and training in the UK over a ten-year period between the years 1996 and 2006. International comparisons of participation post-16 are also made. This provides the background for international studies in this review that focus on countries in which the participation age has recently been raised or which have a similar system to that proposed for England.

**Figure 1. Participation of 16 to 18 year olds in education and training, England, 1996 to 2006**



*\*Provisional*

*Source: Data compiled using tables from DfES (2007a) showing the numbers of young people participating in 'education and work-based learning (WBL)'<sup>2</sup>*

Figure 1 shows that the proportion of 16-17 year olds in education and training fluctuated between 1996 and 2006, rising from a low of 78.3 per cent in 2001 to an estimated 82.4 per cent in 2006. The total number of 16-18 year olds in

<sup>2</sup> This figure includes all young people in full-time education, full-time or part-time government supported work based learning (WBL), employer funded training (EFT) involving some part-time education in college, and other education and training (OET) involving some part-time education in college. It excludes any EFT where training only takes place in the workplace and OET where training takes place in independent colleges or via private study.

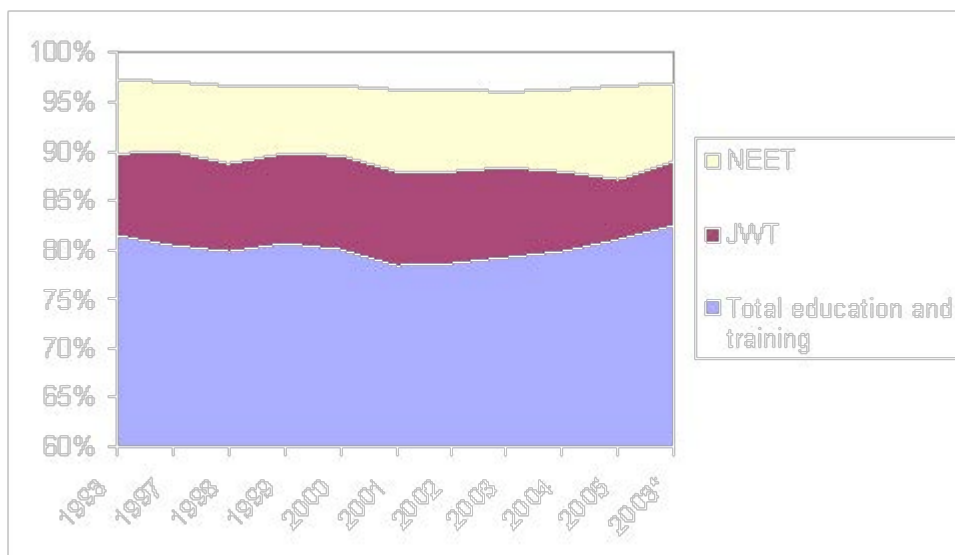
education or training has increased over the same period, from 1.4 million in 1996 to over 1.5 million at the end of 2006, the highest number ever (DfES, 2007b). In 2006, 14.4 per cent of 16 to 17 year olds were either NEET or in JWT (DfES, 2007a).

The combined figures mask greater variation at the individual age level. The proportion of 16 year olds, currently the first post-compulsory year, in education and training has gradually risen from 82.6 per cent in 2001, to 87.2 per cent in 2006. The proportion of 16 year olds within full-time education has risen more steeply, from 70.2 per cent in 1998 to an estimated 78.1 per cent in 2006 – the highest rate ever recorded (DfES, 2007b).

In recent years, however, the concerns about the level of participation in post-compulsory education and training in the UK have centred increasingly on the situation at age 17+. While in recent years the situation has improved, there are still considerable numbers of 17 and 18 year olds who are not participating in education or training. There was a substantial fall in the proportion of 17 year olds participating in education or training between 1999 and 2002, from 76.8 per cent to 73.7 per cent. The proportion participating at 17 subsequently began to rise again, with 77.5 per cent engaged in education or training at the end of 2006. At age 18, there has been a more significant fall-off in participation. The proportion of 18 year olds in education or training has declined since peaking in 1996 at 57.8 per cent, remaining relatively stable at approximately 54 per cent between 2005 and 2006.

The recent increase in overall participation in learning by 16-17 year olds is in the context of an overall reduction in the proportion of 16-17 year olds in JWT, and a NEET population that has stayed around the eight per cent mark (see Figure 2 below).

**Figure 2. Proportion of 16 and 17 year olds NEET, in JWT, and in education and training, England, 1996 to 2006**



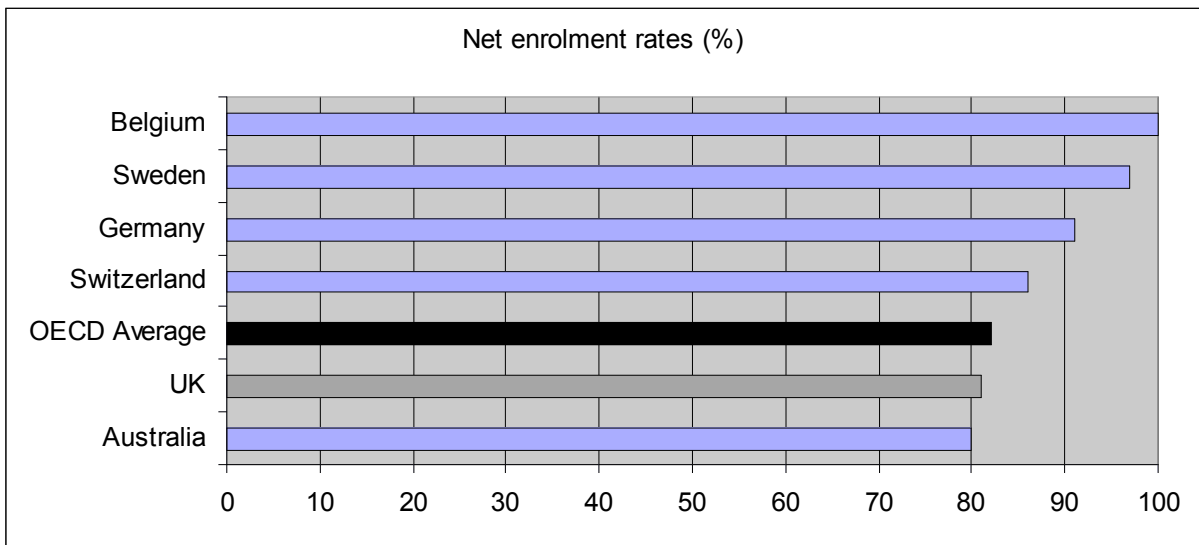
\*Provisional

Source: Data compiled using tables from DfES (2007a) showing the numbers of young people participating in 'education and WBL'. The figures in this graph do not add up to 100 per cent as they exclude some young people engaged in part-time training in the workplace, in independent colleges or via private study, based on estimates from the Labour Force Survey.

The latest figures (DfES, 2007b) suggest that fewer young people are choosing to go into jobs without training and that the government is making progress towards the Public Service Agreement (PSA) target to reduce the proportion of young people aged 16-18 not in education, employment or training.

Despite these improvements, worries about the impact of fall-off in participation at age 17+ on the UK's international competitiveness have led the government to set a demanding target of 90 per cent participation at age 17 by 2015, as outlined in the 14-19 Implementation Plan (DfES, 2005). International comparisons of participation at age 17 suggest that the problem of low levels of participation persist in the UK to a degree not seen in many other developed nations (see Figure 3 below).

**Figure 3. International comparisons of participation in education and training at age 17, 2004**



Source: Data compiled from OECD (2006)

It is important to note, however, that international comparisons of education and training participation rates are very difficult and should, therefore, be treated with caution. In addition, some knowledge of the underlying systems in different countries is extremely useful in interpreting the data. For example, the relative degree to which labour markets are regulated and the relationship between earnings and qualification level in the UK, make it possible to gain employment at 16 or 17 without being qualified. This contrasts with the situation in the majority of other European countries, where entry to most jobs is qualification-restricted, and where many young people not proceeding to higher education enter the job market via a lengthy period of apprenticeship (see Davies and Webster, 2005).

Nevertheless, the figures suggest that further action is needed if the government is to reach its ambition of ensuring that nearly all 16 and 17 year olds are participating in education or training.

## 4. Characteristics of non-participants

### 4.1 Introduction

This section explores the main characteristics of the young people aged 16 to 17 (14.4 per cent in 2006) who do not participate in education or training (DfES, 2007a). It starts with an overall assessment of the characteristics of young people either in JWT or NEET, and then moves on to explore any observed differences in the literature between these two groups. It finishes with an exploration of the implications of the identified characteristics on the likely learning destinations of those targeted by the proposed policy.

### 4.2 Young people in JWT and NEET

It is worth noting that many of the studies reviewed (see, for example, EdComs, 2007; Rennison *et al.*, 2005) emphasise that the non-participants are **not a homogenous group**. The latest Nuffield Review annual report (Hayward *et al.*, 2006), for example, argues that those young people officially categorised as ‘NEET’ for statistical purposes do not form a coherent group with commonly shared characteristics. Instead, they include ‘individuals engaged in activities as diverse as: caring for an elderly relative, parenthood, engaging in criminal activity, coping with a serious physical or psychological illness, searching for suitable education and training provision, travelling or being on a ‘gap’ year’ (p. 105). A similar conclusion was reached by Anderson *et al.* (2006) with regard to those young people in JWT. Based on qualitative interviews with 68 young people in JWT, the research concluded that they ‘display a wide range of characteristics, experiences, motivations and attitudes. They are located in a variety of jobs and plans or ambitions for employment or education vary considerably’ (p. 50).

The fact that non-participants do not form a clearly delineated, homogenous group has obvious implications for policy as no single strategy alone will be able to address their different and varied needs and aspirations.

Despite emphasising their heterogeneity, most of the studies reviewed do attempt to describe the main characteristics of non-participants. Most of the evidence relates to young people who are NEET, with many fewer studies exploring the characteristics of those in JWT (who have only recently become a policy focus). While some studies (for example, EdComs, 2007; Payne, 2000) focus on both groups together, only one recent research report (Anderson *et al.*, 2006) was identified which relates to those in JWT only.

### 4.2.1 Young people who are NEET

According to the literature, young people who are currently NEET are consistently described as being most likely to:

- **have achieved no or very low qualifications when leaving school at 16:** several studies show that educational achievement at 16 is the main predictor of post-16 participation (Bynner, 2004; EdComs, 2007; McIntosh 2004); furthermore, 35 per cent of 16 and 17 year olds who are NEET have no qualifications and 44 per cent have qualifications below Level 2 (DWP, 2006).
- **have not enjoyed school, have a history of truancy and/or exclusion and feel that they were not treated as adults in school:** various studies establish a strong link between negative experiences of school and the likelihood of not engaging in learning post-16 (Coles *et al.*, 2002; EdComs, 2007; Maychell *et al.*, 1998; Payne, 2000) – one study (Rennison *et al.*, 2005), for example, found that young people in the NEET group were over three times more likely to have been excluded from school than young people overall.
- **be male** – statistical data (DfES, 2007b) shows that boys are twice as likely to be NEET at 16 (4.2 per cent of girls compared to 8.6 per cent of boys in 2006).
- **be white** – analysis of the Youth Cohort Study (Payne, 2000) revealed that *‘low achievers from ethnic minorities were much more likely to stay on in full-time education than low achievers belonging to the white majority’* (p. 53).
- **come from lower socio-economic backgrounds** – several studies (Payne, 2000; Rennison *et al.*, 2005) have shown a consistent link between low levels of participation in learning post-16 and disadvantaged family backgrounds and parents’ levels of employment.
- **have low levels of career exploration skills and self-awareness** – a longitudinal survey (Morris *et al.*, 1999) of young people before and after completing compulsory education found that a successful transition into learning post-16 was dependent on young people’s career exploration skills and awareness of their own strengths and weaknesses.
- **have parents with low qualification levels, aspirations and awareness of post-16 options** – analysis of quantitative data (Rennison *et al.*, 2005) collected as part of the evaluation of the Educational Maintenance Allowance (EMA) revealed a strong link between non-participation and parental characteristics. The study found, for example, that parents of young people who were NEET were more likely than other parents to agree that they did not ‘know enough about modern qualifications to give proper advice to their child’ (p. 25).

Other characteristics frequently associated with young people in the NEET group facing particularly serious barriers to engagement include teenage pregnancy and parenthood, being homeless, having a disability, having mental

health problems, having misused drugs or alcohol, and being a young offender (EdComs, 2007; Payne, 2000; Rennison *et al.*, 2005; Sachdev *et al.*, 2006; SEU, 1999).

#### 4.2.2 Young people in JWT

Due to the lack of studies focussing specifically on young people in jobs without training, it is impossible to describe their typical characteristics in the same way. However, the recent study by Anderson *et al.* (2006) shows that even though young people in JWT share many of the characteristics of those who are NEET, they have fewer barriers to engagement, are more similar to those currently participating in education and training and are more likely to be engaged in learning in the future. There is also evidence, for example, that those in JWT tend to have low levels of qualifications, but not as low as those who are NEET. Despite these differences, there is evidence of a lot of movement between the two groups. The study by Anderson *et al.* (2006), for example, found that many classified as being JWT according to the Connexions database had changed status when contacted by researchers. Analysis by the DCSF<sup>3</sup> has also shown that almost half of those exiting both the JWT and NEET groups from one quarter to the next move into the other group.

Other distinguishing characteristics of young people in JWT according to the literature are that many of them are motivated by getting a job and earning money as soon as possible when leaving school (Anderson *et al.*, 2006; EdComs, 2007; Maychell *et al.*, 1998; Rennison *et al.*, 2005); and that many of them are employed in retail (Anderson *et al.*, 2006; Hall, 2006; Spielhofer and Sims, 2004) – up to 30 per cent of those aged 16 and 17 year olds according to analysis by the DCSF<sup>4</sup>. There is also evidence that boys are more likely to be in JWT than girls at 16 (DfES, 2007d).

### 4.3 Likely learning routes for non-participants

Studies reviewed in Sections 4.2.1-2 above indicate that those who are NEET are more likely to have no or very low qualifications and that they have not enjoyed school; those in JWT are motivated by earning money and many of them currently work in the retail sector. Given these characteristics, it is possible to hypothesise that if, and when, the proposed policy to raise the participation age comes into force, many of the non-participants are likely to move into:

- work-based training
- vocational courses (including the new Diplomas)

---

<sup>3</sup> According to an unpublished briefing paper from DfES based on analysis of the 2005 APS Labour Force Survey.

<sup>4</sup> *ibid.*



- courses leading to qualifications at or below Level 2.

The implications of these likely learning routes on the potential benefits of raising the participation age will be explored further in Chapter 6 below.

## 5. The international picture

### 5.1 Introduction

This chapter sets out the main findings of a review of policy documents and consultation with a range of international experts in countries and states belonging to the NFER's Eurydice network (the information network on education in Europe)<sup>5</sup> or INCA (the International Review of Curriculum and Assessment Frameworks Internet Archive)<sup>6</sup>. The main aims of this consultation were to:

- find out which countries had recently raised, or were currently raising, the participation age
- find any evidence of the impact of raising the participation age
- identify key strategies to support the proposed policy change.

The following sections present the main findings of this review and consultation.

### 5.2 Compulsory education and training participation laws in other countries, states and provinces

Two countries were identified which had recently raised, or were in the process of raising, the school-leaving age. In Hungary, the school-leaving age has been raised from 16 to 18, although the change applies only to those entering full-time education (at the age of six) from September 1998 onwards. This means that the first cohort to be affected by the change has not yet reached the age of 16.

In Italy, the school-leaving age was raised from 14 to 15 in September 1999. More recently, in December 2006, new legislation was introduced to further extend the duration of compulsory education. The new legislation makes provision for compulsory education to last ten years, from age six to 16. In addition, it stipulates that the final two years of compulsory education (for 14- to 16-year-olds) must provide general, rather than vocational education. It is intended that the change in duration of compulsory education will come into effect during the 2009/10 school year.

At the same time as raising the upper age limit for education, some countries have also changed the age at which young people have to commence their schooling, thereby extending the number of years young people spend in learning. In Hungary, for example, in addition to raising the school leaving

---

<sup>5</sup> For further information, see <http://www.eurydice.org> and <http://www.nfer.ac.uk/eurydice>.

<sup>6</sup> For further information, see <http://www.inca.org.uk>.

age to 18, kindergarten participation is compulsory for four hours each day for all five to six year olds.

Several countries, states or provinces were also identified which have, or are in the process of adopting, a similar system to that proposed in England.

In Germany, full-time education is required until students are 15 or 16, depending on the federal state. After this time, young people must attend at least part-time education or training for a period of around three years, subject to the stipulation of the federal state. The principle in Germany is one of ensuring flexibility in the system, rather than specifying the upper participation age *per se*. Flexibility is ensured by continuing, as in the past, to allow students to take either general education or vocational education courses post-15 or 16, while at the same time offering the 'dual' system of combined general and vocational educational opportunities, additional programmes which include a vocational basic training year, and specific programmes for disadvantaged young people. The expected benefits are that more young people will have a continuous education record.

Similarly, in the Netherlands, young people are required to attend school full-time until the end of the school year in which they turn 16. They must then attend an institution providing education and training courses for at least two days a week for at least another year (to age 17). Those who have a practical training contract in a particular sector of employment have to go to classes one day each week and work the rest of the week. Legislation is currently before Parliament in the Netherlands to introduce a 'duty to qualify' to a minimum level of a general secondary level qualification or a vocational qualification. Consequently, young people will be expected to remain in compulsory full-time education to age 17, and then in part-time education or training to age 18, with a view to ensuring that, by 18, they will have fulfilled this 'duty to qualify'. Those who do not qualify by age 18 will be expected to report to a regional centre until the age of 23, with a view to allowing them to continue to learn while working and to achieve this minimum-level qualification.

In Belgium, education is compulsory until the age of 18, but from the age of 15 or 16 students can continue their education part-time with a reduced timetable or via a recognised training programme.

Some states in Australia and some provinces in Canada have recently raised the participation age for compulsory education and training. Following recommendations received from a government task force, New Brunswick (Canada) raised the school-leaving age from 16 to 18 in 2000 and, at the same time, introduced new opportunities and services for those staying on, which included apprenticeships and tutoring programmes. In 2006, the participation age in Ontario (Canada) was raised from 16 to 18 in the hope that it would reduce the post-16 drop-out rate. The Act (Bill 52) which amended the Education Act, requires young people to continue in education or other

approved learning programmes to the age of 18 (Legislative Assembly of Ontario, 2006).

In the Australian state of Queensland, *The Youth Participation in Education and Training Act* passed in 2003, made it compulsory for young people to remain in full-time education to age 16 from the start of the 2006 school year (January) (Queensland Government, 2003). In addition, young people must also take part in education and/or training for a further two years, or until they have gained a Senior Certificate (upper secondary level qualification), equivalent level vocational qualification, or until they have turned 17. Young people do not, however, have to remain in education or training post-16 if they are in full-time work. The main emphasis in this state is, therefore, on ensuring that young people are not NEET when leaving school, but instead are either in education or training or in full-time employment.

In South Australia, legislation to increase the compulsory education leaving age was passed by Parliament in August 2002, and the leaving age was raised from 15 to 16 in January 2003. This legislation was central to the government's reform agenda for social inclusion and the improvement of attendance and retention rates. A range of initiatives to assist students to stay in school or be engaged in an approved course of instruction or training were adopted.

In Western Australia, in line with the provisions of the *Acts Amendment (Higher School Leaving Age and Related Provisions) Bill 2005* (Parliament of Western Australia, 2005), in January 2006, the leaving age was raised to the end of the year in which a student turns 16 years of age. As of January 2008 it will be raised further to 17. Students have a choice of several different pathways, including full-time education, training, full-time employment, or part-time education or training combined with part-time work.

More comprehensive details about the education and training systems of these countries, states or provinces can be found in Appendices 3 and 4.

### **5.3 The impact of raising the participation age**

The consultation with international contacts and our review of the international literature revealed only limited direct evidence of the impact or challenges of raising the participation age. The main reason is that, in most cases, the changes have come into effect very recently and the first cohort of students has not yet passed through the revised system. It is, therefore, too early to assess the impact of change. The fact that the review included only documents written in English or German may have also limited information retrieved from other European countries.

## 5.4 Key strategies to support raising the participation age

### 5.4.1 Sanctions and enforcements

Legislation to support raising the participation age in some countries has included sanctions and enforcement measures, which are generally organised at the local level. However, it is important to note that there is very little evidence of the effectiveness of these sanctions and enforcement measures and of the extent to which they are used.

A system of fines are planned or have been put in place for non-attendance or non-compliance in a number of countries, states or provinces including the Netherlands, Ontario (Canada), Wisconsin (USA), Hungary and Western Australia. In the Netherlands, for example, it is planned that fines will increase incrementally for persistent offenders if the new ‘duty to qualify’ is implemented by Parliament (see Section 5.2.2). In Ontario, the Act (Bill 52), which raised the participation age from 16 to 18, provided details of sanctions for those who drop out of the education system early (Legislative Assembly of Ontario, 2006). These include fines for those who employ young people who are required to be in school, for parents or guardians who neglect, or refuse to send, a young person to school and for the young people themselves. An additional penalty for those young people committing an offence by not attending school is possible suspension of their driving licence. No evidence was found on the extent to which such sanctions have been imposed.

In the state of Wisconsin (USA), where students are required to stay in school until they graduate or until the end of the school term, quarter or semester during which they turn 18, if a student is habitually truant, their parents or guardians can be fined up to 500 US dollars or imprisoned for 30 days. Students can also have their driving licence suspended or be required to take part in counselling sessions or supervised work. No evidence was found on the effectiveness of these sanctions.

In Hungary, keeping track of whether pupils comply with the school attendance laws is the responsibility of local officials, who are also responsible for imposing the appropriate sanctions for non-compliance. They will instigate proceedings against parents who fail to enrol their children in school or ensure that they attend school on a regular basis.

There was very little evidence in the literature about the effectiveness of these sanctions and enforcement measures, although one study which looked at recent changes in laws in some US states and New Brunswick (Canada) found that due to weak enforcement, recent increases in the school leaving age had only a small, but nevertheless still significant, impact on school completion rates. The author concludes that provinces need to enforce these laws while at the same time promoting their potential benefits to administrators, parents and

students if they are to make more of a positive impact on drop-out rates (Oreopoulos, 2005).

#### **5.4.2 Learning pathways**

To help enforce the new participation age in Western Australia, ‘participation coordinators’ have been appointed. A participation coordinator’s role is one of supporting those young people specifically identified by their schools as being at risk of disengagement, and working with them to develop a suitable individual learning pathway. Parents or carers have primary responsibility for ensuring that young people continue on this pathway, but participation coordinators provide significant support.

Most of the countries contacted which had recently raised the participation age also identified the significance of providing a variety of learning pathways as a key supporting strategy for such a policy. Policy documents were clear that pathways needed to be flexible and innovative. In addition to the option of continuing in full-time education, more diverse opportunities need to be available to young people. These include approved education programmes, such as flexible training options in the workplace, which are linked to school; full-time apprenticeships or traineeships linked to approved courses; and part-time school combined with part-time training pathways. A recent study (GHK, 2005), examining statistical evidence on the link between early school leavers and the variety of post-compulsory pathways in European Union countries, was not able to establish any significant links due to gaps in the data. However, a review of relevant literature from member countries suggested that ‘offering a variety of courses after compulsory education might decrease the risk of early school leaving because it motivates students and offers students with difficulties the option of following other pathways than those traditionally expected’ (p.8).

In addition, both Western Australia and Queensland recognise that, for some young people, full-time employment may be the best pathway. Consequently, in these states, approved full-time employment (without training) is a permitted option for some young people at age 16.

### **5.5 Challenges of raising the participation age**

International experts described some of the general challenges their countries, states or provinces had faced in raising the participation age. One issue was ensuring that key stakeholders, including students, parents, employers, and the local and wider communities, supported the proposals and engaged effectively with the practicalities, realities and implications of raising the participation age. The high financial cost of implementing the necessary supporting strategies, including enforcement at the local level, provision of advisory services and ensuring curricular flexibility, was also identified as a serious challenge.

The challenge of providing a range of education and training pathways to all young people and curricular flexibility to meet individual learners' needs was also mentioned. There was anecdotal evidence that such provision could not always be put in place in all parts of a country, state or province, so that not all young people had access to the full variety of learning pathways on offer.

In the next chapter, the benefits of participation in post-16 education or training are discussed with reference to the UK and international research literature.

## 6. The Benefits of Participation in Post-16 Education and Training

### 6.1 Introduction

This chapter critically explores the available evidence on the impact of participation in post-16 education and training. As already discussed above, the review was not able to identify any direct international evidence of the benefits of raising the compulsory age of participation in education or training beyond the age of 16. Instead, the only research literature identified related to the impact of voluntary participation in post-16 education or training, or compulsory participation in education only. It is worth noting, therefore, that the benefits identified in the reviewed literature cannot be assumed to be the same as for the proposed system of *compulsory* post-16 participation in education *or* training.

### 6.2 The benefits of participation

There are several research studies which suggest that increased compulsory or voluntary participation in education has many benefits for individuals; such studies appear to show that ‘children who would otherwise leave school early are, in fact, better off if they stay, or that society benefits collectively because a higher level of educational attainment promotes good citizenship and economic development’ (Oreopoulos, 2006a, p. 23).

The review found evidence that increasing participation in education or training may have the following benefits:

- higher wages
- increased likelihood of labour force participation
- improved educational outcomes
- more post-compulsory participation
- increased likelihood of civil involvement
- health benefits
- increased life satisfaction
- reduced offending behaviour and crime.

The available evidence of each of these benefits is examined critically in the following sections.



## 6.3 The impact on wages

Many publications were found which provided indications of the financial benefits of participating in education or training and the achievement of academic and vocational qualifications. This section starts with an outline of the identified benefits and then goes on to examine whether they can be expected to extend to a system based on compulsory participation in training or education post-16.

### 6.3.1 The impact of education on wages

Various studies are available that examine the impact of increased participation in education on annual earnings. The measured benefit on wages ranges from between ten per cent to 18.5 per cent across different countries and education systems. Oreopoulos (2002), for example, carried out an analysis of the impact of raising the compulsory school-leaving age from 15 to 16 in Great Britain, and from 14 to 15 in the Republic of Ireland, in 1972. The study provides robust statistical evidence of the impact of a change in the school-leaving laws, by comparing the earnings of young people who were allowed to leave at 15 in previous years with those who were compelled to stay on until 16. Using statistical regression and controlling for students' background characteristics, the study found that those compelled to take an extra year of schooling experienced an average increase of 12 per cent in annual earnings. Walker and Zhu (2003) examined the same dataset, but restricted their analysis to England only. Their findings were broadly consistent: raising the school-leaving age had an impact of 'perhaps as much as 10 per cent per additional year of education' (p.145). Using a similar approach, Oreopoulos (2006b) identified a ten to 14 per cent impact on earnings as a result of the increase of compulsory schooling in the UK from age 14 to 15 in 1944.

The same kinds of effects were identified from a review of studies focussing on different countries, including the USA, Australia, Sweden and Canada (Ashenfelter and Krueger, 1994; Leigh and Ryan, 2005; Meghir and Palme, 1999; 2004). Oreopoulos (2006a), for example, analysed the impact of changes to compulsory schooling laws in Canada between 1900 and 2000. He concluded that: 'students compelled to complete an extra grade of school have historically experienced an average increase of nine to 15 per cent in annual income' (p. 24).

One shortcoming of these studies is that while they provide robust evidence that correlates compulsory (or voluntary) attendance in education with increased wages, they do not provide an explanation of what causes the measured impact – does staying on at school help young people develop valuable skills and knowledge that is rewarded by higher earnings or does it enable them to achieve valuable qualifications that have a high currency in the labour market? There is no clear agreement in the literature on this question,

with some studies emphasising the ‘signalling’ value of qualifications and others suggesting that higher wages are a result of the skills developed through extended schooling (see Wolf, 2004).

As discussed in Section 6.5 below, very few studies were found to measure the impact of increased compulsory participation on the achievement of qualifications. However, a recent study by Del Bono and Galindo-Rueda (2006) is of particular relevance. This study analysed the impact of a change in law in 1997, which required all young people in England and Wales to stay in education until the end of the academic year in which they turned 16. The authors showed that raising the school-leaving age has an even greater impact on individuals’ labour market returns if

*the school-leaving age is timed to compel individuals to complete a year in which they can be awarded nationally recognised qualifications. In other words, our results suggest that the effect of gaining a certification and not just merely length of schooling alone plays an important role in explaining future economic outcomes (p. iii).*

This finding has important implications for the currently proposed policy in England, as young people compelled to stay on in learning post-16 would not necessarily achieve qualifications. Indeed, those forced to continue in education and training may be less likely to do so than those choosing this option. Furthermore, the current proposed policy (DfES, 2007c) requires young people to remain in education or training only until their 18<sup>th</sup> birthday; some might therefore leave without completing their courses or achieving qualifications (although it should be noted that vocational qualifications are not all tied to academic years).

### **6.3.2 The impact of training on wages**

Hardly any studies are available which document the impact on earnings of increased participation in other forms of learning. One study in Australia (Access Economics Pty Limited, 2005) analysed data relating to adult workers aged 25 to 64, who had completed an additional year of post-compulsory schooling (Year 12) or an apprenticeship. It found that those who had not completed such a year earned (in 1999) almost 20 per cent less than those who had. The study did not distinguish between the effects of education or training among those completing Year 12.

Another study (McIntosh, 2004) focused on what impact the actual completion of vocational qualifications had on those who had left school at 16 with no qualifications, rather than on the benefits of participation in engaging in post-16 training alone. It found that men who had left school with no qualifications were dramatically more likely to earn more if they achieved vocational qualifications after leaving school than those who had not done so. However,

this positive effect was not measured for women. McIntosh (2004) concluded that:

*Men who leave school with no qualifications, and add nothing after school, earn on average £6.05 an hour in 2002. This is of course less than men who leave school with good GCSEs or A levels, who earn an average £7.84 an hour and £8.14 an hour respectively if they do not acquire any post-school qualifications. The unqualified school leavers can get closer to these wage rates, but do not completely close the gap, by acquiring vocational qualifications after school, raising their average wages to £7.14 at level 2 (p. 13).*

### **6.3.3 The impact of compulsory education or training on wages**

The important question for this review is whether the benefits identified in previous studies (discussed in Sections 6.3.1 and 6.3.2) are likely to come about if the participating age in education or training in England is raised to 18. More specifically, is it plausible to assume that the positive effects measured most commonly in relation to increased compulsory schooling or, in just a few cases, voluntary post-16 training, will transfer to a system in which young people are compelled to stay on in education *or* training? Furthermore, given the characteristics of non-participants outlined in Chapter 3 and the likelihood that the majority will engage in work-based training, vocational courses or courses leading to qualifications at Level 2 or below, are such forms of further learning likely to result in the same wage benefits as more conventional forms of schooling?

The review of the literature focussing on these specific questions identified some evidence that:

- vocational qualifications do not have the same economic benefits as academic ones
- there is a significant variation in the returns to apprenticeship between different employment sectors
- the economic returns to NVQs at Level 2 or below are negligible, except for those who leave school with no qualifications.

Evidence supporting each of these statements is explored below.

#### **6.3.3.1 The impact of vocational versus academic qualifications on wages**

As pointed out in Section 4.3, it can be assumed that many of those currently not engaged in education or training are likely to take up vocational rather than academic courses if compelled to participate post-16. However, research evidence suggests that the benefits may not be the same as the benefits of

increased compulsory schooling. Dickerson (2006) carried out an analysis of the relative returns of academic and vocational qualifications at various levels on wages and levels of employment using the annual UK Labour Force Survey (LFS). He found that ‘with the exception of Level 5, the returns to academic qualifications are greater than those to vocational qualifications at every level’ (p. 17). Similar findings were reported by Dearden *et al.* (2002) based on an analysis of an earlier LFS dataset.

It is currently impossible to judge what the wage returns will be to the new Diplomas (DfES, 2005). However, given their proposed blend of theoretical and applied learning, it is possible that they will be valued in the labour market at least as highly as some of the best existing vocational qualifications.

### **6.3.3.2 The economic returns to apprenticeships in different employment sectors**

Section 4.2.2 highlighted the fact that retail is the most popular sector for those aged 16 and 17 currently in JWT, employing up to 30 per cent of this group. If participation in education and training was made compulsory, it is possible that there would be an increase in the number of young people completing apprenticeships or other vocational qualifications in this sector. What would be the likely economic returns for them of completing such qualifications?

McIntosh (2007) recently carried out a cost-benefit analysis of apprenticeships and other vocational qualifications which showed that averaging across all sectors, the returns to apprenticeships are high and stronger than for other types of vocational qualifications. In particular, women with an Advanced Apprenticeship (at Level 3) were found to earn 14 per cent more than other women qualified only up to Level 2. No statistically significant benefits were measured though for women completing an apprenticeship at Level 2. For men, positive wage returns were measured for achieving apprenticeships both at Level 2 and Level 3, of around 20 per cent and 22 per cent respectively. However, McIntosh (2007) also found that there is significant variation in the estimated wage returns to apprenticeships, depending on the sector in which the former apprentice works. Thus, while there was a significant observed wage benefit for completing an apprenticeship in construction, no similar effect was measured for those working in retail. This confirms qualitative research by Spielhofer and Sims (2004), which also found that the achievement of an apprenticeship in retail had no or very little benefit on wages or job status.

### **6.3.3.3 The economic returns to vocational qualifications at Level 2 or below**

Many of those currently NEET post-16 were reported in Section 4.2.1 to have achieved no or very few qualifications. It is, therefore, likely that many of

these could be expected to achieve mainly qualifications at Level 2 or below as a result of one or two years of additional compulsory education or training. But what are the benefits of such qualifications?

There is some evidence in the literature that the achievement of vocational qualifications below Level 2 and, possibly, even below Level 3 does not result in the same rewards as other post-16 qualifications. Dickerson (2006), for example, found that in terms of wages, the return of Level 1 qualifications ‘is negligible or zero for both men and women’ (p. 17). McIntosh (2002) carried out a similar analysis of the LFS. He reported that the achievement of NVQ qualifications at Level 2 or below did not have any measurable positive effects. However, a more recent study by McIntosh (2004) did identify an impact of achieving such vocational qualifications, but only for those who left school with no previous qualifications. Raising the learning leaving age to 18 is, therefore, likely to have a greater economic impact on this group of young people than on those who achieved qualifications at 16.

Dearden *et al.* (2004) also found that while the impact of NVQs at Level 1 and 2 were negligible, there were significant benefits to completing other Level 2 vocational qualifications. In particular, analysis of the UK Labour Force Survey showed that ‘men with City and Guild craft qualifications [at Level 2] and no other qualifications, receive wages 19 per cent higher than those with no qualifications’. Furthermore, ‘women receive substantial returns from RSA first diplomas and BTEC first diplomas’ (p.16-17). However, the authors also note that ‘these qualifications are not very widely held’ (p.16).

It is also worth noting that the achievement of qualifications at Level 2 or below, while possibly not resulting in individual economic benefits, may have other positive impacts on young people. As Sims and Golden (1998) have found, it can increase their self-confidence and act as a ‘stepping-stone’ to other more advanced learning at higher levels. This was confirmed by Dearden *et al.* (2004), who reported that individuals receiving NVQs at Level 2 are ‘more likely than similar individuals without NVQ2s to move on and obtain Level 3 qualifications’ (p.i).

#### **6.4 The impact on labour market participation**

The review identified a few studies from the UK, Canada and Australia which indicated that staying on in education or training and/or achieving post-16 qualifications is strongly linked with the likelihood of being in employment or at least being available for work.

Bynner’s (2004) analysis of the 1958 and 1970 British Youth Cohort Studies, for example, found that young people who had been NEET between the ages of 16 and 18 were 4.5 times more likely not to be labour market participants than those who had been in education or training. Access Economics Pty Limited (2005) identified a similar effect comparing the unemployment rates

of Year 12 leavers and Year 9 leavers in Australia – while seven years after leaving school, seven per cent of the former were unemployed, this figure rose to 21 per cent for the latter group among men; for women the figure was as high as 59 per cent. Oreopoulos (2006a) reported similar impacts of raising compulsory school-leaving ages in Canada.

As regards (voluntary) participation in training, McIntosh (2004) found that young people who left school with no qualifications were dramatically more likely to be in work if they achieved vocational qualifications after leaving school. The impact was found to be most dramatic for qualifications achieved above Level 1 – while only 68 per cent of men aged 23-25 who left school with no qualification and did not acquire any subsequently were in employment, 89 per cent of those who had acquired a vocational qualification at Level 2 were in a job. This employment rate is marginally higher than for those who achieved Level 2 at school and did not acquire any qualifications after that (88 per cent). A very similar positive effect was measured for women – rising from 31 per cent for unqualified to 70 per cent for those who acquired a Level 2 qualification subsequently.

It is worth noting that these studies do not show that participation alone made young people more likely to be employed in later life, especially as most of the evidence relates to voluntary rather than compulsory participation. Alternative explanations are equally plausible, for example, that young people who choose to participate in education post-16 may share certain characteristics which make them more likely to find and remain in employment in later life. It is also not clear whether, if more young people continue in learning and achieve higher-level qualifications, they will all share the same benefits as seen by those doing so at present. In other words, if all those currently at or below Level 1 were to stay on and achieve Level 2 qualifications, would they share the same benefits as those currently achieving Level 2 qualifications?

Some studies contend that they would share the same benefits, as there will be growing demand for intermediate- and higher-level skills in the future (Felstead *et al.*, 2007). Projections commissioned as part of the Leitch Review (2006), for example, predicted a growing demand for such skills and ‘a decrease in low skilled occupations, such as elementary occupations’ (p.33). At the same time, the Review recognised that such a change would not necessarily be uniform across all sectors:

*The shift in low value-added production to emerging economies does not necessarily mean that demand for relatively low skills workers will continue to fall. Rather, the type of demand at the lower end of the labour market is shifting further towards service sector jobs, such as hospitality and personal service work (p.33).*

Furthermore, the Review reported that: ‘The increase in proportion of high skilled workers is leading to increased demand for less skilled workers in

some service sector jobs, such as the hospitality sector' (p.33). Similarly, other commentators (Wolf, 2004) argue that there is still a substantial and possibly even growing demand for unqualified workers in the UK. McGuinness and Bennett (2005) carried out an analysis of British Household Panel Survey (BHPS) data from 1991 to 2002 to assess the extent to which labour market returns have been affected by changes in the nature of educational supply. They identified a rising demand for low-qualified workers which was seen as deriving 'in part from the expansion of the service sector and in part from the need to replace the large numbers of unqualified individuals who had retired out of the labour market in that period'. This would suggest that increasing the supply of young people qualified to Level 2 or above might not result in the same economic and employment benefits as identified in previous studies.

In contrast, however, Felstead *et al.* (2007) analysed the findings of five Skills Surveys of working individuals living in Britain aged 20-65 carried out between 1986 and 2006. They found that over this time period the proportion of jobs not requiring qualifications fell by 11 percentage points, indicating that there may indeed be a growing demand for qualified individuals. This suggests that contrary to other studies young people achieving Level 2 qualifications or above may indeed continue to be rewarded in the labour market.

It is also not clear to what extent the achievement of a relevant vocational qualification is of value over and above the experience of working in a particular occupational field. For example, a recent survey (Roe *et al.*, 2006) of 1,500 employers suggested that the possession 'of qualifications is less significant when recruiting than personality, good literacy and numeracy, interview performance, and experience at all levels' (p. ii). Similarly, the OECD (2006) reported that 'educational attainment cannot be fully equated with proficiency and skills' as 'skills other than those indicated by educational attainment, as well as experience, are rewarded by the labour market' (p. 128).

## **6.5 The impact on educational outcomes**

The review was able to identify only limited evidence regarding the effect of raising compulsory school-leaving ages on educational outcomes. Oreopoulos (2006a) examined the impact of changed school-leaving laws in Canada. He identified a significant 0.18 point impact on average grade attainment for each additional year of schooling. Meghir and Palme (1999) analysed data on changes in compulsory schooling laws in Sweden between 1949 and 1962. This change can be described as a unique social experiment as the law change was implemented gradually across Sweden's 1031 municipalities. This meant that the study was able to compare labour market and educational outcomes of a 'large cohort of individuals going through two different school systems, with different amounts of compulsory schooling, in a very similar environment'

(p.2). The analysis showed that extending compulsory schooling had a significant effect on the level of education achieved by individuals.

## **6.6 The impact on post-compulsory participation**

There is some evidence that raising the compulsory leaving age can have a follow-on effect of extending learning beyond the new leaving age for those who would previously not have continued in education. Meghir and Palme (2004) found that changes to compulsory schooling laws in Sweden led to a significant increase in education and training beyond the new leaving age at 16 for individuals who would previously not have been expected to do so. Oreopoulos (2005) provided evidence of a similar effect as a result of analysing the impact of changed compulsory school-leaving ages across various states in the USA. He found that raising the minimum leaving age above 16 increased the proportion of young adults with some college or university experience by between 1.5 and 2.1 percentage points. The author noted that: ‘One explanation consistent with this finding is that some individuals compelled to stay longer in high school become more interested in postsecondary education or view higher education as less daunting an obstacle than when they were younger’ (p. 11). As noted in Section 6.3.5, previous research has identified a similar benefit of the achievement of vocational qualifications even at lower levels. Even though they may not have immediate wage benefits or other economic returns, they can increase young people’s willingness and confidence to engage in further learning.

## **6.7 The impact on civil involvement**

There was some evidence from two studies – one focusing on the USA and the UK and the other on Germany – that there could be a link between education and civic involvement or citizenship. A study by Milligan *et al.* (2003), analysing the correlation between increased compulsory schooling laws and voter turnout, identified ‘a strong and robust relationship between education and voting in the United States, but not in the United Kingdom’ (p. x). The differential impact on voting behaviour in the USA and UK was explained by the authors as relating to differences in registration requirements in the two countries. In the UK, citizens are ‘legally responsible and actively assisted to register’ (p.4), whereas in the USA, the responsibility of registering to vote rests mainly with the individual. The authors theorise that the bureaucratic hurdles of registration are a bigger barrier to low-educated voters in the USA, which they believe explains the measured effects of increased schooling on voting behaviour. However, Milligan *et al.* (2003) did identify an effect of involvement in education on citizens’ attention to public affairs and to following politics both in the USA and UK.

Another recent study (Siedler, 2007), which analysed the impact of raising the compulsory school-leaving ages between 1949 and 1969 in Germany, also found evidence of a correlation between schooling and citizenship (including



individuals' political interest, voting turnout, democratic values, political involvement and political group membership).

## **6.8 The impact on health and well-being**

Much of the evidence on the links between increased participation and associated health benefits is quite weak and fails to provide a robust relationship between the two. Research based on the 1970 British Youth Cohort Study (SEU, 1999), for example, found that young people who were NEET between the ages of 16 and 18 were more likely to report depression and poor physical health by the age of 21. However, such a finding does not prove that participating in education or training reduces the likelihood of later mental or physical problems. It could simply be that young people who are more prone to mental or physical health problems due to socio-economic factors are less likely to continue in education or training post-16.

Stronger evidence is reported by Oreopoulos (2002), who examined the impact of changes in compulsory schooling on the self-reported health of individuals in Great Britain and the Republic of Ireland. This was done by analysing whether changes in compulsory schooling laws had an effect on the likelihood of young people reporting health problems. He found that: 'A one-year increase in schooling lowers the probability of reporting being in poor health by 3.7 percentage points, and raises the chances of reporting being in good health by 8.2 percentage points' (p. 18). Another study looking at the benefits of participating in learning on adults (Aldridge and Lavender, 2000) identified similar impacts. Based on a survey of 2000 adult learners who had participated in various forms of education, 87 per cent reported benefits to their physical health and 89 per cent benefits to their emotional or mental health as a result of participating in learning. However, 39 per cent of respondents also reported that they had experienced stress, anxiety and mental ill health as a result of their involvement in learning.

## **6.9 The impact on life satisfaction**

Some evidence was found on a correlation between life satisfaction and participation in education or training post-16. Hillman and McMillan (2005), carried out a longitudinal study in Australia of 6,095 young people between around 14 and 21 years of age. The research identified a small, but significant, link between part-time work without study, unemployment or withdrawal from the labour force and lower levels of satisfaction with their lives in general (which includes happiness with their lives at home, social lives, spare time activities, standards of living, where they live, how they get along with others, their independence and their lives as a whole). Similarly, Bynner (2004) reported that an analysis of the 1958 and 1970 British Birth Cohort Studies revealed that women who had been NEET between the ages of 16 and 18 were seven times more likely to report persisting psychological effects manifested in 'dissatisfaction with life, feelings of lack of control over life and problems with life' (p. 9).

## 6.10 The impact on offending behaviour and crime

There is only very limited evidence on the link between not participating in education or training post-16 and the likelihood of criminal behaviour. One study (Feinstein and Sabates, 2007), for example, examined the impact of the Education Maintenance Allowance (EMA) on local crime figures. As previous studies have shown (Legard *et al.*, 2001; Middleton *et al.*, 2005), the EMA has been found to have some impact on raising participation rates. Feinstein and Sabates (2007) sought to examine whether such an impact could be correlated with a concomitant reduction in burglary and theft conviction rates. They found that even though such an effect could be found ('The relative reduction in burglary rates is about 1 less conviction per 1000 pupils in EMA areas relative to other LEAs' (p. i)), such an impact could not be assigned to the EMA alone. Instead, the measured impact was found to be strongest in those areas which had adopted the EMA as well as the Home Office's Reducing Burglary Initiative (RBI) at the same time. Another report (Flood-Page *et al.*, 2000) based on an analysis of the Youth Lifestyles Survey between October 1998 and January 1999 revealed that leaving school without any educational qualification was found to be the second most important predictor of offending among 18 to 30-year-old men. Furthermore, those not participating in further education or employment after leaving school 'were nearly twice as likely to be serious and/or persistent offenders as those who were either in education or work' (p. ix).

The following chapter examines some of the key conditions identified in the literature of ensuring that young people participate in education or training post-16 as a result of the proposed policy.

## 7. Conditions for Success

### 7.1 Introduction

In order to realise the benefits of compulsory participation, which are ultimately to increase young people's skills and qualification levels, it is important to consider the context in which the policy will be put into force, and the supporting steps required to increase young people's participation. The view is expressed in the Green Paper (DfES, 2007c), that young people should ideally *choose* to participate, and that enforcement should be used only as 'a very last resort' (p. 8). Indeed, it could be argued that the most important condition for success of the planned changes is that from 2015, most, if not all young people *actually* participate in some form of education or training. Thus, it is pertinent to ask what conditions are required to: a) make this happen; and b) ensure that young people actually achieve qualifications and learn new skills? This chapter considers six conditions for success identified in the research literature and supported by evidence from the reviewed documents, which would need to be met in order to maximise the impact of the proposed policy and address the questions outlined above. These conditions are outlined in the sections below.

### 7.2 Managing incentives and sanctions

Research findings by the Learning and Skills Network (Villeneuve-Smith *et al.*, 2007) into the attitudes of young people and parents to the plans to raise the learning leaving age suggested that there was more support for incentivising rather than penalising young people who do not participate in education or training. Such findings strongly support the proposed strategy in the Green Paper to encourage young people to participate voluntarily, and that enforcement should be used only as a last resort.

In supporting young people to participate, the Green Paper (DfES, 2007c), proposes to build on EMAs to, *inter alia*, 'strengthen the link between financial support and progression, [and] provide an incentive to behave well and attain more' (p. 34). The national evaluation of the EMA pilot (Dearden *et al.*, 2006; Middleton *et al.*, 2005) identified a small, but significant impact on young people's participation and retention in post-compulsory education – with a greater impact measured on boys rather than girls. This is of particular importance given the fact that, as noted in Section 4, boys are more likely to be both NEET or in JWT at 16 than girls. The study also found that the EMA was slightly more likely to persuade those who would otherwise have gone into work and training to continue in education than those who would have become NEET. However, qualitative research by Legard *et al.* (2001) suggested that the EMA only had an impact on a relatively small sub-group of young people – those undecided on what to do when leaving school at 16. The research suggests that the EMA is unlikely to influence the decision to stay on

in education or training of young people who are highly motivated to start earning or who, on the other hand, have a strong aversion to an educational environment.

The impact of financial support on young people's decision to participate in training was demonstrated by another study (Spielhofer *et al.*, 2006), which explored the views of around 1,588 apprentices receiving the minimum training allowance (MTA<sup>7</sup>) using a questionnaire survey. While 30 per cent of young people said they would have started their apprenticeship even if they had found out, before they started, that they would not be paid for it, the remaining apprentices reported that they would have taken an alternative route, most commonly a job without training.

There will, however, undoubtedly be some young people who choose not to participate voluntarily, and for whom participation will have to be enforced. While a range of sanctions is being used in other countries where the participation age has been increased (see also Section 5.4.1), there appears to be as yet no evidence of the effectiveness of such sanctions. Policies have been introduced, for example, in some states in the USA that have imposed driving restrictions or fines on youth convicted of habitual absence from school or young people not registered in an approved learning environment. Research evidence from the province of New Brunswick in Canada and some states in the USA (Oreopoulos, 2005), where compulsory school-leaving ages have been raised to 18, shows that these initiatives were poorly enforced, with little punishment for non-compliance, and that partly as a result of weak enforcement, raising the school-leaving age had only a small – if still significant – impact on school completion rates (see also Section 5.4.1). Weak enforcement was due to exceptions and exemptions to the law and weak consequences for truancy. The author concluded that weak enforcement gave the impression that raising the school-leaving age in New Brunswick appeared to serve 'more as a signal by the province of its desire to encourage high-school graduation', than 'a serious commitment to keeping every 16- and 17-year-old in school' (Oreopoulos, 2005, p. 9).

### **7.3 Making sure young people receive high-quality guidance and support**

Given the rapidly changing landscape of 14-19 education and training, the new learning routes soon to be available to young people aged 14 and above, and the possibility of more young people staying in education or training to take up such opportunities, access to good quality and impartial information, advice and guidance will perhaps be even more important in the future. There are some studies which suggest that many young people drop out of post-

---

<sup>7</sup> The Minimum Training Allowance (MTA) was introduced to provide financial support to non-employed learners aged 16 to 24. It was replaced by the EMA for learners receiving funding in April 2006.

compulsory courses because these courses do not meet their expectations or because their chosen course is unsuitable for them (see for example Blenkinsop *et al.*, 2006; Payne, 2000). This is of particular concern given the fact that research has shown that progression at 17+ is strongly related to the level of qualification undertaken at age 16, and the extent to which learners are successful in achieving their goals (Davies and Webster, 2005).

The literature suggests that for progression to be optimised it is necessary that both learners and the staff who advise and counsel young people are aware of the full range of potentially appropriate routes, and their associated advantages and limitations (Davies and Webster, 2005). Given the new range of learning routes that will soon be available, young people's choices at 14 and 16 could be greatly increased. Consequently it is essential that young people receive the support and advice necessary to help them make informed decisions. There is also evidence that young people need this advice before they have to make decisions about post-16 (and, in future, their post-14) destinations. Research has found that many pupils start to think about post-16 options in Year 9, if not before (Foskett *et al.*, 2004; Maychell *et al.*, 1998). For example, in a survey of 821 Year 11 students exploring the reasons why certain groups of young people decide to leave full-time education at age 16, half of all Year 11 pupils surveyed felt that it would be useful to receive careers advice earlier than Year 9 (Maychell *et al.*, 1998).

The research literature shows many young people involve their parents or guardians and wider family members in discussions about progression. Research has shown that older siblings for example, are often thought to have 'a credibility that staff and parents don't have' (Blenkinsop *et al.*, 2006, p. 53). There is a danger, however, that parents and guardians in particular, may have out-of-date or otherwise unrealistic ideas about progression routes (Blenkinsop *et al.*, 2006; Davies and Webster, 2005). With the government's promise to expand the learning routes available to young people at ages 14 and 16, it will become even more important to involve family members in discussions with professional guidance advisors about the full range of options. Young people will need this support in order to make informed decisions that will lead to them completing courses and achieving qualifications.

There is also evidence that low achievers, that is those most at risk of not participating in post-compulsory education or training, and, therefore, more likely to be affected by the planned changes, depend more on professional careers advice in finding out what options are available post-16 than young people with better GCSEs (Payne, 2000). Again, better and earlier information, advice and guidance could help more young people choose courses which are appropriate for them, and which offer the best opportunity for success.

## **7.4 Providing better, more engaging pre-16 provision**

Studies have shown that much disaffection takes place before the age of 16, which is significant because post-16 transitions are strongly linked with students' pre-16 experience of education (Sabates *et al.*, 2007; McIntosh, 2001). Thus, for most young people to achieve qualifications and learn skills post-16, they need to be engaged in education and training pre-16. A recent review by EdComs (2007) found a considerable body of research that demonstrates that, for a significant proportion of young people of moderate or low ability, the curriculum, qualifications system and associated teaching styles are unsuitable, leading to a gradual build-up of disaffection. It is this disaffection that leads many young people to decide that they want to leave education and training at 16. This is supported by research into the characteristics of NEETs, who are consistently shown to have had bad experiences of education (see Section 4.2.1). The implication is that if more is not done to improve students' 'prior success' (McIntosh, 2001) and to enthuse and engage young people before the age of 16, any proposal to extend their experience of education or training will meet with resistance. This could limit the numbers of young people willing to participate without added incentives and/or sanctions.

Good alternative pre-16 provision (such as vocational pathways at 14-16 provided through the Increased Flexibility Programme and Young Apprenticeship initiative) has been shown to have a positive effect on post-16 transition (Golden *et al.*, 2006). The research literature also suggests (EdComs, 2007) that those learners who may not be aware of non-academic pathways are more likely to stay on in education if they have the option of taking vocational or work-based qualifications at school or college at 14-16. These findings are, however, within the context of compulsory education and training ending at age 16. The effects of 'compelling' young people to participate in education or training until the age of 18 are less well understood, and may well depend on the characteristics of the young person. For example, the research literature suggests that there are challenges in encouraging young people who have previously been categorised as 'disaffected but in touch' or 'out of touch' at key stage 4 (EdComs, 2007) to continue in education or training after the age of 16. Again, by engaging young people up to the age of 16 and by keeping them motivated to achieve, they will be more likely to choose to participate and better placed to take up learning opportunities at age 16.

## **7.5 Providing a range of post-14 and post-16 pathways**

Another condition identified in the reviewed documents was the need to ensure better coherence of post-16 provision, and to enable young people to choose the education or training most appropriate to them (GHK, 2005). The government is addressing some of these challenges with plans to extend the range of learning pathways available to young people at ages 14 and 16, for example through the Diplomas, the first of which will be introduced in

September 2008. In the future, the government wants ‘every young person in a school or college to be entitled to pursue any one of the Diploma courses at an appropriate level for them, wherever they are in the country’.<sup>8</sup> This New National Entitlement is part of the Education and Inspections Act and is due to be in place from 2013.

There are issues, however, about whether there exists sufficient capacity for more young people to take up routes into programmes of learning, such as apprenticeships. In addition to the government’s desire for every young person to be able to pursue a Diploma, the Green Paper (DfES, 2007c) states that there will be a new apprenticeship entitlement:

*And we believe that every young person who wants to continue learning on a work-based route should be able to do so. We will therefore create a system where there can be an Apprenticeship place for every young person who wants one and meets the entry requirements for the sector (Paragraph 4.13).*

There is a need, therefore, to engage strongly with employers to ensure that appropriate work-based learning opportunities exist for all young people in all parts of the country. For example, research shows that despite the fact that employers are key to encouraging and increasing the take-up of Level 2 vocational qualifications (Tennant *et al.*, 2005), ‘micro firms’, that is those with less than ten employees (who represent some 83 per cent of UK employers<sup>9</sup>), are less likely to engage in training of their employees than larger employers (EKOS Consulting, 2006; Kitching and Blackburn, 2002). Furthermore, previous research has shown that a lack of apprenticeship placement opportunities or, indeed, the perception by young people that few placement opportunities exist (Anderson *et al.*, 2006), can lead some young people to take up jobs without training or unsuitable post-16 learning opportunities which they do not complete. There is a pressing need, therefore, to ensure that sufficient numbers of employers in every part of the country are committed to providing placements for young people when, under the proposals, the participation age is raised to 17 in 2013 and 18 in 2015.

## 7.6 Tracking young people

The proposal to increase the learning leaving age and, therefore, to encourage many more young people to participate in some form of education or training after the age of 16 presents challenges for the monitoring and tracking of young people. Potential challenges could include limited staffing and time, confidentiality/data protection issues, information technology issues and

---

<sup>8</sup> A step by step plan to the new Diplomas: <http://www.dfes.gov.uk/14-19/index.cfm?sid=3&pid=224&lid=185&ctype=Text&ptype=Single> [25 June, 2007]

<sup>9</sup> Based on the total number of small and medium sized enterprises in the private sector (including public corporations and nationalised bodies) in the UK in 2005, but excluding enterprises with no employees (see <http://www.dtstats.net/smes/sme/25/06/07>)

difficulties of partnership working. Young people who are NEET or in JWT can be particularly difficult to monitor and contact. This is a problem that NFER has experienced in its research and which has also been reported in the literature. For example, researchers at the Centre for Economic and Social Inclusion attempted to interview young people in JWT (see Anderson *et al.*, 2006). At least a third of the contacts provided by Connexions partnerships in the fieldwork areas in which they were working were inaccurate or incomplete. The research team discovered that contacts were updated only once a year, which was judged to be inadequate considering that these young people tended to move frequently from job to job.

These findings suggest that the challenges associated with tracking young people need consideration if local authorities and learning providers are to know what young people in their areas are doing and whether a young person has dropped out of a course or not.

## **7.7 Addressing social challenges**

Findings from the research literature suggest that extending the compulsory leaving age alone will not overcome the negative effects of underlying personal and social factors associated with young people who drop out of, or do not participate in, post-16 education and training. Many of the reviewed documents, therefore, argued for the need to address underlying social characteristics associated with non-participation. While we know that attainment is the best predictor of post-16 participation (EdComs, 2007; Maychell *et al.*, 1998; McIntosh and Houghton, 2005; Payne, 2000; Payne, 2003), we also know that academic attainment is in turn affected by parental and family background (Cater and Coleman, 2006; Payne, 2000). For example, findings from Payne's (2000) study into the progress of low achievers after age 16 using data from the Youth Cohort Study (YCS) found that young people had a higher risk of low attainment if their parents were in low-level occupations, were not in full-time employment, or had poor educational qualifications. Young people were also found to be more at risk if they lived in social rented accommodation or came from lone parent families (Payne, 2000). In such cases, poor educational attainment can lead to growing perceptions about limited life options regarding further education and employment (Cater and Coleman, 2006).

The importance of parental characteristics and parents' interest in, and commitment to, their children's education was also highlighted by McIntosh and Houghton (2005). They found that parental interest, along with careers advice at school and work experience, was one of the key factors which could lessen the impact of disengagement (using truancy as an indicator) on pupils' achievement at GCSE and post-16 participation. These findings suggest that more has to be done to address the social challenges of poverty and parental attitudes towards education and the associated negative effects on the way in which young people consider and participate in post-16 education and training.



## 8. Summary and Conclusions

The Green Paper (DfES, 2007c) proposed raising the age of participation in learning to 17 in 2013 and 18 in 2015. A literature review was undertaken to explore the likely impact, benefits and challenges associated with the proposed change. This chapter summarises the findings, and makes recommendations for further research.

### 8.1 Evidence reviewed

In addition to searching bibliographic databases and internet sources, international contacts were asked to provide relevant information. Countries, states or provinces selected for investigation were those which had experienced change in recent years, and/or had systems similar to that proposed in the Green Paper. Unfortunately, it was not possible to find any direct evidence of the impact of introducing a system of compulsory education or training to the age of 18. In some of the countries where change had been introduced, it was as yet too early to find evidence of impact. Research evidence in English relating to some European countries was limited or non-existent. We did review a significant number of papers relating to change in the ‘learning leaving’ age, but in many cases this applied specifically to raising the school-leaving age, and it cannot be assumed that the findings of such studies would apply directly to the proposed English context.

In addition to examining the impact of legislative change (which compels young people to remain in education until a later age) we reviewed evidence relating to voluntary participation (the impact on young people who choose to continue learning beyond the minimum leaving age). Again, such evidence may not apply directly to the proposed new context, but with direct evidence lacking, the best alternative strategy was to examine evidence on related topics and consider what light it might shed on a situation which would in some respects (though not all) be similar. This approach led us also to review literature on a number of topics related to the issue of making education and training compulsory to the age of 18.

### 8.2 Young people likely to be affected

A large majority of young people aged 16-17 are already in education or training. By 2006, the figure had increased to around 82 per cent, including 77.5 per cent of 17-year-olds. The government had already set a target of reaching 90 per cent participation by 17 year olds by 2015; the proposals in the Green Paper (DfES, 2007c) are intended to raise the rate still higher. The young people likely to be affected by the proposals are the minority who would otherwise be NEET or in jobs without training. It is important to understand the characteristics of these young people, in order to know how best to encourage them to participate in education or training.

Research evidence indicates that young people who are NEET have not enjoyed school, and leave without obtaining any qualifications (or only minimal qualifications). They tend to be white, male, to come from lower socio-economic backgrounds, and have low levels of career exploration skills and self-awareness. Their parents have low qualification levels, aspirations and awareness of post-16 options (and may therefore be ill-equipped to advise and encourage their sons and daughters).

There are relatively few studies relating to young people in jobs without training. However, recent evidence suggests that although they share many of the characteristics of the NEET group, their qualification levels are not quite as low, and there are fewer barriers to engagement in learning. When leaving school, they tend to be motivated by gaining employment and earning money as soon as possible.

Given the characteristics of these two groups (between which there is considerable movement) it seems likely that – when participation to 18 becomes compulsory – most are likely to move into jobs *with* training, vocational courses and courses leading to qualifications at Level 2 or below. A key challenge will be to provide opportunities which are both suitable and attractive to them.

### 8.3 Likely benefits

**Future earnings.** The main benefit for young people of further participation in education or training is in terms of increased future earnings. Studies carried out in several different countries provide substantial evidence that participation in education and training leads to higher wages. These studies relate to raising the school-leaving age, or (in a few cases) to voluntary participation in vocational training; it cannot be assumed that the proposed requirement to participate in education or training to 18 would necessarily have the same impact. The evidence suggests that vocational qualifications do not yield the same economic benefits as academic qualifications, and that the benefits of NVQs at Level 2 or below are negligible. However, they do have a significant impact on young people who left school with no previous qualifications. This is particularly important given the fact that many of those currently NEET or in JWT have no or very few qualifications. Furthermore, the wage and employment returns of the new Diplomas are not yet known; given their blend of theoretical and applied learning, it is possible that they may be valued more highly than existing vocational qualifications.

**Qualifications.** It is reasonable to assume that staying on in education or training will lead to improved qualifications, which will in turn lead to increased future earnings. However, while many studies have examined the link between staying on and earnings, or between qualifications and earnings, relatively few have examined the link between staying on and improved

educational outcomes. Some positive evidence has been found, although this was within a context of raising the school-leaving age.

**Employment prospects.** There is evidence that young people who stay in education or training post-16 are more likely to be in employment at a future date. However, it should be noted that the link is not necessarily causal; that the studies were in a context of voluntary participation; and that one related to *successful* participation (i.e. the achievement of qualifications) rather than participation per se.

**Post-compulsory participation.** Two studies provided evidence to suggest that some young people who were ‘compelled’ by legislative change to stay on at school might subsequently participate in post-compulsory education.

**Other benefits.** The literature examined included studies of the relationship between extended education and civil involvement, health and wellbeing, life satisfaction and criminal behaviour. In most cases, the evidence for a causal relationship was weak.

## 8.4 Challenges

Implementing the Green Paper proposals will involve a number of challenges, some of which are evident from a consideration of the young people likely to be affected by the change. As noted above, these are young people who currently choose not to participate, and they will include some at least whose experience of pre-16 education was mainly negative. Although the proposal is for *compulsory* participation, the Green Paper acknowledges that it will be better to encourage young people to participate of their own free will. The main challenge, therefore, is to make young people *want* to stay in post-16 education or training.

The research evidence suggests that a number of strategies will need to be adopted to achieve this end. First, there needs to be **a range of post-14 and 16 pathways** which will be both suitable and attractive to the young people. Plans for the new Diplomas, and the apprenticeship entitlement will contribute to this. But young people will not take advantage of new opportunities unless they are fully aware of them, and able to choose the most appropriate pathway. This highlights the importance of **high-quality guidance and support**, and the need to involve family members in discussions with professional advisors, so that decisions can be made in the light of full knowledge of the options, as well as the young person’s interests and skills.

The evidence confirms that young people are less likely to remain in (voluntary) education and training post-16 if their pre-16 experience of education has not been positive. An unsuitable curriculum or teaching style may lead to disaffection and the desire to leave education at the earliest possible opportunity. It is therefore important to offer **good, alternative pre-**

**16 provision** which will engage the young people and encourage them to want to continue learning after reaching the school-leaving age.

Although voluntary participation is undoubtedly preferable, a statutory requirement for participation to 18 has to incorporate some method of **tracking young people and ensuring that they continue to participate**. Tracking young people who are currently NEET or in jobs without training can prove very difficult, and under the proposed system LAs and learning providers would need to be aware of what every young person under the age of 18 was doing.

A further question is **how participation could be enforced**, in cases where young people refuse to engage voluntarily. Evidence from countries, states or provinces with a similar system indicates a number of sanctions that can be applied, such as fines (for the young people and/or their parents) and the withholding of driving licences. Unfortunately, there appears to be as yet no evidence indicating how successful these sanctions are. There is evidence (from New Brunswick) that raising the (in this case, school) leaving age may have limited impact in the context of weak enforcement. The implication is that ‘strong’ enforcement would be needed for effective implementation of the proposals.

## 8.5 Further research

The review has provided evidence to help assess the likely impact of raising the age of participation in education or training, and to identify the likely benefits and challenges associated with implementing the proposals. As there appears to be no country where a similar system has been introduced and thoroughly evaluated, it is necessary to rely on mainly indirect evidence, but we believe that further research in the following areas would be valuable.

- There is a large body of research evidence regarding young people who are NEET, but relatively few studies of young people in jobs without training. A survey could help to clarify their characteristics, and the strategies that would encourage them to engage in post-16 participation.
- Raising the age of participation will have implications for many employers. Those who currently offer jobs without training to young people under 18 will need to either employ only over-18s, offer jobs *with* training, or release young employees for a day a week to enable them to engage in education or training elsewhere. It is difficult to see how the proposals could be implemented without their cooperation; moreover, it would be necessary for planning purposes to know which route they proposed to follow. A survey of employers, to ascertain their response to the proposals, and their plans for future change in the light of them, would therefore be valuable.
- We were able to find very little research evidence from overseas countries where the learning leaving age had been raised. However, an analysis of statistical data from such countries could yield valuable comparative

evidence of likely impact. Collecting and analysing statistical data was not possible within the present project's very short timescale, but it could be undertaken as a separate project in the future.

- It could be helpful to undertake a longitudinal study of the first cohort of young people to be affected by the raising of the learning leaving age: to follow them from Year 9 (when they choose key stage 4 courses) or even earlier, and monitor the guidance received, decisions made, courses followed and finally post-16 outcomes. Although by then the proposals would have been implemented, and it would thus be too late to influence the policy, this research could help to inform future developments, in this country and elsewhere.

## References

- Access Economics Pty Limited (2005). *The Economic Benefit of Increased Participation in Education and Training*. Glebe, NSW: Dusseldorf Skills Forum. [online]. Available: [http://www.dsf.org.au/papers/173/DSFdoc\\_Apr05FINALrev\\_0.pdf](http://www.dsf.org.au/papers/173/DSFdoc_Apr05FINALrev_0.pdf) [27 June, 2007].
- Aldridge, F. and Lavender, P. (2000). *The Impact of Learning on Health*. Leicester: NIACE.
- Anderson, A., Brooke, B., Doyle, A., Finn, D. and Moely, S. (2006). *Understanding Young People in Jobs Without Training* (DfES Research Report 736). London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RR736.pdf> [21 June, 2007].
- Ashenfelter, O. and Krueger, A. (1994). 'Estimates of the economic return to schooling from a new sample of twins', *American Economic Review*, **84**, 5, 1157-1173.
- Blenkinsop, S., McCrone, T., Wade, P. and Morris, M. (2006). *How Do Young People Make Choices at 14 and 16?* (DfES Research Brief 773). London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RB773.pdf> [29 June, 2007].
- Bynner, J. (2004). *Participation and Progression: Use of Birth Cohort Study Data in Illuminating the Role of Basic Skills and Other Factors* (Nuffield Review of 14-19 Education and Training Working Paper 9). Oxford: University of Oxford, Department of Educational Studies. [online]. Available: <http://www.nuffield14-19review.org.uk/files/documents16-1.pdf> [29 June, 2007].
- Cater, S. and Coleman, L. (2006). *'Planned' Teenage Pregnancy: Perspectives of Young Parents from Disadvantaged Backgrounds*. York: Joseph Rowntree Foundation. [online]. Available: <http://www.jrf.org.uk/bookshop/eBooks/9781861348753.pdf> [21 June, 2007].
- Coles, B., Hutton, S., Bradshaw, J., Craig, G., Godfrey, C. and Johnson, J. (2002). *Literature Review of the Costs of Being "Not in Education, Employment or Training" at Age 16-18* (DfES Research Report 347). London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RR347.pdf> [21 June, 2007].
- Davies, P. and Webster, T. (2005). *Improving Participation at 17+*. London: Learning and Skills Development Agency.
- Dearden, L., McIntosh, S., Myck, M. and Vignoles, A. (2002). *The Returns to Academic and Vocational Qualification in Britain*. London: London School of Economics, Centre for the Economics of Education. [online]. Available: <http://cee.lse.ac.uk/cee%20dps/CEEDP04.pdf> [2 July, 2007].

Dearden, L., McGranahan, L. and Sianesi, B. (2004). *An In-Depth Analysis of the Returns to National Vocational Qualifications Obtained at Level 2*. London: London School of Economics, Centre for the Economics of Education. [online]. Available: <http://cee.lse.ac.uk/cee%20dps/ceedp46.pdf> [3 August, 2007].

Del Bono, E. and Galindo-Rueda, F. (2006). *The Long Term Impacts of Compulsory Schooling: Evidence from a Natural Experiment in School Leaving Dates* (ISER Working Paper 2006-44). Colchester: University of Essex, Institute for Social and Economic Research. [online]. Available: <http://www.irc.essex.ac.uk/pubs/workpaps/pdf/2006-44.pdf> [28 June, 2007].

Department for Education and Skills (2005). *14-19 Education and Skills: Implementation Plan*. London: DfES. [online]. Available: <http://www.dfes.gov.uk/publications/14-19implementationplan/docs/14-19%20Implementation.pdf> [2 July, 2007].

Department for Education and Skills (2007a). *Participation in Education, Training and Employment by 16-18 Year Olds in England: 2005 and 2006 and Participation in Education and Training by 16 and 17 Year Olds in each Local Area in England: 2004 and 2005*. London: DfES. [online]. Available: <http://www.dfes.gov.uk/rsgateway/DB/SFR/s000734/index.shtml> [29 June, 2007].

Department for Education and Skills (2007b). *Participation in Education, Training and Employment by 16-18 Year Olds in England: 2005 and 2006 and Participation in Education and Training by 16 and 17 Year Olds in Each Local Area in England: 2004 and 2005* (Statistical First Release 22/2007). London: DfES. [online]. Available: [http://www.dfes.gov.uk/rsgateway/DB/SFR/s000734/sfr22\\_2007.pdf](http://www.dfes.gov.uk/rsgateway/DB/SFR/s000734/sfr22_2007.pdf) [29 June, 2007].

Department for Education and Skills (2007c). *Raising Expectations: Staying in Education and Training Post-16* (Cm. 7065). London: The Stationery Office. [online]. Available: <http://www.dfes.gov.uk/publications/raisingexpectations/index.shtml> [29 June, 2007].

Department for Work and Pensions (2006). *Inquiry into Employment and Training Opportunities for Low-Skilled Young People*. [online]. Available: <http://www.parliament.uk/documents/upload/EA50%20DWP.doc> [29 June, 2007].

Dickerson, A. (2006). *The Returns to Academic and Vocational Qualifications in the UK*. Coventry: University of Warwick, Warwick Institute for Employment Research. [online]. Available: <http://wpeg.group.shef.ac.uk/refereeing2006/papers20006/Dickerson.pdf> [28 June, 2007].

EdComs (2007). *90% Participation Project: Desk Research* (DfES Research Report RW102). London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RW102.pdf> [21 June, 2007].

EKOS Consulting (2006). *Segmentation of Employers on the Basis of their Training Behaviour* (DfES Research Brief 807). London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RB%20807.pdf> [29 June, 2007].

Feinstein, L. and Sabates, R. (2007). *Education and Youth Crime: Effects of Introducing the Education Maintenance Allowance Programme* (Wider Benefits of Learning Research Report No. 14). London: Centre for Research on the Wider Benefits of Learning. [online]. Available: <http://www.learningbenefits.net/Publications/ResReps/ResRep14.pdf> [29 June, 2007].

Felstead, A., Gallie, D., Green, F. and Zhou, Y. (2007). *Skills at Work, 1986 to 2006*. [online]. Available: <http://www.kent.ac.uk/economics/staff/gfg/Skills%20at%20Work,%201986%20to%202006.pdf> [28 June, 2007].

Flood-Page, C., Campbell, S., Harrington, V. and Miller, J. (2000). *Youth Crime: Findings from the 1998/99 Youth Lifestyles Survey* (Home Office Research Study 209). London: Home Office Research, Development and Statistics Directorate, Crime and Criminal Justice Unit. [online]. Available: <http://www.homeoffice.gov.uk/rds/pdfs/hors209.pdf> [27 June, 2007].

Foskett, N., Dyke, M. and Maringe, F. (2004). *The Influence of the School in the Decision to Participate in Learning Post-16* (DfES Research Report 538). London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RR538.pdf> [21 June, 2007].

Golden, S., O'Donnell, L., Benton, T. and Rudd, P. (2006). *Evaluation of Increased Flexibility for 14 to 16 Year Olds Programme: Outcomes for the Second Cohort* (DfES Research Report 786). London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RR786.pdf> [29 June, 2007].

Government of Ontario (2007). *McGuinty Government to Give Legislative Backing to Student Success*. [online]. Available: <http://www.nuffield14-19review.org.uk/files/documents16-1.pdf> [29 June, 2007].

Hall, J. (2006). *Rates of Return: What are 16-17 Year Olds Doing?* (Nuffield Review of 14-19 Education and Training Briefing Paper 19). Oxford: University of Oxford, Department of Educational Studies. [online]. Available: <http://www.nuffield14-19review.org.uk/files/documents156-1.pdf> [29 June, 2007].

GHK (2005). *Study on Access to Education and Training, Basic Skills and Early School Leavers* (Ref. DF EAC 38/04). Lot 3: Early School Leavers. Final Report [online]. Available: <http://ec.europa.eu/education/doc/reports/doc/earlyleave.pdf> [10 August, 2007].



Hayward, G., Hodgson, A., Johnson, J., Oancea, A., Pring, R., Spours, K., Wilde, S. and Wright, S. (2006). *The Nuffield Review of 14-19 Education and Training*. Oxford: University of Oxford, Department of Educational Studies.

Hillman, K. and McMillan, J. (2005). *Life Satisfaction of Young Australians: Relationships Between Further Education, Training and Employment and General Career Satisfaction* (Longitudinal Surveys of Australian Youth Research Report 43). Camberwell, Vic: Australian Council for Educational Research. [online]. Available: [http://www.acer.edu.au/documents/LSAY\\_lsay43.pdf](http://www.acer.edu.au/documents/LSAY_lsay43.pdf) [28 June, 2007].

Kitching, J. and Blackburn, R. (2002). *The Nature of Training and Motivation to Train in Small Firms* (DfES Research Brief 330). London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RB330.PDF> [29 June, 2007].

Legard, R., Woodfield, K. and White, C. (2001). *Staying Away or Staying On? A Qualitative Evaluation of the Education Maintenance Allowance* (DfEE Research Report 256). London: DfEE. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RR256.PDF> [21 June, 2007].

Legislative Assembly of Ontario (2006). *Bill 52: 2006. An Act to Amend the Education Act Respecting Pupil Learning to the Age of 18 and Equivalent Learning*. Toronto, ON: Office of the Legislative Assembly of Ontario. [online]. Available: [http://www.ontla.on.ca/bills/bills-files/38\\_Parliament/Session2/b052ra\\_e.htm](http://www.ontla.on.ca/bills/bills-files/38_Parliament/Session2/b052ra_e.htm) [29 June, 2007].

Leigh, A. and Ryan, C. (2005). *Estimating Returns to Education: Three Natural Experiment Techniques Compared* (Discussion Paper 493). Canberra, ACT: The Australian National University. [online]. Available: <http://econrsss.anu.edu.au/pdf/DP493.pdf> [28 June, 2007].

Leitch Review of Skills (2006). *Prosperity for All in the Global Economy: World Class Skills. Final Report* ( Leitch Review). [online]. Available:

[http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) [23 May, 2007].

Maychell, K., Evans, C., Brooks, R., Lee, B. and Pathak, S. (1998). *Leaving at 16: A Study of Factors Affecting Young People's Decision to Leave Full-Time Education*. Slough: NFER.

McGuinness, S. and Bennett, J. (2005). *Intra and Inter-Generational Changes in the Returns to Schooling 1991-2002*. Belfast: Economic Research Institute of Northern Ireland. [online]. Available: <http://www.erini.ac.uk/Publications/PDF/ERINIWP6.pdf> [22 May, 2007].

McIntosh, S. (2001). 'The demand for post-compulsory education in four European countries', *Education Economics*, **9**, 1, 69-90.

- McIntosh, S. (2002). *Further Analysis of the Returns to Academic and Vocational Qualifications* (DfES Research Report 370). London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RR370.pdf> [29 June, 2007].
- McIntosh, S. (2004). *The Impact of Vocational Qualifications on the Labour Market Outcomes of Low-Achieving School-Leavers* (CEP Discussion Paper No. 621). London: London School of Economics, Centre for Economic Performance Publications Unit. [online]. Available: <http://cep.lse.ac.uk/pubs/download/dp0621.pdf> [2 July, 2007].
- McIntosh, S. (2007). *A Cost-Benefit Analysis of Apprenticeships and Other Vocational Qualifications* (DfES Research Report 834). London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RR834.pdf> [21 June, 2007].
- McIntosh, S. and Houghton, N. (2005). *Disengagement from Secondary Education: a Story Retold*. London: Learning and Skills Development Agency [online]. Available: <http://www.lsneducation.org.uk/pubs/Pages/052229.aspx> [10 August, 2007].
- Meghir, C. and Palme, M. (1999). *Assessing the Effect of Schooling on Earnings Using a Social Experiment*. [online]. Available: <http://econpapers.repec.org/paper/hhshastef/0313.htm> [2 July, 2007].
- Meghir, C. and Palme, M. (2004). *Educational Reform, Ability and Family Background*. London: Institute for Fiscal Studies. [online]. Available: <http://www.ifs.org.uk/wps/wp0410.pdf> [28 June, 2007].
- Middleton, S., Perren, K., Maguire, S., Rennison, J., Battinstin, E., Emmerson, C. and Fitzsimmons, E. (2005). *Evaluation of Education Maintenance Pilots: Young People Aged 16 to 19 Years. Final Report of the Quantitative Evaluation* (DfES Research Report 678). London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RR678.pdf> [29 June, 2007].
- Milligan, K., Moretti, E. and Oreopoulos, P. (2003). *Does Education Improve Citizenship? Evidence from the U.S and the U.K.* (NBER Working Paper No. 9584). Cambridge, MA: National Bureau of Economic Research. [online]. Available: <http://www.nber.org/papers/w9584> [28 June, 2007].
- Morris, M., Golden, S. and Lines, A. (1999). *The Impact of Careers Education and Guidance on Transition at 16* (RD 21). Sheffield: DfEE.
- Oreopoulos, P. (2002). *Do Dropouts Drop Out Too Soon? Evidence from Changes in School-Leaving Laws*. Toronto, ON: University of Toronto, Department of Economics. [online]. Available: <http://www.chass.utoronto.ca/cepa/Dropouts.pdf> [28 June, 2007].
- Oreopoulos, P. (2005). 'Stay in school: new lessons on the benefits of raising the legal school-leaving age' (The Education Papers), *Commentary*, **223**, (whole issue),

[online]. Available: [http://www.cdhowe.org/pdf/commentary\\_223.pdf](http://www.cdhowe.org/pdf/commentary_223.pdf) [27 June, 2007].

Oreopoulos, P. (2006a). 'The compelling effects of compulsory schooling: evidence from Canada', *Canadian Journal of Economics*, **39**, 1, 22-52.

Oreopoulos, P. (2006b). 'Estimating average and local average treatment effects of education when compulsory schooling laws really matter', *American Economic Review*, **96**, 1, 152-175. [online]. Available: [http://www.chass.utoronto.ca/~oreo/research/ATE\\_LATE/average%20treatment%20effects%20of%20education%20June%202005.pdf](http://www.chass.utoronto.ca/~oreo/research/ATE_LATE/average%20treatment%20effects%20of%20education%20June%202005.pdf) [28 June, 2007].

Organisation for Economic Co-operation and Development (2006). *Education at a Glance: OECD Indicators 2006*. Paris: OECD.

Parliament of Western Australia (2005). *Acts Amendment (Higher School Leaving Age and Related Provisions) Act 2005*. Perth, WA: Government of Western Australia. [online]. Available: [http://www.des.wa.gov.au/files/pdf/act\\_amendment\\_leaving\\_age.pdf](http://www.des.wa.gov.au/files/pdf/act_amendment_leaving_age.pdf) [29 June, 2007].

Payne, J. (2000). *Progress of Low Achievers After Age Sixteen (An Analysis of Data from the England and Wales Youth Cohort Study)*. London: DfEE.

Payne, J. (2003). *Vocational Pathways at Age 16-19 (DfES Research Report 501)*. London: DfES. [online]. Available: <http://publications.teachernet.gov.uk/eOrderingDownload/RR501MIG2775.pdf> [21 June, 2007].

Queensland Government (2003). *Youth Participation in Education and Training Act 2003: Act No 62 of 2003*. Queensland, NSW: Office of the Queensland Parliamentary Counsel. [online]. Available: <http://education.qld.gov.au/etrf/pdf/ypet2004.pdf> [29 June, 2007].

Rennison, J., Maguire, S., Middleton, S. and Ashworth, K. (2005). *Young People Not in Education, Employment or Training: Evidence from the Education Maintenance Allowance Pilots Database (DfES Research Report 628)*. London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RR628.pdf> [29 June, 2007].

Roe, P., Wiseman, J. and Costello, M. (2006). *Perceptions and Use of NVQs: a Survey of Employers in England (DfES Research Brief 714)*. London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RB714.pdf>

Sabates, R., Feinstein, L. and Skaliotis, E. (2007). *Determinants and Pathways of Progression to Level 2 Qualifications: Evidence from the NCDS and BHPS (Wider Benefits of Learning Research Report No. 21)*. [online]. Available: <http://www.learningbenefits.net/Publications/ResReps/ResRep21.pdf> [22 May, 2007].

- Sachdev, D., Harries, B. and Roberts, T. (2006). *Regional and Sub-Regional Variation in NEETs - Reasons, Remedies and Impact*. London: Learning and Skills Development Agency. [online]. Available: <http://readingroom.lsc.gov.uk/lsc/SouthWest/swr-lsn-neetstudy-2006.pdf> [29 June, 2007].
- Siedler, T. (2007). *Schooling and Citizenship: Evidence from Compulsory Schooling Reforms* (German Institute for Economic Research Discussion Papers 665). [online]. Available: <http://econpapers.repec.org/paper/hhshastef/0313.htm> [2 July, 2007].
- Sims, D. and Golden, S. (1998). *A Study of Employers' Use of NVQs and SVQs Across Industrial Sectors* (DfEE Research Brief 51). Sheffield: DfEE.
- Social Exclusion Unit (1999). *Bridging the Gap: New Opportunities for 16-18 Year Olds Not in Education, Employment or Training*. London: Social Exclusion Unit.
- Spielhofer, T., Nelson, J., O'Donnell, L. and Sims, D. (2006). *The Role of Training Allowances in Incentivising the Behaviour of Young People and Employers* (DfES Research Report 756). London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RR756.pdf> [21 June, 2007].
- Spielhofer, T. and Sims, D. (2004). *Modern Apprenticeships in the Retail Sector: Stresses, Strains and Support*. [online]. Available: [http://www.nfer.ac.uk/publications/other-publications/downloadable-reports/pdf\\_docs/SKAJan04.pdf](http://www.nfer.ac.uk/publications/other-publications/downloadable-reports/pdf_docs/SKAJan04.pdf) [29 June, 20 A.D.].
- Tennant, R., Brown, R. and O'Connor, W. (2005). *Level 2 Adult Vocational Learning - A Qualitative Study of Motivations, Experiences and Outcomes* (DfES Research Brief 664). London: DfES. [online]. Available: <http://www.dfes.gov.uk/research/data/uploadfiles/RB664.pdf> [29 June, 2007].
- Villeneuve-Smith, F., Marshall, L. and Munoz, S. (2007). *Raising the Leaving Learning Age: Are the Public Convinced? A Survey of Parents and Teenagers*. London: Learning Skills Network.
- Walker, I. and Zhu, Y. (2003). 'Education, earnings and productivity: recent UK evidence', *Labour Market Trends*, **111**, 3, 145-151. [online]. Available: [http://www.statistics.gov.uk/articles/labour\\_market\\_trends/education\\_Mar03.pdf](http://www.statistics.gov.uk/articles/labour_market_trends/education_Mar03.pdf) [28 June, 2007].
- Wolf, A. (2004). 'Education and economic performance: simplistic theories and their policy consequences', *Oxford Review of Economic Policy*, **20**, 2, 315-333.

# Appendix 1 searches

## Keywords used in

### Search strategy

A range of different educational and sociological databases were searched. Search strategies for all databases were developed by using terms from the relevant thesauri (where these were available), in combination with free text searching. The same search strategies were adhered to as far as possible for all the databases.

The key words used in the searches, together with a brief description of each of the databases searched, are outlined below. All searches date from 2000 onwards, apart from the BEI ones which go back to 1972 to cover the raising of the school-leaving age.

### *Australian Education Index (AEI)*

AEI is produced by the Australian Council for Educational Research. It is an index to materials at all levels of education and related fields. Source documents include journal articles, monographs, research reports, theses, conference papers, legislation, parliamentary debates and newspaper articles.

- #1 Not in the labour force
- #2 NILF
- #3 Labour force
- #4 School leavers
- #5 Dropouts
- #6 School holding power
- #7 School to work transition
- #8 Transition programmes
- #9 Widening participation
- #10 #7 or #8 or #9
- #11 Post compulsory education
- #12 #10 and #11
- #13 Job training
- #14 Jobs without training
- #15 #13 or #14
- #16 #15 and #11
- #17 Student destinations
- #18 Course choice
- #19 Youth programs
- #20 #17 or #18 or #19
- #21 #20 and #11
- #22 Career choice and #11
- #23 Employers and Training
- #24 Staying on Rates
- #25 Non participation
- #26 Students at Risk

### **British Education Index (BEI)**

BEI provides bibliographic references to 350 British and selected European English-language periodicals in the field of education and training, plus developing coverage of national report and conference literature.

- #1 ROSLA
- #2 Raising school leaving age
- #3 School leavers
- #4 Dropouts
- #5 Staying on rates
- #6 School to work transition
- #7 Transition programmes
- #8 #1 or #2 or #3 or #4 or #5 or #6 or #7
- #9 Post compulsory education
- #10 Sixteen to Nineteen education
- #11 #9 or #10
- #12 Student destinations
- #13 Widening participation
- #14 #12 or #13
- #15 #11 and #14
- #16 Job training
- #17 Jobs without training
- #18 Youth programmes
- #19 Course choice
- #20 Career choice
- #21 #19 or #20
- #22 #11 and #21
- #23 Students at risk
- #24 Employers and Training
- #25 Attendance and (Sanctions or Penalties)

### **Canadian Business and Current Affairs (CBCA)**

CBCA provides indexing and fulltext access to the principal educational literature publications in Canada, covering all significant reports of government departments, faculties of education, teachers' associations, large school boards and educational organisations. Over 150 educational periodicals, plus educational articles in over 700 general journals and newspapers are indexed.

- #1 NEET
- #2 School leavers
- #3 Staying on rates
- #4 Non participation
- #5 Widening participation
- #6 Dropouts
- #7 Jobs without training
- #8 Post compulsory education
- #9 Non attendance and Sanctions
- #10 6 Ways Scheme
- #11 Learning to Age 18 Act

## **The Educational Resources Information Center (ERIC)**

ERIC is sponsored by the United States Department of Education and is the largest education database in the world. It indexes over 725 periodicals and currently contains more than 7,000,000 records. Coverage includes research documents, journal articles, technical reports, program descriptions and evaluations and curricula material.

- #1 Attendance and (Sanctions or Penalties)
- #2 Non attendance
- #3 School leavers
- #4 School leaving age
- #5 Dropouts and Compulsory education
- #6 Post secondary education
- #7 NEET
- #8 Non participation
- #9 Staying on rates
- #10 School holding power
- #11 Out of school youth
- #12 Widening participation
- #13 Job training
- #14 Jobs without training
- #15 Students at risk
- #16 Student destinations
- #17 Youth transition into the labour market
- #18 School to work transition
- #19 Transition programmes
- #20 Course choice
- #21 Youth programmes
- #22 Employers and Training

## **Author Searches**

Oreopoulos, P.

## **Journals Handsearched**

Journal of Further and Higher Education 2000-2007

Journal of Vocational Education and Training 200-2007

Research in Post-compulsory Education

## **Google searches**

NEET

Not in Education Employment or Training

## **Websites**

Dusseldorp Skills Forum

<http://www.dsf.org.au/>

LSAC – The Longitudinal Study of Australian Children

<http://www.facsia.gov.au/internet/facsinternet.nsf/research/ldi-lsac.htm>

OECD  
<http://www.oecd.org>



## Appendix 2 reviewing research

## Framework for relevant

<b>Study</b>	Full reference
<b>Source</b>	Details of type of document (e.g. journal article, research report)
<b>Date of review and researcher</b>	
<b>Country</b>	Name of country or countries referred to in the document
<b>Themes</b>	The main focus of the research
<b>Aim</b>	A summary of the aims of the research study as reported by the researcher in their paper
<b>Key Findings</b>	<ol style="list-style-type: none"> <li><b>1. Trends in non-participation</b></li>   <li><b>2. Benefits of 16-18 education and training (compulsory and non-compulsory). Benefits at three levels: individual, economic, societal</b></li>   <li><b>3. Challenges and reasons for non-participation. Two levels: employers' attitudes to education/training ; young people's attitudes</b></li>   <li><b>4. How can young people be encouraged to participate? (e.g. incentives/financial support)</b></li>   <li><b>5. How can legislation be enforced? (e.g. sanctions; parental penalties/driving licences taken away)</b></li>   <li><b>6. Support needed by young people (e.g. guidance agenda)</b></li> </ol>
<b>Methodology</b>	Summarised details of the reported procedures of data collection and of data analysis
<b>Overall relevance/comments</b> <b>What does this study tell us about the likely benefits/challenges of raising the participation age?</b>	Reviewer's view of the key implications and lessons emerging from the study in relation to the key research questions being asked, including an assessment of the validity and reliability of the research findings, and any strengths and weaknesses.

## Appendix 3 context

## International policy

### **Australia**

Australia comprises six states (New South Wales, Queensland, South Australia, Tasmania, Victoria and Western Australia) and two territories (the Australian Capital Territory (*ACT*) and the Northern Territory) and has a federal system of government. States and territories have constitutional responsibility for school education, enrolment policies, determination of curriculum content, course accreditation and certification procedures, and methods of assessment.

Compulsory education ends at age 15 or 16 in Australia, dependent on the individual state or territory. At age 15-16, students may usually choose whether to continue in secondary school or to enter a range of technical or vocational courses at colleges of technical and further education, senior colleges or rural training schools.

At the post-compulsory upper secondary (15+/16+) level, the curriculum is more likely to be specified in detail by an authority responsible for examining and certifying students. At these levels, students generally have more scope to specialise and a range of elective studies is usually provided. Although there are no compulsory subjects as such, the vast majority of senior level students do study English and mathematics throughout their senior secondary course.

### **Queensland**

The Youth Participation in Education and Training Act 2003 made it compulsory, from 2006, for young people to remain in school until they finish Year 10 (age 15-16), or reach their 16th birthday, whichever comes first. Unless they are in full-time work, young people who have finished Year 10 or reached the age of 16 are then required to participate in education and training for a further two years, or until they have gained a Senior Certificate (or equivalent level vocational qualification), or until they have turned 17.

### **Western Australia**

The *Acts Amendment (Higher School Leaving Age and Related Provisions) Bill 2005* was enacted in November 2005. In January 2006 (the start of the school year in Australia), the age of compulsory education was raised to the end of the year in which a student turns 16 years of age; as of January 2008 it will be raised to 17. Regulations to support the new legislation have been introduced. It is particularly relevant to those young people who are at risk of not returning to education and completing the Western Australian Certificate of Education (WACE).

Approved options that students who turn 16 in 2007 (16 or 17 in 2008) are legally able to access include:

- full-time schooling
- full-time training institution
- apprenticeship

- community-based provider
- part-time work/training
- full-time employment (prior approval has to be sought).

### **South Australia**

In August 2002, legislation to increase the school-leaving age was passed by Parliament and in January 2003, the school-leaving age was raised from 15 to 16. This legislation was central to the government's reform agenda for social inclusion and the improvement of school attendance and retention rates.

### **Canada**

Responsibility for education is vested in the ten provinces and three territories. There is no national education ministry. Each province or territory has a Department or Ministry of Education, which is headed by an elected minister and controls all aspects of its education system up to the end of secondary school (around age 18). Such Ministries are responsible for setting standards, drawing up curricula and giving grants to educational institutions. Typically, compulsory education in Canada begins at age six or seven (and lasts for about ten years). The minimum age for leaving school is either 15 or 16 depending on the jurisdiction, but most students continue until around age 18 (Year/Grade 12).

The majority of students attend post-compulsory education, which is generally provided in senior high school. In most jurisdictions, this usually includes Grades 10 to 12 (students aged 16 to 18 or 17 to 19). In general, a broad range of both academic and vocational programmes is offered. During senior high school, the number of compulsory subjects is usually reduced, permitting students to spend more time on specialist programmes preparing them for the job market, or to take specific courses to help them satisfy the entrance requirements of the college or university of their choice.

### **New Brunswick**

New Brunswick raised the leaving age from 16 to 18 in 2000. In 1999, a task force recommended that this should happen and insisted that new services such as apprenticeships and tutoring programmes were introduced along with the new law.

### **Ontario**

In 2006, the participation age in Ontario was raised from 16 to 18 in the hope that it would improve the drop-out rate. The Act (Bill 52), which amended the Education Act, enforces pupil learning to the age of 18. Students must continue their education in school or at other approved learning programmes (e.g. apprenticeships, dual credits).

The Government recognised the importance of an education system which provides young people with choice and a positive learning environment that will keep them motivated to stay in school until they graduate or turn 18. The Learning to 18 Legislation is just one part of the Government's Student Success Strategy launched in 2003-04.

## USA

The United States of America is a confederation of states, each with considerable autonomy. Responsibility for education is devolved to the state/district level. However, on a national level, the United States Congress has enacted several pieces of legislation affecting states, communities and schools. The main piece of education legislation – the Elementary and Secondary Education Act (*ESEA*) – is re-authorised every five years or so, under a specific title. In addition, there are national education reform strategies which are signed into law. These include President George W Bush's 2002 No Child Left Behind Act.

Education structure is determined at both the state and local levels. That is, responsibility for education is exercised by the legislatures of each of the 50 states and, within the individual states, the operation of public schools is managed by some 16,000 local districts. States formulate policies on the allocation of funds, the certification of teachers, textbooks and library services, and the provision of records and statistics; some states also specify curricula.

Compulsory education ends by law at age 16 in 30 states, at age 17 in nine states, and at age 18 in 11 states. If students complete their education (Grade 12 – age 18) they receive their High School Diploma, which shows they have successfully graduated from secondary school. High School Diplomas represent a variety of different curricula and standards. Students may leave school at an earlier date if they have reached the set age for the end of compulsory education, but they are not considered to have completed school and do not receive any certificate or award.

## Belgium

In Belgium, the responsibility for education devolves to the three communities: Flemish community, French community and German-speaking community. In the Flemish community, school attendance is compulsory between the year in which a pupil turns six and age 18. Compulsory education ends in the calendar year in which the pupil attains the age of 18, either on 30<sup>th</sup> June (end of the school year) for pupils who have attended 12 years of primary and secondary education or on the 18<sup>th</sup> birthday itself. Schools are asked to do their utmost to convince pupils to finish the academic year even if they have reached the age of 18. From the age of 15 or 16, students can complete their education with a reduced timetable or a training programme which is recognised as satisfying the requirements of compulsory education.

In the French community, school attendance is compulsory between the ages of six and 18, but from the age of 15 or 16, students can complete their education with a reduced timetable or a training programme which is recognised as satisfying the requirements of compulsory education. Only if a student has not completed two years of secondary education by age 15 is he/she required to remain in full-time education until age 16. If a 15-year-old pupil has completed his/her second year of full-time secondary education (regardless of outcomes), then he/she is not obliged to attend compulsory full-time education.

Similarly, in the German-speaking community, education is compulsory from six to 18 but from 15 or 16 students can continue on a part-time basis. If students have not

completed their first two years of secondary education by the age of 15, they have to continue their full-time schooling at least until they are 16.

## Germany

Compulsory education lasts from ages six to 18/19. Full-time attendance is compulsory from age six to 15 (nine years) or to age 16 (ten years), depending on the *Länder*. Attendance, at least on a part-time basis, then remains compulsory for a further three years (ages 15/16 to 18/19.) Should students select part-time education from age 15/16 onwards, they usually start out in an occupation and also attend part-time classes receiving some form of vocational training. This is commonly known as the 'dual system'. It was introduced in all five *Länder* of the former German Democratic Republic at the beginning of the academic year 1992/93.

## Hungary

Until the start of the 1998/1999 academic year, compulsory education in Hungary started at the age of six and ended at 16. By law, every five-year-old must now also attend kindergarten for up to four hours each day in order to prepare for school.

In accordance with the 1996 amendment to the Public Education Act, education in Hungary the participation age was raised. Since September 1998, all children entering primary education (at age six) have been obliged to attend school until the end of the academic year in which he or she reaches his/her 18th birthday.

The basic institution of compulsory education is the eight-year general school. On completion, normally at the age of 14, students continue their studies either in general, academic secondary schools, technical/vocational/professional secondary schools or short vocational (trade) schools. The typical duration of secondary education is four years. With the raising of the school leaving age to 18, the aim is to introduce a system-wide 8 + 4 system of schooling, with students receiving eight years of basic education, followed by four years of education at upper secondary level.

## Italy

In Italy, until the 1999-2000 academic year, compulsory education lasted eight years (students aged 6 to 14 years). In September 1999 the school-leaving age was raised from 14 to 15.

In December 2006, new legislation was introduced to further extend the duration of compulsory education. The new legislation makes provision for compulsory education to last ten years, from age six to 16. In addition, it stipulates that the final two years of compulsory education must provide general, rather than vocational education. It is intended that the change in duration of compulsory education will come into effect from the 2009/10 school year.

Following legislation introduced in 2005, plans are also in place to adapt the education system to ensure that students have the formal right/duty to continue their studies via general or vocational pathways until the age of 19.

## Netherlands

In the Netherlands, every child must attend school full time from the first school day of the month following his or her fifth birthday. In effect, however, nearly all children attend school from the age of four. Children must attend school full-time until the end of the school year in which they turn 16.

Young people are then required to attend an institution providing education and training courses for at least two days a week for at least another year (to age 17). Those who have a practical training contract in a particular sector of employment attend classes one day a week on a day-release basis and work the rest of the week. In these contracts, institutions and training companies agree on the quality of the practical training.

Since 1995, municipal authorities have been responsible for registering early school leavers under the age of 23 and coordinating regional policy on this matter. In 2002, the Regional Registration and Coordination (Early School Leavers) Act (RMC) entered into force to prevent and tackle early school leaving in ordinary and special secondary schools, secondary vocational education and adult general secondary education. The municipal authorities are responsible for ensuring an integrated approach to the issue of early school leaving. Schools and colleges are required to report all cases up to the age of 23. The main aim is for all young people to leave school with a basic qualification.

In a report the Education Council has recommended raising the school-leaving age for young people who have reached the age of 16, but who neither attend school nor work, and giving the municipal authorities the opportunity to oblige them to undergo training. Full-time education would then be compulsory for young people of 16 and 17, and part-time education (i.e. one or two days a week) for those of 18 and older. According to the Education Council, it should be for the municipal executive to decide in each individual case whether to make education compulsory after the age of 16.

In early 2007, Parliament agreed to introduce a new ‘duty to qualify’, but it remains to be implemented. The aim of the ‘duty to qualify’ is to tackle the problems which arise after some years for those who leave education early. Until 2007 it was compulsory for young people to attend school part-time if they did not participate in regular upper secondary education or in a form of vocational education. This part-time compulsory education ended in the year the person reached the age of 17. The new duty to qualify ends at the age of 18. The whole approach ends at the age of 23.

The Act consists of three parts:

- a duty to qualify by the age of 18 (in secondary vocational education or general secondary education)
- for those who have not qualified, a duty to report to a regional centre until the age of 23.
- a duty to learn and work between the ages of 18 and 23.

Municipalities have the right to impose this duty on young people. If young people refuse to cooperate, they can be fined. The level of fine increases should they persist in refusing to cooperate.

### **Sources**

Eurydice – the information network on education in Europe

<http://www.eurydice.org/portal/page/portal/Eurydice>

See also Eurybase, the information database on education systems in Europe

[http://www.eurydice.org/portal/page/portal/Eurydice/DB\\_Eurybase\\_Home](http://www.eurydice.org/portal/page/portal/Eurydice/DB_Eurybase_Home)

INCA – International Review of Curriculum and Assessment Frameworks Internet Archive

<http://www.inca.org.uk>

International contacts that NFER has established both through direct links with other countries in the Eurydice network and through other links.

## Appendix 4

## Table of International countries

Country/state	Compulsory education	Implementation date (where recent)	Notes
<b>Australia</b>			
Queensland	6 – 16 * If students are in full-time employment they do not have to remain in education and training post-16 (see notes).	2006	Since 2006, students have to remain in school until they finish Year 10 (ages 15/16), or reach their 16 <sup>th</sup> birthday, whichever comes first. Unless they are in full-time work, they must participate in education and training until they have gained a Senior Certificate or until they have turned 17.
Western Australia	6 – 16	January 2006	In January 2006, compulsory education was raised from 15 to the end of the year in which a student turns 16; as of January 2008 it will be raised to 17.
South Australia	6 – 16	January 2003	
<b>Canada</b>			
New Brunswick	6 – 18	2000	The leaving age was raised from 16 to 18 in 2000.
Ontario	6 – 18	2006	Participation age raised from 16 to 18 in 2006.
<b>USA</b>	variable		Compulsory education ends by law at age 16 in 30 states, at age 17 in nine states, and at age 18 in 11 states.
<b>Europe</b>			
Belgium	6 – 18* Not full-time provision	-	In Belgium, education is compulsory until the age of 18, but from age 15/16 students can continue their education part-time with a reduced timetable or training programme.
Germany	6 - 18/19* Not full-time provision	1992/3	Full-time attendance is compulsory from 6 to 15/16 depending on the region. Attendance, at least on a part-time basis, remains compulsory until 18/19.



<b>Country/state</b>	<b>Compulsory education</b>	<b>Implementation date (where recent)</b>	<b>Notes</b>
Hungary	6 – 18	1998	Since September 1998, pupils entering primary school (at age six) have been required to attend school until the academic year in which they reach their 18 <sup>th</sup> birthday. By law 5-year-olds must attend kindergarten for up to four hours each day.
Italy	6 – 15	1999	In September 1999, the school-leaving age was raised from 14 to 15. In December 2006, legislation stipulated that compulsory education should be extended to 16. This is intended to come into effect from the 2009/10 school year.
Netherlands	5 – 17* Not full-time provision		Students must attend full-time education until the end of the academic year in which they turn 16. They are required to attend an institution providing education and training courses for at least two days a week until they are 17. Legislation before Parliament in 2007 will increase the full-time requirement to 17, and the part-time requirement to 18.

Copies of this publication can be obtained from:

DfES Publications  
PO Box 5050  
Sherwood Park  
Annesley  
Nottingham NG15 0DJ

Tel 0845 6022260  
Fax 0845 6033360  
Email [dfes@prolog.uk.com](mailto:dfes@prolog.uk.com)  
Please quote ref: DCSF-RR012

ISBN: 978 1 84775 057 0

© National Foundation for Educational Research 2007

**[www.dcsf.gov.uk/research](http://www.dcsf.gov.uk/research)**

Published by the Department for  
Children, Schools and Families

**£4.95**