

Department for Work and Pensions

Research Report No 375

The impact of learning on unemployed, low-qualified adults: A systematic review

Sally Dench, Jim Hillage and Pam Coare

A report of research carried out by the Institute for Employment Studies and the Centre for Continuing Education, University of Sussex on behalf of the Department for Work and Pensions

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First Published 2006.

ISBN 1 84712 058 X

ISBN13 978 1 84712 058 8

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Printed by Corporate Document Services.

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Acknowledgements

The authors would like to thank Gillian Burgess and Jacqui Hansbro at Department for Work and Pensions (DWP) for their comments and support while conducting this review. Our thanks to all members of the review group for their contribution at various stages in conducting the review, also to Gerry Lyons for her help searching for documents and to Caroline Beaumont and Denise Hassany at Institute for Employment Studies (IES) for their assistance in preparing this report.

We would also like to thank Mark Newman, Jennifer Gray and Jeff Brunton at the Evidence for Policy and Practice Information-Centre (EPPI-Centre) for their advice and support on the process of conducting a review and use of the EPPI software.

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Abbreviations and acronyms

AEI	Australian Education Index
AND	Asian Neighbourhood Design
ASSIA	Applied Social Sciences Index and Abstracts
BCS70	British Cohort Study 1970
BEI	British Education Index
BET	Basic Employability Training (part of WBLA)
BTEC	British Technical Education Council
CASAS	Comprehensive Adult Student Assessment System
CASE	Centre for the Analysis of Social Exclusion
CCE	Centre for Continuing Education, University of Sussex
CEP	Centre of Economic Performance
CERADUS	Centre for Education Research and Development Unit, University of Sussex
CLMS	Centre for Labour Market Studies
CLS	Centre for Longitudinal Studies
DC	District of Columbia
DfES	Department for Education and Skills
DWP	Department for Work and Pensions
EDAP	Employee Development Assistance Programme

EPPI-Centre	Evidence for Policy and Practice Information Centre (Social Science Research Unit, Institute of Education, University of London)
ESF	European Social Fund
ESOL	English for Speakers of Other Languages
ESRU	Employment Studies Research Unit
FTP	Florida's Family Transition Program
GAIN	Greater Avenues of Independence (US welfare to work programme)
GCSE	General Certificate of Secondary Education
GED	General Educational Development test
IALS	International Adult Literacy Survey
IES	Institute for Employment Studies
IER	Institute for Employment Research
IJSA	Individualised Job Search Assistance (US Job Search Assistance Demonstration)
IJSA+	Individualised Job Search Assistance with training (US Job Search Assistance Demonstration)
ILM	Intermediate Labour Market
INSEE	Institute for Statistics and Economic Study
IPPR	Institute for Public Policy and Research
IFS	Institute for Fiscal Studies
IOE	Institute for Education
ISCED	International Standard Classification of Education
JOBS	Job Opportunities and Basic Skills Training, programme of the 1988 Family Support Act (USA)
JRF	Joseph Rowntree Foundation
JSA	Jobseeker's Allowance

JSA	Job Search Assistance (USA)
JTPA	Job Training Partnership Act (USA)
LANT	Literacy and Numeracy Training Programme (Australia)
LFS	Labour Force Survey
LOT	Longer Occupational Training (part of WBLA)
LSC	Learning and Skills Council
LSD	Learning and Skills Development Agency
MFIP	Minnesota's Family Investment Program (USA)
NALS	National Adult Learning Survey
NCDS	National Child Development Study
NEP	National Employment Panel
NISER	National Institute for Social and Economic Research
NFER	National Foundation for Education Research
NIACE	National Institute of Adult Continuing Education
NVQ	National Vocational Qualifications
ONC/OND	Ordinary National Certificate/Ordinary National Diploma
QA	Quality assurance
PALS	Pathways to Learning Survey
PIU	Partnerships, Inclusion and Unemployment
PRI	Policy Studies Institute
PSI	Policy Studies Institute
SJFT	Short Job-Focused Training (part of WBLA)
SJSA	Structured Job Search Assistance (US Job Search Assistance Demonstration)
SWIM	Saturation Work Initiative Model (US welfare to work programme)

TABE	Test of Adult Basic Education
TfW	Training for Work
WBLA	Work-Based Learning for Adults
WDA	Workforce Development Academy
WOE	Weight of evidence
WOW	Women on to Work

Summary

This review was initiated and commissioned by the Department for Work and Pensions (DWP) to explore the impact of learning on employment outcomes for low-qualified, out-of-work adults. There is a long tradition of subsidising education and training for this group, although the evidence on returns to adult learning, especially for this low-qualified group, is not clear.

The review question developed was:

'What is the impact of learning on employment outcomes for low-qualified adults who are out-of-work or at risk of losing their job?'

There was also interest in the characteristics of a learning intervention, the individuals involved and what types of learning do and do not seem to have an impact.

The review process resulted in 16 documents, representing 12 studies, being included in the final research synthesis.

Main findings

Eight studies explored whether the chances of obtaining employment improved following a learning intervention. None were rated among the highest quality studies in the final review. All showed some sort of positive impact. However, this does not provide as conclusive a picture as it might seem on first impression. For some of these studies it is difficult to isolate the specific impact of learning because some of the programmes were employment-focused or included a mix of approaches, rather than learning only. Four studies included some comparative data and were able to show that participating in a learning intervention did result in low/unqualified, out-of-work adults being more likely to be in employment compared to those not participating. The other studies had no controls. Although they showed that a proportion of participants did move into employment, it is not possible to say how this compared to the experiences of similar people not going through an intervention.

A few studies looked beyond any immediate move into employment and the findings are mixed. One found that, although more likely to have entered employment, programme participants had been employed for a similar amount of time to those in the control group. However, after five years, those in the programme group had been employed for more time (compared to the control group). Another study found that although participation in a learning intervention helped low-qualified participants find work, this was not necessarily stable or steady.

Five studies reported the impact of programme participation on earnings. The findings also are mixed. A group of highly rated evaluations of welfare-to-work in the USA did find a statistically significant impact on the earnings of participants compared to the control group. However, this varied between different types of programme. Programmes placing more focus on job search and obtaining work, rather than largely focusing on learning were found to have a stronger impact on earnings in the shorter term. After five years, those on learning-focused programmes were beginning to catch up with those on employment-focused ones. Other studies show some impact on earnings but either this was not statistically significant or there were no data on what might have happened if individuals had not gone through a programme.

Seven studies reported some findings on the impact of learning on the qualifications or skills of participants. All found a positive impact on participants with no prior qualifications, in that they were likely to obtain qualifications because of the intervention. In three studies there was a control group and those on the programme were more likely to obtain qualifications compared with those in the control. In the other studies there was no information against which to compare the achievements of those on the programme.

Soft outcomes were discussed in two studies. In particular, self-confidence, belief in their abilities and potential and improved employability skills (for example, better behaviour at work, timekeeping and working with others) were reported.

The review also provided some information on the context of learning. A series of reports from the USA found that 'employment-focused' programmes were more successful in terms of employment outcomes for low qualified participants, than 'education-focused' programmes. Both provided learning inputs, but the former also emphasised job search. Those on 'education-focused' programmes did seem to 'catch up' with those who had been on an 'employment-focused' programme over time. These findings do need to be interpreted carefully. It is possible that those on 'education-focused' programmes had more skill needs that had to be addressed.

The learning provided on the programmes was varied. While some programmes concentrated on vocational skills, others focused on or included basic skills or basic education for those in need of these. A few programmes also included personal development activities. These were important, eg in improving motivation and an interest in learning for those participating.

A general theme emerging from a range of studies was that interventions with employer-placements and work-based training were more successful in leading to employment outcomes. These interventions put participants in contact with employers and help develop more general employability skills, as well as enabling the individuals concerned to demonstrate work experience to potential employers. However, there was also some evidence that those more likely to gain employer-placements were the more 'job-ready'. Employer placements might not be so advantageous to those needing basic skills training and other support, for example.

Learning was rarely being provided in isolation. The various interventions also included help with job search and this was concluded to be very important. Some interventions were providing broader based support to help participants with more general problems, eg financial and personal issues. This was also reported to contribute to the success of these interventions in getting low/unqualified, out-of-work people a positive employment outcome. There was also some evidence that individual and integrated support was important.

A number of **implications** can be drawn:

- **For policy** – that training has a role to play in helping low-qualified, out-of-work adults into employment, but that other factors are important, including work experience, job search, broader support and advice structures.
- **For practice** – the importance of, where possible, looking at individual circumstances and tailoring support to these is emphasised.
- **For research** – there is a need to understand better the interaction between being low-qualified and having poor basic skills and the relative importance of addressing each of these for employment outcomes; there is considerable scope for secondary analysis of existing data to explore the impact of learning on low-qualified, out-of-work adults; primary studies need to collect data on participants' prior qualifications and include this variable in the analysis (and report whether the results are significant or not); studies need to have a longitudinal and comparative element; more needs to be understood about those for whom interventions are not working (who they are, why they are not working, etc.).

The review process

Each term in the question was defined and criteria set for the inclusion/exclusion of studies in the review. Bibliographic databases, websites, journals and material held by the review group were searched to find relevant material. Abstracts and titles from bibliographic databases were screened against the exclusion criteria. Where possible, a full paper or report was obtained for those thought to be relevant to the review. Summaries, and sometimes full reports from other sources, were screened against the same criteria. Full papers/reports were further screened against the exclusion criteria and 'keyworded' to describe their key characteristics.

The initial search of bibliographic databases yielded 25,549 documents, 677 of which were duplicates. Following screening, attempts were made to obtain 188. In addition, eight documents were brought in from other sources, giving a total of 196. Twenty two (11 per cent of the 196) documents were not obtained. Of the 174 documents obtained, 119 were screened out based on the exclusion criteria, seven were duplicates and 48 went forward for keywording.

At this stage, it was decided to further screen these 48 documents. The quality of their methodology was the main criterion used – those deemed to be low quality were excluded from the review. However, other documents were excluded as it became clear that it would not be possible to look at the particular impact of training on low-qualified, out-of-work adults. A few were excluded because the document obtained did not provide sufficient data and it was not possible to obtain other reports of the findings.

Throughout the process a main difficulty was finding studies that properly looked at the impact of a learning intervention on low-qualified, out-of-work adults. Many evaluations, for example, look at the impact of an intervention on the group it aims to support – usually a disadvantaged group who are out of work. Although low-qualified adults are part of this group, many analyses do not seem to address the issue of prior qualifications separately.

At the end of the screening processes, a total of 16 papers/reports were included in the in-depth review – these related to 12 different studies. Full data extraction was conducted on these, including an assessment of their quality and weight of evidence.

1 Introduction

This review was initiated and commissioned by the Department for Work and Pensions (DWP) to explore the impact of learning on employment outcomes for low-qualified adults who are out of work or at risk of losing their job. There is a large and growing literature exploring the impact of having, or not having, qualifications and skills on the employment and earnings potential of individuals. There are also many evaluations of employment and training programmes, and studies of adult learning and employer training practices. This review focuses on a very specific sub-section of this – the impact of a learning intervention on low-qualified, out-of-work adults.

This chapter sets out the aims and rationale of this review, and discusses the policy and practice, and research backgrounds. It lists the authors, funders and users of the review, defines the review question and explores some definitional and conceptual issues.

1.1 Aims and rationale for the current review

The DWP commissioned this review to contribute towards a better understanding of whether training or learning works and leads to positive employment outcomes for those claiming benefits. They were also interested in what sort of training or learning produces such outcomes, and in what circumstances. The findings (reported in Chapter 2) will inform policy development in two particular areas: training and learning for low-qualified/skilled adults in employment (workforce development) and without employment (including active job seekers and inactive benefit claimants).

There is a large literature exploring the effect of education and qualifications on employment and earnings. This literature shows that higher level skills and qualifications obtained at the 'usual time' lead to better employment and higher earnings. However, the research provides a less clear picture of the returns to adult learning, especially for low-qualified/skilled adults. Despite this gap in evidence, there is a long tradition of providing and subsidising education and training for out-of-work, low-qualified/skilled adults in England.

The DWP had not commissioned a systematic review before and it was agreed at an early stage that the Evidence for Policy and Practice Information-Centre (EPPI-Centre) model for conducting such reviews should be used. This means that the literature search was conducted using stated definitions, criteria and sources. The titles and/or abstracts and, if necessary and where possible, full papers were screened for relevance. The full papers of any relevant literature were keyworded and the information stored using the EPPI software. The range of literature was then mapped, using the keywords. Following this mapping, it was decided to screen papers further; (a) to ensure that they really could provide data relating to the specific review question and (b) to exclude any studies which were not deemed to adopt a good quality methodology. Data was then extracted from the remaining studies using a slightly adapted EPPI data extraction tool. It is these studies that form the basis for the findings reported in Chapter 2. Chapters 3 and 4 explore in greater detail the approach taken in the course of this review.

1.2 Policy and practice background

There is a long tradition of providing and subsidising education and training for low qualified/skilled adults in England. This is based on the premise that training and learning for such adults gives individuals the opportunity to improve their human capital, and hence improve their chances in the labour market. Subsidised or free training and learning is seen as necessary to remove the financial barrier faced by many low-qualified or skilled adults, particularly those outside the labour market.

The economic rationale supporting these policies is that for the economy to become more productive and innovative, and to operate at the higher value-added end, a skilled workforce is a prime requirement.

There is also a social agenda. Low skills, in particular poor basic skills, are correlated with indicators of social disadvantage, such as poor health, housing and increased risk of becoming involved in crime. Furthermore, tackling the low skills of parents is seen as one way of addressing child poverty and intergenerational disadvantage. Skills provision is one part of a broader set of social support measures for disadvantaged individuals, families and communities.

The Skills Strategy outlined in the 2003 White Paper *21st Century Skills: Realising Our Potential* (DfES, 2003), addresses all levels of skill need and focuses on the needs of employers. A key policy strand aimed at tackling low-skill and qualification levels is the entitlement to a fully subsidised level 2 qualification for adults not previously qualified at this level.

Furthermore, the Moser Report (DfEE, 1999) identified significant levels of functional illiteracy amongst adults in England. This resulted in *Skills for Life*, the national strategy for improving basic skills. Those groups where literacy and numeracy needs are greatest (ie unemployed people and benefit claimants, prisoners, public sector employees and low-skilled adults in employment) are a particular focus.

Government policy focuses on qualifications and skills because of their link to improving employability. The 2003 skills White Paper (DfES, 2003) invited the National Employment Panel (NEP) to examine measures to increase collaboration between welfare to work and workforce development systems. This resulted in recommendations that are currently being operationalised. Many will be included in the New Deal for Skills. The NEP's recommendation's further support the view that training and learning opportunities for adults improve their chances of finding and retaining employment. For example, their suggestions for shared objectives and performance indicators for the Learning and Skills Council (LSC) and Jobcentre Plus include skill and qualification outcomes along with job entry rates, retention in work and wage at entry. The New Deal for Skills also targets inactive people who might enter employment in the medium- or long-term.

The White Paper published in March 2005 (HM Government, 2005), included the following as core strands in the Skills Strategy:

- to help all adults gain the functional skills of literacy, language and numeracy and develop wider employability skills, with more opportunities for people to progress on to skilled trade, technician, graduate and professional qualifications, going as far as their talents and drive can take them;
- to tackle the obstacles that people face in gaining fair access to training and jobs, including the barriers between welfare and work.

Two of the measures of success are that by 2010, 2.25 million adults will achieve functional competence in literacy, language and numeracy, and that over three million adults will achieve their first full level 2 qualification.

Policy initiatives place much emphasis on the association between skills and qualifications, and employability. This review examines the assumptions that the provision of training develops such skills and that this in turn increases employment, especially for low-qualified/skilled adults, to inform both strategic and operational development.

1.3 Research background

There is considerable evidence of an association between the amount of education received by an individual and their level of qualifications, and labour market indicators such as the likelihood of being employed and salary levels (for example, Booth, 1991; Greenhalgh and Stewart, 1987; Wilson and Hogarth, 2003). Some authors have unpacked the return to different types of qualification (eg Dearden *et al.*, 2001; McIntosh, 2004). These generally show much higher returns to people with academic qualifications, although some vocational qualifications do lead to positive benefits. McIntosh (2004) found that unqualified school leavers who subsequently obtained level 2 or 3 vocational qualifications were much more likely to be in employment than those who did not. The employment and wage gaps, the wage gap to a lesser extent, between those leaving education unqualified and those

with academic qualifications was reduced when the latter obtained these vocational qualifications.

The Leitch Review (2005) summarised the findings of some key studies on the employment returns to qualifications. Table 1.1 reports the percentage point difference in the probability of being employed for particular qualifications. It is stated in the Review that the lowest employment returns data were used in this table. These data show that, on the whole, having qualifications is better than not having any. For academic qualifications, the returns can be higher for the lower qualifications. The picture for vocational qualifications is more mixed. While women benefit in terms of employment for all levels of vocational qualifications, the returns for men are lower. Indeed, Dearden *et al.* (2000) report negative impacts of the lowest level vocational qualifications for men.

There is also a literature relating to basic skills (eg Bynner *et al.*, 2001; Denny *et al.*, 2003; Machin *et al.*, 2001; McIntosh and Vignoles, 2000). This shows that over time the employment rates of those with low literacy and numeracy skills have fallen compared with other groups. When those with poor basic skills improve these, this strengthens their labour market position.

Table 1.1 Estimates of the employment returns to qualifications (percentage point difference in probability of being employed for each qualification level)

	Dearden <i>et al.</i> (2000) Labour Force Survey (LFS) data	Dearden <i>et al.</i> (2000) International Adult Literacy Survey (IALS) data	McIntosh (2004)
Academic qualifications			
Degree	6 for men 9 for women	10 for men	
'A' levels	ns for men 3 for women	11 for women	
5+ A*-C GCSEs	10 for men 12 for women	13 for men	
Vocational qualifications			
NVQ level 1	-9 for men 4 for women		6-11 for men 16-22 for women
NVQ level 2	-4 for men 10 for women		10-11 for men 17-21 for women
NVQ level 3-5	3 for men 12 for women		10-13 for men 19-36 for women
ONC/OND, BTEC National	4 for men 9 for women		

Source: Leitch Review (2005), Table D.2 (p 148).

Several studies explore estimates of the employment returns to basic skills, and again these are summarised in a table in the Leitch Review. Table 1.2 shows the percentage point difference in the probability of being employed for those with different levels of basic skills. Although the different studies show different employment impacts, depending for example, on the data used and analytical approach adopted, they do clearly show that basic skills and higher levels of basic skills are associated with greater probabilities of being employed.

Table 1.2 Estimates of employment returns to basic skills (percentage point difference in probability of being employed for each qualification level)

	Numeracy		Literacy	
	Level 1	Level 2	Level 1	Level 2
McIntosh and Vignoles (2001), Natural Child Development Survey (NCDS)	2.9	4.0	0.2	1.0
McIntosh and Vignoles (2001), IALS	2.0	8.8	9.6	11.4
Bynner <i>et al.</i> (2001), NCDS	4.6		3.6	
Bynner <i>et al.</i> (2001), BCS70	1.2		5.9	
Dearden <i>et al.</i> (2000), IALS		9.0		11.0

Source: Leitch Review (2005), Table D.3, p 148.

A major evaluation of the Pathfinder Extension activities aimed at improving basic skills (Bonjour and Smeaton, 2003) showed that ten per cent of those who were unemployed at stage one of the evaluation were employed following the intervention. There is no specific analysis of the previous qualifications of those who were unemployed. The report shows that 54 per cent of participants had left school with no or low qualifications. One-third had basic qualifications, although some of these could have been at level 2. The findings suggest that some low/unqualified and unemployed people gain employment because of participation in Pathfinders, however findings relating to this group are not explicitly reported.

Studies of training interventions have often looked at the return to employers providing learning. There is some evidence that training received from an employer (whether current or previous) leads to wage benefits, improved promotability and reduced likelihood of redundancy for the individual (eg Blundell *et al.*, 1999). Tamkin (2005) reviewed evidence on the link between skills, training and business performance, concluding that a more highly qualified and educated workforce is associated with greater productivity, greater innovation and higher quality products and services. To the extent that employers are aware of and take this message into account, it is therefore likely that individuals with better skills and qualifications will be more able to compete effectively in the labour market.

Evaluations of employee development type programmes (eg Ford's Employee Development Assistance Programme (EDAP)) also contribute to this overall body of

knowledge. These have shown that those who left compulsory education with no/low qualifications and received little or no subsequent learning often benefit from an informal or non-work related programme (eg Maguire and Horrocks, 1995). Such studies are not directly relevant to this review as these programmes are provided by employers for their employees. However, they do show that these informal and non-work related, types of learning activity impact positively on the confidence and motivation of participants, and promote interest in further learning.

There is less evidence on the impact of learning undertaken in adulthood on the employment and earnings of low-qualified/skilled participants. Exploring the extent and nature of this body of evidence is the aim of this review.

1.4 Authors, funders and other users of the review

The review was funded by the DWP who convened a project steering group representing policy and user interests (see Appendix A).

The Review Group was made up of the following staff from the Institute for Employment Studies (IES) and the Centre for Education Research and Development Unit (CERADUS) in the University of Sussex Centre for Continuing Education (CCE):

- Jim Hillage (IES, Project director, data extraction and author);
- Pam Coare (CERADUS, Project director, data extraction and author);
- Sally Dench (IES, Project manager and author);
- Suzanne Hyde (CERADUS, screening articles, keywording);
- Sam Carroll (CERADUS, screening articles, keywording);
- Linda Miller (IES, keywording and data extraction);
- Nick Jagger (IES, data extraction);
- Peter Bates (IES, data extraction);
- Laura Cecil (CERADUS, screening articles, keywording, data extraction);
- Julia Dinsdale (CERADUS, data extraction);
- Sakunthala Mapa (CERADUS, searching literature).

Mark Newman, Jennifer Gray and Jeff Brunton provided support to the Review Group from the EPPI-Centre.

1.5 The review question

The review question was developed in discussion with the project steering group and went through several iterations before being finalised in the following form:

'What is the impact of learning on employment outcomes for low-qualified adults who are out of work or at risk of losing their job?'

The context of the learning and characteristics of the individual were also important to this review in that there was interest in the following sub-questions:

- What types of learning intervention have a positive impact (or work best), for whom and in what circumstances?
- What types of learning intervention do not work (in that they have no or a negative impact), for whom and in what circumstances?
- For what types of learning intervention is there no evidence as to impact?

The next section defines various phrases and words used in the review question. The review question is both broad and multi-faceted in nature, but also very specific. This created issues in searching for and identifying directly relevant literature. It is broad in that the search needed to include a wide range of factors (as detailed in the definitions below and in subsequent sections) to ensure that relevant studies were included. However, when it came to fully operationalising the review question, its specificity became fully apparent. The review was aiming to look at the impact of a range of different learning interventions on a particular group of adults – those with low or no qualifications and who were out of work. This was an issue still being grappled with when finalising papers for inclusion in the full review. Many studies do not specify the qualifications of the group under study and, in those that do, the analysis conducted did not always include previous qualifications. This raised issues in discussion within the team on how studies are reported. Studies are conducted with a range of aims and objectives, and qualifications or employment status might not always be important to these. Many studies collect vast amounts of data. The authors may only report, for example, what is significant (although not necessarily saying this) or areas specified by the client. Evaluation and other research reports are often criticised as being too long – they would be even longer if everything was reported. If it had been possible, within the scope of this project or in practice (eg not all data are accessible to other researchers) to reanalyse some of the original data on which various studies are based, information of direct relevance to the review question may have been obtained.

1.6 Definitions

1.6.1 Adult

The term 'adult' cannot be properly defined without reference to other words in the review question. A strictly age-based definition was not used. The interest is in adults of working age who left continuous education with low or no qualifications,¹ and received some form of learning intervention later.

For the purposes of this review, adults therefore include 17 year olds who left school with low qualifications, if they have received some learning subsequently but with a gap (excluding holidays) since completing continuous education. For example, they decided to look for or take a job but this did not work out and then returned to learning; they remained unemployed and entered some form of learning programme.

Any adults (whatever their age) who are seeking work, whether on benefits or not, or who are at risk of becoming unemployed will be relevant to the study. Some groups of adults (for example, women staying home to look after children or anyone who has taken early retirement) may or may not be relevant. Some will participate in learning as a means of improving their employability. Others participating will not do so with this aim, however, the learning might have unplanned or unforeseen effects in relation to their longer-term engagement with the labour market.

The choice of terms used has a significant impact on the data that is produced. In this instance, to ensure that all possible variations of 'adult' were covered, search terms such as 'young people' were also used. The result of this was to increase the search significantly and include much material that was not relevant, eg school-based.

1.6.2 Low-qualified

The definition of low-qualified is derived from the National Qualification Framework. Adults with British qualifications below level 2 are generally considered low-qualified. Studies relevant to this review had to address the impact of learning on those whose existing qualifications were low. There was also interest in whether learning outcomes differ for adults with no qualifications, compared to those with some low-level qualifications. Where possible, data on this was extracted for the review.

The level 2 definition did not apply in the international literature. In these cases the International Standard Classification of Education (ISCED) categories was used (or its national equivalent). Low-qualified adults were defined as having education/qualifications at level 0-2, ie equal to or lower than the first stage of secondary education.

¹ The phrase low qualifications will be used in the rest of the report and should be read to mean low or no qualifications. In Chapter 2 this may not always be the case, depending on the group for which findings are reported – and this will be made explicit.

1.6.3 Learning

A very broad definition of learning was adopted. However, the learning had to be facilitated or involve some formal intervention. Very informal types of learning were excluded (eg reading instruction manuals, improving knowledge through reading books, etc.).

The learning could:

- be vocational, academic, or related to a leisure interest, involvement in voluntary or community activities or everyday responsibilities (eg parenting and caring skills, household management);
- be work or non-work related;
- be directly aiming to increase employability and skills or not;
- lead to qualifications or be unaccredited;
- be at a range of levels (eg including basic skills and English for Speakers of Other Languages (ESOL); access to further and higher education). However, participation in higher education was not included, based on the assumption that those participating at this level would not previously have been low-qualified;
- take place in a range of settings (eg at a college or other learning institution, at the workplace, in a training centre, in a voluntary/community organisation);
- be funded in a number of ways (eg through state programmes, by Jobcentre Plus, the LSC, individually, possibly employer funded);
- take place at any time (eg during the day, evening classes);
- include formal training or monitoring, coaching and other assessment activities.

1.6.4 Out of work

The DWP were particularly interested in job seekers and inactive benefit claimants. However, the definition was expanded to ensure lessons could be learnt from a broader range of literature. The search therefore also included anyone who was out of work and seeking work or inactive and likely to work in the medium-/longer-term (eg lone parents with young children; women looking after children; older people taking, or forced into, early retirement).

1.6.5 Risk of losing their job

There are many reasons why people are at risk of losing their job. The search therefore included those in work but whose employment was unlikely to be sustained (ie at risk of unemployment), precarious (eg seasonal, temporary) or under threat of redundancy. Those who move constantly between employment and unemployment ('repeat spellers') were also of interest to DWP.

1.6.6 Employment outcomes

Again a broad definition was adopted, including hard and soft indicators. The focus was on increased employability – meaning that, as a result of a learning intervention, individuals gained qualifications, skills, knowledge or experience that helped them find actual employment or increased their ability to enter employment in the longer term. The definition therefore included clear employment outcomes (eg finding a job, less unemployment, impact on earnings), but also any soft outcomes that indicated an individual might have become more employable or had moved closer to the labour market (eg increased confidence, motivation).

Employment outcomes therefore included any of the following:

- outcomes that indicated improved ability to find and enter employment:
 - immediate outcomes – eg qualifications gained, improved skills, learning outcomes;
 - progression to more learning – eg from basic skills to a vocational course, to a further vocational course;
 - move from complete inactivity to, eg voluntary work (as a precursor to finding employment);
 - participation in unpaid employment (ie in relation to civic participation and citizenship);
 - soft outcomes – eg improved motivation and confidence, more positive attitudes to finding employment;
- actual employment outcomes:
 - short-term employment related outcomes – eg finding a job, obtaining more interviews/ better job search;
 - earnings-related outcomes – which might relate to obtaining employment or progression in the labour market;
- long-term employment-related outcomes:
 - fewer episodes of unemployment/longer periods of employment;
 - fewer days unemployed;
 - better employment, eg permanent rather than temporary work, higher pay, a 'career' job;
 - progression, eg evidence of sustained employment, promotion within a job.

1.6.7 Impact and context

There was interest in studies that looked at causality, relationships and association, and that placed the individuals and the learning intervention in context, taking into account any mediating factors. The review was not limited to studies adopting particular methodological approaches. Studies could include a wide range of

research designs and methods that provided some information on the possible causal relationships/associations between learning and employment outcomes, including learners' perceptions of outcomes.

To answer the sub-questions, background characteristics about an individual and the context within which the learning takes place were very important. Therefore, any paper which, for example, simply described a learning intervention and its outcomes, without providing any background and context, was excluded. In practice, papers provided varying amounts of information on the characteristics of learners and the learning interventions.

The variables to be taken into account included:

- socio-economic and personal characteristics of learners (including age, sex, disability, ethnicity, dependent/caring responsibilities);
- their previous employment and training history;
- local area/geographic effects;
- prevailing economic climate/stage in business cycle (in that this will influence potential to enter employment);
- characteristics of the learning intervention (eg the length, quality, methods of delivery, learner support, voluntary or mandatory);
- in the case of non-UK interventions, any macro-cultural differences between learners and learning contexts and the national policy context;
- any micro-cultural differences (eg in interventions such as ESOL).

In practice, all studies would have been excluded if all these variables had been expected; however, some background contextual information was looked for.

1.7 Report structure

The rest of this report is structured as follows:

- Chapter 2 reports the findings of this review. It first provides a summary of the findings emerging from research studies identified in the process of conducting this review, and goes on to report the findings emerging from each study in greater detail. Finally, it draws some conclusions for policy, practice and further research.
- Chapters 3 and 4 explore the process of conducting this systematic review which led to the selection of the research studies on which Chapter 2 is based. This is, in effect, the research methodology which led to the findings reported in Chapter 2. Chapter 3 looks at the process of identifying and selecting studies, and extracting data for the analysis. Chapter 4 reports the numbers of documents involved and provides a map of the studies initially selected for more detailed examination.

- Chapter 5 draws out some wider lessons for the conduct of systematic reviews in this area.
- Finally, a number of appendices provide additional information on the process and tools used.

2 In-depth review: results

2.1 Introduction

This chapter explores the findings emerging from a systematic search of the literature in relation to the question:

'What is the impact of learning on employment outcomes for low-qualified adults who are out-of-work or at risk of losing their job?'

It is based on 16 papers reporting 12 studies. Chapters 3 and 4 describe the process through which these papers were found and selected.

The review question was both broad – in that it covered a wide range of literature – and very specific. The search and screening process aimed to identify studies that allowed the impact of learning on low-qualified, out-of-work adults to be explored. Many studies were excluded because, at least on the basis of the reports found, it was not possible to explicitly explore the impact of learning on this particular group of adults. This does not mean that data on prior qualifications (ie their qualifications at the beginning of a learning intervention) were not collected, but rather that findings were not reported separately for this group. This could have been for a range of reasons, for example, because they were not significant, they were not of interest to the client/author(s), etc.

Another point to bear in mind is that the various studies included in this review grouped qualifications in different ways. For example, some studies compared the impact of a learning intervention on those with some, compared with no, qualifications (ie those with low qualifications are grouped with those with higher qualifications). Conclusions from these can only be drawn about those with no, as opposed to some, qualifications. Other studies report findings for those with low qualifications (either grouping these with 'no qualifications' or leaving them as a separate group). For the purposes of this review, low-qualified was taken to mean below level 2. No studies explicitly used this divide.

Most of the studies included in this review provided information on a range of employment-related outcomes. However, not all of these outcomes were related to

prior qualification levels. Only those findings of specific relevance to the review question are reported here – ie only data from the studies that are related to the prior qualification levels of out-of-work adults are included in this review.

Studies also provided information on a range of comparator groups. Some included control groups so that the impact of a learning intervention on a particular group can be compared with what happened to those who did not participate. These provide the strongest evidence of the impact of learning on low-qualified, out-of-work adults. However, even in these there are sometimes problems with the control groups, for example, members also participated in some learning activities similar to the ones provided to those taking part in the learning intervention being evaluated. It can be difficult to isolate the particular impact of learning. Other studies had no control group – comparisons might be made between what happens to those with different qualification levels going through an intervention. A number of studies only report what happens to those going through a particular learning intervention and there is no information on what might have happened to them if they had not participated.

A further general point about the studies reported here is that learning was not happening in isolation. The majority of interventions included other support for participants, for example, help with job search, employer placements/work experience, support with personal problems. It is therefore often difficult to isolate the specific impact of learning.

This chapter begins with two tables. The first provides some information on the nature of the learning interventions being researched (Table 2.1), including the age and gender distribution of participants. The second (Table 2.2) describes the method of study. These tables also detail the country in which each study took place. Nine studies evaluated a range of employment and training interventions using a quantitative methodology and were based on primary data collection. Two involved secondary analysis of existing data and one was a case study of a particular employment and training intervention.

Each study was given an overall ‘weight of evidence’ rating of high, medium or low, based on its relevance to the review question (see Chapter 3 for details and Appendix B for all ratings for each study). Both tables list the studies included in this review grouped according to their weight of evidence rating. It should be noted that this overall weight of evidence takes into account the relevance of a particular study to the review question, furthermore that studies rated low in terms of their internal methodological approach and coherence were excluded from the full review (see Chapter 3). Therefore studies with a low weighting reported in this chapter are not poor quality *per se* but are of less direct relevance to this review. They still provide some important evidence.

These tables are followed by a summary of the findings of this review and a section detailing the specific findings from each study. Finally, some implications are drawn.

2.2 Characteristics of studies included in the review

Table 2.1 provides information on the nature of the learning interventions being researched, and the age and gender distribution of participants.

Table 2.2 shows some details on the aims, methodology and evidence rating of the various studies.

Table 2.1 The interventions explored by studies included in the in-depth review (in order of weight of evidence rating)

Author and publication date	Country	Intervention	Sex and age of programme participants
<p>High/medium</p> <p>Michalopoulos, C., Schwartz, C. (2000), <i>What works best for whom: Impacts of 20 Welfare-to-Work Programs by Subgroup</i>, National Evaluation of Welfare-to-Work Strategies, www.mdrc.org</p>	<p>USA – San Diego, Alameda, Butte, Los Angeles, Riverside and Tulare counties, California; Atlanta, Georgia; Grand Rapids, Michigan; Columbus, Ohio; Detroit, Michigan; Oklahoma City; Portland, Oregon; seven counties in Minnesota; Escambia County, Florida.</p>	<p>Twenty programmes aimed at single-parents: Saturation Work Initiative Model (SWIM); Greater Avenues for Independence (GAIN) – six programmes; 11 welfare-to-work programmes created or adapted to fit the provisions of the Job Opportunities and Basic Skills Training (JOBS) programme of the Family Support Act (1988); Minnesota's Family Investment Program (MFIIP); Florida's Family Transition Program (FTP).</p> <p>All programmes require welfare recipients to participate in an employment or training programme with the ultimate objective of helping clients leave welfare for work. Some do this primarily through job search, others assign clients initially to basic education and training. Others use a mix of first activities, allowing participants who lack basic skills to enrol in education and requiring others to start looking for work.</p> <p>Job Training Partnership Act (JTPA).</p> <p>Randomised experiment looking at the impact of the programme in 16 service delivery areas between November 1985 and September 1989.</p> <p>The services offered to participants fell into six basic categories: classroom training in occupational skills; on-the-job training; job search assistance; basic education; work experience; miscellaneous services (eg assessment, job readiness training, 'try out' employment).</p>	<p>More than 90 per cent women in each programme. Average age around 30.</p>
<p>Ore, L.L., Bloom, H.S., Bell, S.H., Doolittle, F., Lin, W., Cave, G. (1996), <i>Does Training for the Disadvantaged Work? Evidence from the National JPTA Study</i>, Washington: The Urban Institute Press</p>	<p>USA</p>	<p>Job Training Partnership Act (JTPA).</p>	<p>54 per cent female/46 per cent male.</p> <p>Programme applies to adults (ie aged 22 and over) and youths (16 to 21).</p>

Continued

Table 2.1 Continued

Author and publication date	Country	Intervention	Sex and age of programme participants
Medium			
Bonnal, L., Fougere, D., Serandon, A. (1997), 'Evaluating the impact of French employment policies on individual labour market histories', <i>Review of Economic Studies</i> , 64, pp. 683-713	France	Looks at the impact of youth employment schemes in France in the late 1980s on subsequent employment and unemployment durations of recipients. Policy then offered strong incentives to private firms offering training places and facilitated the development of alternating work/employment programmes.	Young men.
Bos, J.M. et al. (2002), <i>Improving Basic Skills: The Effects of Adult Education in Welfare-to-Work Programs</i> ; Freedman, S. (2000), <i>Four-Year Impacts of Ten Programs on Employment Stability and Earnings Growth</i> ; Friedman, S. et al. (2000), <i>Two-Year Impacts for Eleven Programs</i> ; Hamilton, G. et al. (1997), <i>Evaluating Two Welfare-to-Work Program Approaches: Two-Year Findings on Labour Force Attachment and Human Capital Development Programs in Three Sites</i> ; Hamilton, G. et al. (2001), <i>How Effective are Different Welfare to Work Approaches? Five-Year Adult and Child Impacts for Eleven Programs</i> .	USA – Atlanta, Grand Rapids, Riverside, Portland, Columbus, Detroit, Oklahoma City.	Evaluation of state-operated welfare-to-work programmes begun under the 1988 Family Support Act. Some programmes had a strong employment focus while others were more strongly education-focused. The programmes also varied in other ways, including how broadly the participation mandate applied and how strictly it was enforced, the amount of childcare support provided for participants and methods of case management. The programmes also served different welfare populations and operated in a variety of labour markets.	94 per cent female; 24 per cent under 25; 47 per cent 25-34.
All part of the National Evaluation of Welfare-to-Work Strategies – www.mdrc.org			

Continued

Table 2.1 Continued

Author and publication date	Country	Intervention	Sex and age of programme participants
Decker, P.T., Olsen, R.B., Freeman, L., Klepinger, D.H. (2000), <i>Assisting Unemployment Insurance Claimants: The Long-Term Impacts of the Job Search Assistance Demonstration</i> , www.upjohninst.org/erdc	USA	Evaluation of the US Job Search Assistance Demonstration. This involved three strategies for encouraging entry to employment and a reduced reliance on benefits. Structured Job Search Assistance (SJSAs) provided standard assistance to participants. Individualised Job Search Assistance (IJSAs) provided services based on the individual needs of claimants. Individualised Job Search Assistance with training (IJSAs+) was identical to IJSA but also included assistance to enrol in training. In practice participants in all three strategies were equally likely to participate in some training, so the evaluation is less helpful than hoped in identifying the impact of a training, compared to another type of intervention.	Of those eligible for programme, 60 per cent male. Average age 38.
McIntosh, S. (2004), <i>The Impact of Vocational Qualifications on the Labour Market Outcomes of Low-Achieving School-Leavers</i> , Centre for Economic Performance Discussion Paper No. 621, London: LSE	UK	Explores the extent to which low-qualified school leavers can improve their labour market status through the acquisition of vocational qualifications. Uses data from the Labour Force Survey (LFS) relating to 1996-2002. The analysis includes consideration of those who were unemployed at the time of obtaining their vocational qualifications.	Young adults (up to age 25).

Continued

Table 2.1 Continued

Author and publication date	Country	Intervention	Sex and age of programme participants
Payne, J., Payne, C., Lissenburgh, S., Range, M. (1999), <i>Work-Based Training and Job Prospects for the Unemployed: An Evaluation of Training for Work</i> , Research Report RR96, Department for Education and Employment	England and Wales	Evaluation of Training for Work (TfW), a programme aimed at helping people who had been unemployed for over six months to find jobs and improve their skills, by providing appropriate training and work experience. After initial assessment and guidance, entrants followed one of three routes: employer placements, full-time off-the-job training; or project placements. A nationally representative sample of TfW participants in England and Wales who left the programme in autumn 1995 were interviewed in spring 1996 and summer 1997. Participation in TfW was voluntary. People with no or very low school level qualifications as well as those with vocational qualifications equivalent to NVQ level 2 or higher were less likely to go on the programme.	Around two-thirds men. Mean age 33.

Continued

Table 2.1 Continued

Author and publication date	Country	Intervention	Sex and age of programme participants
Rademacher, I., Bear, M., Conway, M. (2001), <i>Project QUEST. A Case Study of a Sectoral Employment Development Approach</i> , Economic Opportunities Program, Aspen Institute, USA	USA	A case study of a programme aiming to provide the unemployed and poor working residents of San Antonio with a new type of employment and job placement service. The pool of low skilled jobs traditionally occupied by low qualified workers was declining because of the closure of a major manufacturing employer. Two local agencies analysed the city's economic trends and found that job creation was greater than job loss. However, for low qualified and skilled residents the problem was that these jobs were high-skill – they did not have the training to obtain them. Project Quest was set up as a two-year demonstration project and won political and financial support from local to federal agencies. The goal was to train 600 individuals to fill quality, career-track jobs. This has now become a nationally-recognised model for workforce development. An intensive programme (Workforce Development Academy (WDA)) is available for those that need it, to raise participants' reading, writing and maths skills from 9th grade to 12th grade in ten weeks. Once this is successfully completed they can enrol on an occupational specific college course – this training has to be relevant to the needs of local employers. An important part of the project is that links are developed with local employers.	

Continued

Table 2.1 Continued

Author and publication date	Country	Intervention	Sex and age of programme participants
<p>Medium/low</p> <p>Anderson, T., Dorsett, R., Hales, J., Lissenburgh, S., Pires, C., Smeaton, D. (2004), <i>Work-Based Learning for Adults: and evaluation of labour market effects</i>, Working Age Research and Analysis Publications No. 187, London: Department for Work and Pensions</p>	England	<p>Evaluation of Work-Based Learning for Adults (WBLA) which aims to assess the extent to which participating in the programme affected subsequent labour market outcomes. WBLA was a voluntary training programme in England, aimed at those aged 25 years or more who had been claiming Jobseeker's Allowance (JSA) for a least six months. There were three areas of WBLA provision: short job-focused training (SJFT) – courses of up to six weeks duration for the most job-ready; Longer Occupational Training (LOT) – for those with benefit claims of a year or more, providing longer-term training to address more fundamental needs; Basic Employability Training (BET) – for those with basic skill needs, lasting 26 weeks. Those with low or no qualifications were much more likely to participate in BET – 27 per cent of both SJFT and LOT participants had no qualifications or were below level 2, compared to 75 per cent on BET. The data are reported separately for those with no compared to those with one or more qualifications, so although conclusions can be drawn about those with no qualifications, nothing can be said about those with low qualifications.</p>	Continued

Table 2.1 Continued

Author and publication date	Country	Intervention	Sex and age of programme participants
<p>Low</p> <p>Howieson, C. (1996), <i>Making a Move. Next Steps for Women. A follow-up study of Women Onto Work Students</i>, Edinburgh: Centre for Educational Sociology</p>	Scotland	<p>Reports a longitudinal study of students who took part in Women on to Work (WOW) courses between 1990 and 1994. These courses were aimed at unemployed women from Wester Hailes, Craigmillar and Pilton/Muirhouse and at unemployed women with disabilities and women from ethnic minorities from all parts of Edinburgh. These women had few, if any, qualifications and either no work experience, or they had only worked in low paid, unskilled work. WOW courses ran for three days a week over a 12-week period. They primarily aimed to raise participants' self-esteem and aspirations, and included self-assessment, confidence building, examining options, careers counselling and job seeking skills.</p>	Women, all ages.
<p>Marshall, B., Macfarlane, M. (2000), <i>The Intermediate Labour Market. A tool for tackling long-term unemployment</i>, Work and Opportunities Series No. 20, York: Joseph Rowntree Foundation</p>	Britain	<p>Explores the impact of Intermediate Labour Market (ILM) programmes in Britain. These have been developed to address long-term unemployment and promote community-based regeneration. The study found that there were at least 65 operations across the country, offering 5,300 employment opportunities targeted at the long-term unemployed. The main feature of ILMs is that they offer paid work on a temporary basis, with training, personal development and job search activities. The work has to be additional (to that already in existence) and usually benefits the community in some way. A range of public funds are used to support these programmes. Trainees are low-qualified and 88 per cent of training provision is to level 2.</p>	Continued

Table 2.1 Continued

Author and publication date	Country	Intervention	Sex and age of programme participants
Tao, F., Gamse, B., Tarr, H. (1998), <i>National Evaluation of the Even Start Family Literacy Program</i> , 1994-1997 <i>Final Report</i> , Washington: US Department of Education	USA	National evaluation of Even Start Family Literacy Program, relating to 1994-1997. Even Start addresses the basic educational needs of families, and children of low-income families through a unified programme of adult basic or secondary education and literacy programmes for parents; assistance for parents to effectively promote their children's educational development and early childhood education for children. It is the first of these which is of interest to this review. The majority of participants were low qualified – in 1996/97, 85 per cent of participants had not graduated high school. A wide range of agencies in different communities provide education and training input. Many families did not know about local provision or had difficulty accessing this. Even Start projects both added to the flexibility of provision and helped to bring existing services together to serve the community more generally. As well as education, childcare and other additional support was available.	85 per cent women; average age 28.

Table 2.2 Some characteristics of studies included in the in-depth review

Author and date	Country	Aims of study	How studied	Overall weight of evidence in relation to review question
High/medium Michalopoulos <i>et al.</i> (2000)	San Diego, Alameda, Butte, Los Angeles, Riverside and Tulare counties, California; Atlanta, Georgia; Grand Rapids, Michigan; Columbus, Ohio; Detroit, Michigan; Oklahoma City; Portland, Oregon; seven counties in Minnesota; Escambia County, Florida.	To evaluate the impact of 20 different welfare-to-work programmes across eight states and more than a dozen counties over a period of more than ten years.	Evaluation: researcher manipulated. Those eligible for welfare program or control group. Looks at impact of program on employment and earnings for sub-groups.	High/medium: A sound methodological and relevant paper. Only drawback is that most of participants under study are women.
Orr <i>et al.</i> (1996)	USA	Evaluation of the JTPA – US government sponsored employment and training programmes to support adults and young people who may experience barriers to employment) examining the programme's success in increasing employment and earnings of participants, reducing support costs and increasing tax revenues.	Description – use of survey data, administrative records and programme and government department generating management information. Evaluation: researcher manipulated. Those eligible for the programme randomly assigned to treatment and control groups.	High/medium: The study provides strong evidence on the success of voluntary employment and training programmes in increasing employment levels and the quality of that employment among adults. However, not many findings are reported in a way that distinguishes between the impact of low/unqualified adults from the rest.
Medium Bonnal <i>et al.</i> (1997)	France	To evaluate the impact of youth employment schemes on subsequent unemployment and employment durations of recipients.	Exploration of relationships: Modelling of a reduced-form, multi-spell transition model, using non-experimental longitudinal micro data collected by INSEE.	Medium: An appropriate methodology using secondary data, however date of data used and different economic context makes findings of only some relevance to the review.

Continued

Table 2.2 Continued

Author and date	Country	Aims of study	How studied	Overall weight of evidence in relation to review question
Bos <i>et al.</i> (2002); Freedman (2000) ; Freedman <i>et al.</i> (2000); Hamilton <i>et al.</i> (1997 and 2001)	USA – Atlanta, Grand Rapids, Riverside, Portland, Columbus, Detroit, Oklahoma City.	Evaluating impact of 11 Welfare to work programmes. These include two types of programme: employment-focused and education-focused.	Evaluation: researcher manipulated. Randomly assigns those eligible to treatment or control group in each area.	Medium: provides relevant data on impact of intervention on low/unqualified. However, no multi-variate analysis looking at interactions between variables and between 89 and 97 per cent of participants (in different areas) women.
Decker <i>et al.</i> (2000)	USA – District of Columbia (DC) and in Florida	To evaluate the US Department of Labor's 'JSA demonstration' aimed at testing feasibility of implementing job search assistance programmes and measuring their effectiveness in promoting rapid re-employment. Three strategies were tested: SJSA, IJSA and IJSA+.	Evaluation: researcher manipulated. Eligible claimants were randomly assigned to the control group or one of the three treatments (SJSA, IJSA, IJSA+).	Medium: This study does include adults with low educational achievement but does not provide great detail in outcomes, particularly for the subgroups. The overall study does show that the 'learning' interventions were largely in the form of job search activities and it was more likely the motivation to contact more potential employers, than application of any learning led to reduced unemployment. The value of this study in answering the review question may be in what is not evidence of success for adults with low educational attainment, or that success in such limited terms (reduced benefit claim) is only one measure.

Continued

Table 2.2 Continued

Author and date	Country	Aims of study	How studied	Overall weight of evidence in relation to review question
McIntosh (2004)	UK	Analysis of the extent to which low-qualified school leavers can improve their labour market status through the acquisition of vocational qualifications.	Exploration of relationships: Secondary analysis of a quasi-cohort constructed using LFS data – compares impact of vocational qualifications on those with different qualification levels. Descriptive and regression based analysis.	Medium: The study provides evidence that young people without qualifications may gain an employment advantage through vocational qualifications. However, less is known about whether those who take further study are substantially different from those who do not (eg more motivated). Only looks at young people.
Payne <i>et al.</i> (1999)	England and Wales	Evaluation of the effectiveness of skills training for unemployed adults through TfW.	Evaluation: researcher manipulated. Comparison of participants with a matched sample of non-participants.	Medium: provides comparisons between groups receiving and not receiving TfW but limited analysis and reporting based on prior qualifications.
Rademacher <i>et al.</i> (2001)	USA	Case study of a training programme developed to tie in closely with the needs of local employers, looking at operation of the project and project outcomes.	Description.	Medium: some information on impact on those with low/no qualifications, no comparators but a sound study in its own right.

Continued

Table 2.2 Continued

Author and date	Country	Aims of study	How studied	Overall weight of evidence in relation to review question
Medium/low Anderson <i>et al.</i> (2004)	England	To understand the nature of the client group accessing work-based learning better and to assess the effect that participation has on subsequent labour market outcomes.	Evaluation: researcher manipulated. Impact of WBLA was estimated by comparing the outcomes of participants with a sample of non-participants, selected using propensity score matching to control for differences in characteristics. The evaluation was based on survey data collected using questionnaires.	Medium/low: relatively few findings relevant to group of specific interest to the review, and few findings on the impact of training.
Low Howieson (1996)	Scotland	To evaluate the impact of WOW courses on women's educational and employment prospects in the long term. The study was carried out between 1992 and 1996.	Evaluation: naturally occurring, mostly a descriptive study with some crosstabulations. Postal questionnaire survey of four cohorts of participants – some surveyed one and two years after WOW some just one.	Low: provides some data for different qualification levels, mostly descriptive and nothing to show what could have happened without the intervention.
Marshall and Macfarlane (2000)	Britain	To explore the impact of the ILM approach, including the range of programmes and how operating, what makes a successful project, outputs and values relative to other labour market initiatives.	Description – using survey of ILMs and in-depth study of 11 programmes.	Low: Although a low qualified and out of work group being targeted by the programme, the report focuses more on ILMs themselves rather than the people being studied. Some information on specific impact of training.

Continued

Table 2.2 Continued

Author and date	Country	Aims of study	How studied	Overall weight of evidence in relation to review question
Tao <i>et al.</i> (1998)	USA	A four year study to monitor the implementation and effectiveness of the 'even start' programme.	Evaluation: naturally occurring. A mixture of survey and case study data were collected. A mixture of descriptive and exploratory analytical techniques are used.	Low: provides some data of relevance to the review. Authors discuss problems in attributing impacts to even start as no control. The report is not particularly clearly written or easy to follow.

2.3 Summary of the findings

This section summarises key themes emerging from the studies included in this review. Detailed findings from each study are reported individually in the following section. Table 2.3 summarises the outcomes found in the various studies, for example, a '+ve effect' under employment means that a study found that employment chances improved after low/unqualified, out-of-work adults had participated in some form of learning intervention. Blank cells mean that no findings were reported by that study on that particular impact of learning on low/unqualified, out-of-work adults. Results that are not statistically significant are included in Table 2.3. These often suggest that the findings are inconclusive.

2.3.1 Impact on employment

Eight studies explored whether the chances of obtaining employment improved following a training intervention. As Table 2.3 shows, all those studies reporting the chances of employment showed some form of positive impact. However, this does not provide as conclusive a picture as it might seem on first impression. Bonnal, the group of papers linked to Bos *et al.*, Payne *et al.* and McIntosh (all medium rated) provide evidence with some comparative information, that low/unqualified, out-of-work participants in their studies who experienced a learning intervention (or in the case of McIntosh obtained vocational qualifications) were more likely to obtain employment than those who did not experience such an intervention. Bos, Freedman and Hamilton report findings for an 'employment-focused' programme – although including training elements the main focus was on finding employment. It is therefore difficult to isolate the precise role of the training intervention. (This is an issue explored further towards the end of this section). Marshall and Macfarlane (looking at ILMs) (low rated) make some comparisons with other programmes aimed at disadvantaged groups and draw favourable conclusions in relation to the impact of ILMs. However, the other studies reported here (one medium rated, one medium/low and two low rated), although showing that a proportion of this group obtained employment after an intervention provide no comparative information. From these it is not possible to say what might have happened if such individuals had not participated in the various interventions, and to know the extent to which these employment-outcomes can be related to the learning intervention being studied.

Table 2.3 The impact of learning on low/unqualified, out-of-work adults

	Employment	Impact on earnings	Impact on human capital	Soft outcomes
High/medium weight of evidence Michalopoulos <i>et al.</i> (2000)		Some +ve impact (compared to control) but not for all interventions. Programmes with an employment focus, rather than more focused on training more likely to have a +ve effect.		
Ore <i>et al.</i> (1996)		Adult women – some effect (but not statistically significant). Adult men no statistically significant effect. No evidence of improved earnings amongst young people (16-22). (compared to control group)	Obtaining a high school diploma +ve and statistically significant impact on women +ve but not statistically significant impact on men (compared to control group)	
Medium weight Bonnal <i>et al.</i> (1997)	+ve effect (no control)			

Continued

Table 2.3 Continued

	Employment	Impact on earnings	Impact on human capital	Soft outcomes
Bos <i>et al.</i> (2002); Freedman (2000) Freedman <i>et al.</i> (2000); Hamilton <i>et al.</i> (1997 and 2001)	+ve (statistically significant) after two and five years (compared to control group)	+ve effect and maintained at two and five years (compared to control group)	Obtaining a high school diploma +ve effect, statistically significant	
Note: Programmes on which findings are reported from these studies focused on finding work, but included an element of training.	After two years, length of stay in employment similar programme and control group; after five years, programme group employed for longer.		But no improvement in reading or maths test scores (compared to control group)	
Decker <i>et al.</i> (2000)		+ve effect but not statistically significant (compared to control)		
McIntosh (2004)	+ve effect (no control, but multivariate analysis comparing similar groups)			
Payne <i>et al.</i> (1999)	+ve effect (compared to control group) But low qualified not necessarily moving into stable or steady work.		+ve effect	
Rademacher <i>et al.</i> (2001)	+ve effect (no control)			

Continued

Table 2.3 Continued

	Employment	Impact on earnings	Impact on human capital	Soft outcomes
Medium/low weight Anderson <i>et al.</i> (2004)	+ve effect (not compared to control)		+ve effect (not compared to control)	
Low weight Howieson (1996)	+ve effect (no control)		Encouraged women to progress to further learning (no control)	Increased self-confidence and belief in selves and their potential
Marshall and Macfarlane (2000)	+ve effect (no control)	+ve effect and in longer term (no control)	+ve effect in terms of achievement of vocational qualifications (no control)	Increased confidence. Improved behaviour at work, time keeping, flexibility and working with others.
Tao <i>et al.</i> (1998)			+ve effect (compared to control group)	

A few studies (all medium rated) look beyond any immediate move into employment and the findings are mixed. The Bos, Freedman and Hamilton group of papers report that after two years, programme participants (although more likely to have entered employment) had been employed for a similar amount of time to those in the control group. However, after five years, those in the programme group had worked for longer compared to those in the control group. Rademacher (although without a control) found that high rates of employment were maintained, however this was only over a 90 day period. Findings reported by Payne *et al.* suggest that although TfW helped low/unqualified out-of-work participants obtain work, this was not necessarily stable or steady work. This finding related to a 17 month follow-up period. Overall conclusions cannot, therefore, easily be drawn from the studies included in this review about whether learning interventions had a longer term impact on the employment chances of low/unqualified, out-of-work participants.

2.3.2 Impact on earnings

Five studies reported findings related to the impact of a learning intervention on earnings. Table 4.3 summarises these and shows a mixed picture. One of the highest rated studies in this review, Michalopoulos *et al.* found that earnings increased significantly for low qualified participants (compared to the control group) following a welfare-to-work intervention. However, the impact did vary across the range of different programmes. Those focusing on encouraging participants to search for work but providing a mix of activities, rather than a main focus on learning had the biggest impact on subsequent earnings of the low qualified. Another highly rated study, Ore *et al.* found some effect on earnings, but this was not statistically significant (ie it could not conclusively be said that those with low qualifications benefited less than those who were more highly qualified). The Bos, Freedman and Hamilton group of papers (medium rated) show that the earnings of low qualified participants in welfare-to-work were significantly higher compared to the control group, and that this was maintained over a five year period. They provide further support for 'employment-focused' programmes being more successful in increasing earnings, compared to those focusing more on education, although participants in the latter do show some catching up after five years.

2.3.3 Impact on human capital

Seven studies looked at the impact on human capital, usually reported in terms of acquiring qualifications. The three high/medium and medium-rated studies all show a positive impact of the learning intervention under study (Ore *et al.*, Bos, Freedman and Hamilton, Payne), although Ore finds that the impact on men was not statistically significant. The lower rated studies (Anderson *et al.*, Howieson, Marshall and Macfarlane, and Tao *et al.*) all show a positive effect, although in the first three of these there are no control group comparisons. For example, Anderson *et al.* report that a proportion of those without qualifications did gain some as a result of going on a work-based learning programme (16 per cent of those on SJFT; 29 per cent of those on LOT and 12 per cent of those on a basic education track). They go

on to combine reported improvements because of formal training and obtaining qualifications – 39 per cent of those on SJFT (with no qualifications) and 45 per cent of those on LOT were found to have improved human capital. There are, however, no data to show what might have happened to these individuals (or people like them) without such training.

Having reported improvements in human capital, the analyses do not provide evidence of the difference this makes to those who initially have no/low qualifications in the labour market. Indeed, Anderson *et al.* comment that not all improvements in human capital result in increased employability.

2.3.4 The differential impact of learning

Several of the studies provide comparisons of the impact of a learning intervention on those with low and/or no qualifications and those with higher (or some) qualifications. The findings do vary. For example, Anderson *et al.* (medium/low rating) show that a higher proportion of those with some qualifications obtained employment following various training interventions. Howieson (low rated) found that a year later those with no prior qualifications were less likely to be in employment than those with some qualifications. Freedman, Freedman *et al.* and Hamilton *et al.* (medium rated) also show a stronger impact of welfare to work programmes on those with higher (compared to low) qualifications. Others report a different picture. The following examples are from three medium rated studies, Bonnal *et al.* found that vocational training had a positive impact on the least educated group of young men, but not the most qualified. McIntosh reported no employment benefit of vocational qualifications for those who did well at school. Payne *et al.* concluded that prior qualifications were not related to the chances of obtaining work after TfW.

There are a number of possible reasons for these findings. Those with some qualifications maybe more 'job ready', eg through having some vocational qualifications/experience, compared to those without. Those with low/no qualifications are likely to include a higher proportion of people with poor basic skills and perhaps need more training/development before being ready to enter employment. Indeed, Anderson *et al.* (medium/low rated) found that very similar proportions of those with no and some qualifications who went through a basic skills training entered employment following the programme (31 and 36 per cent respectively). There may be a range of attitudinal and behavioural issues related to having no qualifications that are less attractive to employers. Simply having some qualifications may act as a positive signal to employers, eg in the Bos/Freedman/Hamilton group of studies (medium rated) the importance of having a high school diploma as opposed to not in the US labour market is suggested. Bonnal and McIntosh (medium rated) were both studying young people, and their findings suggest the importance of vocational training and qualifications for those who do not already have good academic qualifications.

2.3.5 Soft outcomes

The importance of 'soft outcomes' in terms of, for example, increased confidence and motivation are generally emphasised in the broader literature on training. However, very few studies included in this review reported such outcomes and both reported here were given a low weight of evidence rating. Howieson found that WOW courses were important in increasing women's self-confidence and belief in themselves and their potential. This was not always carried through to positive employment outcomes because of barriers such as family and childcare, however two years after participation on WOW the majority of respondents were still positive about the value of the training. Marshall and Macfarlane reported increased self-confidence and improved employability (eg better behaviour at work, timekeeping and working with others) as a result of being on an ILM programme.

2.3.6 The nature and context of learning

This review was also aiming to explore the context of learning, for example, what types of learning intervention work or do not work. A number of themes can be drawn from the studies included in the review.

The nature of the training provided was quite varied and programmes usually had a mix of provision depending on the needs of different individuals. Michalopoulos *et al.* (highly rated) and Bos, Freedman and Hamilton (medium rated) all conclude that 'employment-focused' programmes have a greater impact on low/unqualified participants compared to 'education-focused' programmes. This is especially in the shorter-term (around two years). After five years the gap closes, although those on 'employment-focused' programmes were still doing better (compared to the control group) than those on the 'education-focused' programmes. Michalopoulos *et al.* report that programmes with a mix of first activities may be more effective in increasing earnings because they use more complex methods to determine who would benefit from job search and who from basic skills. These programmes also emphasised job search for all (whether participants were also receiving some training/education as well, or not). Education-based programmes were generally more narrowly focused on learning activities (usually basic skills or basic education). The different outcomes from these two programme types is likely to, at least in part, reflect different characteristics of those on each programme. Those on education-focused programmes were often more disadvantaged and amongst those 'furthest' from the labour market – it may take a number of years before they progress to employment, compared to those on other programmes.

Anderson *et al.* (medium/low rated) found that those going through the basic education part of work-based learning were less likely to obtain employment afterwards. These participants were however, generally much more disadvantaged than those on the job-related tracks. It is possible that longer term studies are needed to explore the full impact of such programmes.

A few of the interventions studied included not just job-related training, but personal development activities such as driving lessons, photography, computer classes (eg Marshall and Macfarlane, low rated). These all helped to begin a process of lifelong learning and the authors concluded that the development of transferable skills are important in retaining motivation and producing job outcomes. Howieson (low rated) found that assertiveness training and decision-making skills helped the women going through WOW courses.

Other studies included in the review find that interventions with employer-placements and work-based training were generally more successful in leading to employment outcomes. For example, Bonnal *et al.* (medium rated) found that training in the private sector had the strongest impact on low qualified, unemployed young men. Programmes with a high level of on-the-job training were most beneficial to the least qualified. Payne *et al.* (medium rated) reported that those on employer placements had a better chance of obtaining work than those in full-time training or no projects. Anderson *et al.* (medium/low rated) concluded that SJFT was most successful in getting those with no qualifications into work. Marshall and Macfarlane (low rated) attribute some of the success of ILMs to their work-based nature, in that the majority of activity participants are involved in, while on the scheme, is work.

This could be related to the direct work experience which employers find attractive in potential recruits (Bonnal *et al.*, medium rated, also found that previous work experience before a period of unemployment was associated with better employment outcomes). Employer-placements put people directly in contact with employers and this was reported to be important (eg Payne *et al.*, Howieson, medium and low rated respectively). However, as Payne *et al.* point out there can be an element of selective allocation, with those on employer placements having attributes and/or skills that employers find more attractive. It is not just the specific intervention under study which helps them obtain employment subsequently. Those in Anderson *et al.*'s study (medium/low rated) on SJFT tended to be the most 'work ready' of those going through work-based learning.

Marshall and Macfarlane (low rated) and Rademacher *et al.* (medium rated) both suggest that learning needs to be tailored to the local labour market and that the success of the programmes they researched can be at least partly attributed to this. Tailoring training delivery to individual participants was also suggested to be an important factor in the success of various programmes.

Another factor that makes it difficult to isolate the precise impact of learning is that most interventions are multi-faceted. It is rare that learning is provided in isolation. The welfare-to-work programmes evaluated by Michalopoulos *et al.* and Bos, Freedman and Hamilton (high and medium rated respectively) all had mixes of employment and learning focuses. The focus on job search was reported to be important, especially in obtaining positive labour market outcomes in the shorter term. Other authors also concluded that support and advice with job search were

important in helping participants obtain employment (eg Payne *et al.* (medium rated), Anderson *et al.*, (medium/low rated) Howieson, Marshall and Macfarlane (both low rated)). A number of studies also comment on the importance of providing broader support, helping people address financial and personal problems (eg Michalopoulos *et al.*, Rademacher *et al.* (high and medium ratings respectively)).

Other aspects of programmes that were found to be associated with a more positive labour market impact on participants with low/no qualifications were: integrated case workers (ie providing support with income maintenance and employment/education), case workers with fewer cases and able to give more intensive, individual support (eg Michalopoulos *et al.* (highly rated)). Decker *et al.* (medium rated) found that the programme with individualised support for participants had the strongest impact. The individual characteristics of participants also played a role. For example, Bos *et al.* (medium rated) reported that personal barriers and emotional problems negatively impacted on participants' ability to benefit from welfare-to-work programmes.

The studies included in this review were varied in their approach and also looking at very different types of interventions. Although all reporting some data on the impact of a learning intervention on low/unqualified, out-of-work adults, the extent to which they do this varies. Furthermore, some provide more background information than others. These studies do not provide a very conclusive picture, but do generally suggest that going through a learning intervention is better (in terms of an employment outcome) than not doing so. However, learning alone is unlikely to be sufficient (eg broader support, work experience, job search skills are also important). The learning and support needs of different individuals do vary. Some will need a longer period of learning and support.

2.4 Detailed findings from the studies

This section reports the detailed findings from each of the studies, using the same categories as the earlier synthesis. In each section those which rated highest in terms of their weight of evidence are reported first.

2.4.1 Impact on employment

Eight studies (nine papers) reported the impact of learning on employment for out-of-work adults with low/no qualifications. Five of these studies were given a medium weight of evidence rating (Bonnal *et al.*, 1997; McIntosh, 2004; Payne *et al.*, 1999; Rademacher *et al.*, 2001; and two papers relating to the same study: Freedman, 2000 and Hamilton *et al.*, 2001), one a medium/low rating (Anderson, *et al.*, 2004) and two a low rating (Howieson, 1996; Marshall and Macfarlane, 2000).

Medium rated studies

The findings from Bonnal *et al.* (1997) are now dated in that they look at work and training programmes in France in the late 1980s. However, some of their findings are pertinent to this review. Through modelling individual labour market transitions from non-experimental longitudinal data, they found that the impact of programmes on subsequent labour market performance did depend on prior education levels. For the least educated group (young men without a diploma and only nine years of schooling) attendance on an apprenticeship course, qualification or adaptation contract increased the likelihood of moving from unemployment to a regular job. Such training had no impact on the transition for young men with the highest levels of qualification. Experience of a community job in the public sector had no effect on the movement out of employment for the least qualified and decreased movement for young men with higher level qualifications.

The main conclusions Bonnal *et al.* draw from their findings are: training in the private sector had the most favourable impact on unemployment regardless of qualification levels; programmes with a high level of on-the-job training were particularly beneficial to the least qualified. These conclusions perhaps relate to the directly relevant work experience that young people obtain, and their contact with employers. The negative impact of public-sector programmes may be owing to some sort of signalling effect suggesting lower employment performance. The analysis showed that previous work experience before a period of unemployment also increased subsequent employment chances. The authors comment that this is compatible with a segmented labour market in which past employment histories provide information on applicants to future employers and that this signalling process confines workers with different productive abilities to different types of job.

Freedman (2000) and Freedman *et al.* (2000) report the impact of one welfare to work programme on participants lacking a high school diploma or basic skills. They show a strong, statistically significant impact on the chance of this group having some employment during a two-year follow-up period following participation in the programme. While 39 per cent of the control group had been employed at some point during the two-year period, 56 per cent of those participating in welfare to work had been employed. The difference between the control and programme group was significant at the one per cent level. However, amongst those who did find employment, the average number of quarters employed was very similar for both groups. On average, the control group had been employed for 4.01 quarters and the programme group for 4.07 quarters. This can be interpreted to suggest that the programme helped low qualified adults obtain work, but not necessarily to obtain work that was more stable compared to those not going through the programme.

Hamilton *et al.* (2001) report the likelihood of the same group of participants being in employment over a five-year follow-up period. Looking at the welfare to work programme for which data are provided on those lacking a high school diploma or basic skills, 61 per cent of the control group and 71 per cent of those going through

the programme had been employed at some point. This difference was statistically significant at the one per cent level. The improved employment chances of programme participants was therefore maintained over a longer period than that reported by Freedman *et al.* (2000). However, a difference begins to emerge between the two groups in the average number of quarters employed. Over a five year period, members of the control group had been employed for an average of 4.7 quarters and the programme group for 6.0 quarters (again this difference was statistically significant at the one per cent level). It appears that participating in a welfare to work programme can improve the employment chances of those with low qualifications, both in terms of finding any work and staying in work (or moving between a range of jobs). Both Freedman *et al.* and Hamilton *et al.* show a stronger impact of the programme on those with higher (compared to low) qualifications.

The programme for which Freedman/Freedman *et al.* and Hamilton *et al.* report data separately for those with low qualifications was 'employment-focused'. In spite of including training elements, the main focus was on job search and finding employment. Using data from the study (although not completely related to those with low qualifications), they conclude that employment-focused programmes are generally more successful than learning-focused programmes in improving employment chances. However, the learning-focused programmes were often providing basic skills and other basic education, participants therefore had someway to catch up with those on other programmes not needing such support. Hamilton *et al.* do seem to show that there is some catching up of those going through a learning-focused programme over the longer time period being studied.

McIntosh (2004) shows that amongst men leaving school with no qualifications, the achievement of vocational qualifications by the age of 23/25 raised employment rates. The employment rates for those who left school with no qualifications and remained unqualified was (by age 23/25) 68 per cent, compared to 89 per cent amongst those who gained level 2 qualifications. Unqualified male school leavers who reached vocational level 3 had an employment rate of 94 per cent – the same as those who left school with academic qualifications at this level. Amongst men who left school with 'low grade lower secondary qualifications' (GCSE grades D to F), the employment rate amongst those who had obtained level 2 qualifications by the age of 23/25 was 91 per cent. In comparison, the employment rate of those who left school with low qualifications, and had obtained no further ones, was 81 per cent.

For women, the acquisition of vocational qualifications also had a substantial impact on employment rates. Amongst those who left school with no qualifications and had obtained level 2 vocational qualifications by the age of 23/25, the employment rate was 70 per cent. The employment rate amongst those who had reached level 3 was 77 per cent. Only around one-third (31 per cent) of those who remained unqualified were employed. Those leaving school with 'low grade lower secondary qualifications' and remaining unqualified had an employment rate of 56 per cent, compared to 66 per cent and 87 per cent of those who reached levels 2 and 3 respectively.

However, the study found no employment benefit of vocational qualifications for those who did well at school. And this applied to both men and women.

The above data are presented for all in the sample, regardless of their employment status while obtaining the qualifications. They could, therefore, be argued to be offering little relevant data in relation to the review question. However, they do present an overall picture and the analysis goes on to explore the impact of obtaining qualifications depending on the labour market status of sample members at the time.

McIntosh explores these data in a multivariate context. He used probit equations to estimate, for those not in work at time $t-1$, the impact of acquisition (between time $t-1$ and time t) of post-school vocational qualifications at the various levels, on the probability of being in employment at time t . (Those studying at time t are excluded from the analysis.) Controls for gender, age, ethnicity, region of residence and year of observation are included.

This analysis shows that those who left school with no or low qualifications and obtained a vocational qualification while out of work, improved their chances of finding employment. Looking first at those with no qualifications and who were out of work in the first period, they were six percentage points more likely to be in employment in the later period if they acquired a level 1 vocational qualification between the two periods. Those who acquired level 2 were 18 percentage points and those who acquired level 3 were 11 percentage points more likely to be in employment. The same pattern held for those who left school with low qualifications (ie 'low grade lower secondary qualifications'): obtaining level 1 or 2 both improved the likelihood of being in employment by seven percentage points and obtaining level 3 by 14 percentage points. This study does not tell us anything about the nature of the training received, except the level and that it was vocational.

Payne *et al.* (1999) found that unemployed people increased their chances of finding employment through TfW. A discrete-time logistic duration model was applied to the data to explore the time from the start of the qualifying spell of unemployment to the start of any paid work. The overall finding was that TfW participants obtained work more quickly than members of the matched comparison sample. From this modelling, prior qualifications were not found to be a factor in the chances of obtaining any work for those going through TfW – ie having previous academic school or vocational qualifications was not a significant predictor of subsequent employment. The authors suggest that this might be explained by the fact that the kinds of jobs that long-term unemployed people are most likely to secure do not generally demand good qualifications.

A logistic regression model exploring the time spent in work showed that having GCSE or 'O' level grades A to C or higher was significantly related to the total proportion of time spent in work over the 17 month follow-up period. The authors conclude that this suggests that people who got jobs tended to keep these jobs for longer if they already had such qualifications. Those with no GCSE or 'O' level passes

at A to C do not fully equate with the group on which this review particularly focuses. However, this study does suggest that the low/unqualified group of interest to this review were helped to obtain work through TfW but not necessarily stable or steady work.

TfW participants on employer placements had a better chance of obtaining work than those in full-time training or on projects, and compared to the comparison group. This is linked to the likelihood of participants being kept on by an employer, and supports findings of other studies that employer links are important in improving employment chances. However, there was an element of selective allocation to TfW in that employer placements were more likely to be allocated to individuals who were most attractive to employers. Full-time, off-the-job training did lead to improved job prospects relative to non-participants in the short and long term, but the gains were modest compared to those associated with employer placements. An overall conclusion drawn from these data is that training alone does not seem sufficient to improve the employment chances of unemployed people, whether lowly qualified or not.

The Quest programme (Rademacher *et al.*, 2004) had high rates of placements in jobs – for those who completed their training (94 per cent in 1997; 90 per cent in 1998; 72 per cent in 1999 (although the latter was for a ten-month period, compared to a whole year for the others)). In 1998 and 1999, all were still in their jobs 90 days later (data are not available for 1997). There was no control group against which employment rates amongst those not participating in the programme can be compared.

Rademacher *et al.* (2001) list a number of factors that contributed to the success of the Quest project in terms of employment outcomes:

- the programme must tie in strongly with occupational demands of local employers;
- the programme must be selective and target training only for those careers that offer good pay and opportunities for progression;
- intensive client services are required to help overcome financial and personal barriers to skill acquisition;
- the programme must leverage training resources already in the community.

An important aspect of the training provided through the Quest project was the additional support given to students to see them through the training:

'...the staff's self-defined mission is to do whatever possible in the way of intervention and support to help participants stay in school and complete training. Whether the issue relates to school, family, health, housing, transportation, work, domestic violence or any other stumbling block, the client services staff find ways to leverage resources and obtain the needed services and support for participants.'

Financial support was also available to cover tuition, books and necessary supplies, travel to and from the learning provider, certification costs where relevant. Childcare was available. It was also recognised that assistance with everyday living costs might be needed. Counselling and personal support was available to those needing it. This was a well funded programme.

Medium/low rated studies

Looking at the likelihood of working after participating in WBLA, Anderson *et al.* (2004) found that those on SJFT and LOT were more likely to have entered paid employment (59 and 53 per cent respectively) compared to those on BET (33 per cent). Those with some, as opposed to no, prior qualifications were slightly more likely to have entered employment for each type of training provision, and the difference was greatest on LOT:

- 57 per cent of those with no prior qualifications had entered employment after SJFT, compared with 59 per cent of those with some qualifications;
- 46 per cent of those with no qualifications had entered employment after LOT, compared with 55 per cent of those with some qualifications;
- 31 per cent of those with no qualifications had entered employment after BET, compared with 36 per cent of those with some qualifications.

Although data were collected from a group of non-participants in WBLA during the study, these were not used in the report to provide comparisons between participants and non-participants depending on their prior qualifications.

The findings reported in the previous paragraph do suggest some differences in the impact of the three different programmes on those with no qualifications, in particular SJFT seems to be the most successful for this group. However, there were differences between the three groups of participants. Those on BET were more disadvantaged compared with those on SJFT and LOT. A greater proportion of BET participants had poor basic skills, poor IT skills, no qualifications, no recent job experience; they also fared badly in their access to basic goods and services and were concentrated in London. Those on SJFT and LOT were similar, although the former were more likely to have worked in the 12 months before participation.

There was little information on the nature of the training participated in, except that it was short and job focused, longer term or addressing basic skills. Although these data are not related to prior qualifications, many respondents could not remember the nature of their training. However, the training and wider support provided was varied, and the training provided on each of the three types of provision was not happening in isolation from other activities. For example, help with job search and having a placement/training with an employer were generally found to contribute to success in finding employment. In particular, the importance of gaining work experience with an employer was emphasised as a route into employment.

Anderson *et al.* (2004) report on the usefulness of the training and whether it helped participants to get a job for those who remembered participating in training. There was virtually no difference amongst those with no qualifications and those with some qualifications in their responses (Table 2.4).

Table 2.4 Usefulness of training and whether helped participant to get a job (column percentages)

	SJFT		LOT		BET	
	Useful	Helped get a job	Useful	Helped get a job	Useful	Helped get a job
No qualifications	76	25	72	32	70	12
One or more qualifications	77	37	75	32	74	14
All	76	34	75	32	71	13

Source: Derived from Table 3.17, page 24 Anderson *et al.* (2004).

Low rated studies

Howieson's study (1996) had no control group, so it is not possible to say what would have happened if the sample had not taken part in WOW. However, Howieson reports economic status one and two years after completing a WOW course. Looking at the whole sample, regardless of prior qualifications, a year later 30 per cent were in paid employment (mainly part-time). A similar proportion were in education or training, a fifth were looking after family/home, a tenth unemployed and just under a tenth were unable to work because of illness or disability. Age did not seem to be related to economic status. The existence of children did not seem to be related to economic status, but was related to whether a woman not in work defined herself as unemployed or looking after family. However, the availability of suitable childcare was a major barrier to entering work. Whether or not a WOW participant was in paid employment was related to prior qualifications (although no percentages are given in the report) – a year later those with no prior qualifications were less likely to be in work following WOW than those with some qualifications. There was little difference by prior qualifications in participation in education or training after WOW. However, those with no prior qualifications had a higher chance of being at home with their family or being unemployed.

Howieson found that assertiveness training and decision-making skills were reported to be useful aspects of the training received. She also emphasises the importance of work experience for participants on WOW courses, including putting them in touch with potential employers. Help and information in finding work and job-seeking skills were similarly important.

Marshall and Macfarlane (2000) report that established ILM programmes have over 60 per cent of participants entering employment, which is higher than the proportion of most disadvantaged achieving jobs through TfW. They suggest that a typical ILM project will achieve 50 per cent higher job outcomes for the long-term

unemployed than other programmes. Comparisons were made with various evaluations of TfW – the main programme for the integration of the long-term unemployed – Glasgow Works, the New Deal. These were, however, all general comparisons and not specifically related to the prior qualifications of participants or whether the groups were broadly comparable or not.

The average proportion entering employment for all the programmes surveyed in the study for 1998/99 was 49 per cent. This was expected to rise to 53 per cent for 1999/2000. The durability of employment was reported to be higher at three, six and 12 months than for other programmes. However, it was concluded that this was not just attributable to the training but rather to the particular work-based nature of the programme. Marshall and Macfarlane conclude that the bulk of activity in an ILM has to be work and that a normal work pattern has to be established. Their survey found that work accounted for 60 per cent of contact hours in 78 per cent of the programmes. Although ILMs are not specifically training courses, they achieve twice the rate of vocational qualifications compared to comparable programmes (no figures are given). This is attributed to their intensity and duration.

Marshall and Macfarlane identify a number of factors that they contribute to the success in obtaining employment following involvement in an ILM. These include:

- offering work, wages and support for those who have been unsuccessful in the labour market – they are about rebuilding participants' belief that they can hold down a job and giving them enough proper work experience to impress an employer;
- flexibility to match the needs and interests of those the programme aims to help – eg for lone mothers, interesting work with flexible hours, limited travel time and good childcare; for unskilled men – attracting them by offering manual or sports activity work; later offering them other opportunities such as computing;
- related to the above, some groups may need more support with personal problems, attitudes to work, etc. for a programme to be successful;
- the type of work activity determines who will be recruited – it is important to design the work and its location to be attractive to the target group;
- providing job search activities is very important to success of a project – and this should be started as early as possible.

Training courses were found to be one of the most popular aspects of the package on offer and people valued being able to obtain a qualification. Some programmes included 'personal development' activities, eg driving lessons, photography, computer classes, outward bound courses. These all aimed to increase the motivation of participants, lead to a sense of achievement and to begin the process of lifelong learning. The authors conclude that the lesson is that flexibility in training and the development of transferable skills are most likely to retain motivation and produce job outcomes.

2.4.2 Impact on earnings

Five studies (seven papers) reported the impact of learning on earnings for out-of-work adults with low/no qualifications. Four of these did not address employment outcomes, or at least not for the low/unqualified group of particular interest to this review. However, by implication, if out-of-work individuals experience a growth in earnings as a result of learning, they must be in employment.

Two of these five studies were given a high/medium weight of evidence rating (Ore *et al.*, 1996; Michalopoulos *et al.*, 2000), two a medium rating (Decker *et al.*, 2000; and three papers relating to the same study: Bos *et al.*, 2002; Freedman *et al.*, 2000; Hamilton *et al.*, 2001) and a low rating (Marshall and Macfarlane, 2000).

High/medium rated studies

Michalopoulos *et al.* (2000) found that earnings increased and welfare payments decreased significantly (compared to the control group) for high school graduates and non-graduates (ie broadly those above and below level 2 on leaving compulsory education) following participation in welfare to work. However, there was a significant difference between earnings growth for graduates and non-graduates with those of graduates growing more quickly.

These changes in earnings were looked at across 20 welfare to work programmes according to qualification levels. It was found that for ten programmes the increase in earnings was statistically significant for high school graduates, and for 12 it was statistically significant for non-graduates (compared to the control groups). Differences between graduates and non-graduates were statistically significant in only six programmes – in four of these, graduates had higher earnings than non-graduates; for two programmes the impact was greater for non-graduates than graduates. Michalopoulos *et al.* found that programmes with a mix of first activities did better than education-focused programmes for non-graduates, although both emphasised basic education for this group. They conclude that programmes with a mix of first activities may be more effective in increasing earnings because they use more complex methods to determine who would benefit from job search and who from basic skills (compared to those focusing on education). Two programmes using a mix of first activities but both sending messages that participants were expected to look for a job, led to the greatest increase in earnings for graduates and non-graduates. Two welfare to work programmes were particularly effective in increasing earnings (and hence employment) for the lower qualified (broadly below level 2). One had integrated case workers dealing with both education/training and income maintenance and the other ensured that case workers had fewer cases, therefore able to provide more intense support to individuals.

Michalopoulos *et al.* go on to look at the earnings impact of participation in welfare to work for those with different combinations of disadvantages. A finding of relevance to this study was that the groups with the largest earnings impact had two things in common: being graduates (ie higher qualified) and having no recent work

experience. Common factors amongst those with the lowest earnings impact were being non-graduates and having no recent work experience. This suggests that, at least in the USA, having school-level qualifications might be key to earnings impact. The authors suggest that this could be owing to characteristics of graduates compared to non-graduates (eg motivation, intelligence, etc.) making the former more attractive to employers. They suggest three possible explanations for the relative low earnings impact of participating in welfare to work on non-graduates: other non-observed barriers prevent them benefiting so much; high school qualifications are required for jobs; some self-sufficiency approaches of programmes are not appropriate for non-graduates. Other interpretations could include the signalling school-level qualifications provide to employers or that it takes longer for the earnings effects of programmes to work through for those with lower qualifications.

Ore *et al.* (1996) concluded that the programme worked well for adults (ie aged over 22), although participants were volunteers and the findings should not necessarily be taken as evidence that such a programme would have the same effect if mandatory. Some findings are reported by prior qualifications. For women overall, participation in the programme had a statistically significant impact on earnings (at the .01 level). Participation in the programme did not have a statistically significant impact on the earnings of those without a high school diploma or General Educational Development (GED) (compared to the control group). Participation did have a statistically significant impact on the earnings of those with these qualifications (again compared to the control group). The authors go on to use the F-test to test whether the estimated impacts for these two qualification groups were significantly different from each other or not. They find that the F-test was not significant – meaning that they cannot be confident that those with no qualifications benefited less (in terms of earnings) from the programme than those with qualifications (ie findings on the impact of the programme on low qualified participants were inconclusive).

For adult men overall, Ore *et al.* found that participation in the programme had a slightly significant (at .10 level) on earnings. However, when the sample was divided according to prior qualifications, no significant impact on earnings emerged (compared to the control group) for those with or without a high school diploma or GED. For young people (16 to 21 years) there was no clear evidence that the programme improved earnings, and this was also the case for those with low qualifications.

Medium rated studies

Bos *et al.* (2002) show that welfare to work programmes were generally successful in increasing earnings and reducing welfare dependency for those without high school credentials (ie those who were unqualified). Eleven programmes were looked at and the programme effects were nearly all highly statistically significant. Bos *et al.* conclude that some variations reflect differences in other characteristics of the

welfare recipients served by these programmes, some are accounted for by differences in welfare grants and economic circumstances, and some reflect differences in programme approaches. After controlling for individual characteristics and the programme environment they 'cautiously' conclude that:

- education-focused programmes achieve smaller impacts on earnings during the early years of participation;
- programmes with high levels of enforcement had stronger effects in reducing welfare dependency;
- programmes with integrated case management have stronger impacts than those with a more traditional separation of income maintenance and welfare-to-work tasks.

They also found some evidence that higher grants lead to larger programme effects and that higher unemployment reduces these effects. In relation to individual characteristics, there was evidence that lower initial reading skills limit, or at least delay, programme effects on earnings. Personal barriers and emotional problems negatively affect participants' ability to benefit from welfare-to-work programmes.

Freedman *et al.* (2000) show that, amongst those without a high school diploma, average total earnings in the second year of follow-up were significantly higher (at the five per cent level) amongst participants compared to the control group (for the programme for which data on qualifications are reported separately). Average earnings for the programme group were \$2,258 compared to \$1,883 for the year.

Hamilton *et al.* (2001) report the five year impacts on earnings of participation in a welfare to work programme. Average total earnings in years one to three were significantly (at the one per cent level) higher amongst participants compared to the control group: \$6,678 and \$5,286 respectively. Earnings in the last quarter of year 5 were also significantly higher (but at the five per cent level): \$986 and \$829 respectively. These findings further support those of Bos *et al.*, that education-focused programmes seem to have smaller impacts on earnings in earlier years compared to employment-focused programmes. There is some catching up between the two types of programme after five years, although those on education-focused programmes are still slightly behind.

Decker *et al.* (2000) found that the job search interventions they were evaluating had uneven impacts on employment and earnings. They found little statistical evidence that the impacts of the programme differed for different types of claimants, and this also related to prior qualifications. The programme had three options: SJSA, IJSA and IJSA+. Data are reported for two areas. Looking first at the district of Columbia, overall all three options increased the earnings of participants compared to the control groups in the initial year following participation in the programme, by \$614 for SJSA, \$137 for IJSA and \$197 for IJSA+. However, the difference was only statistically significant for SJSA (at 95 per cent level). The earnings impact did differ from these for those with no high school diploma.

Amongst this group, earnings were \$124 higher amongst SJSA compared to the control group, \$318 higher for IJSA and \$100 lower for IJSA+. None of these differences were, however, statistically significant. In Florida, earnings for those with no high school diploma increased greatest compared to the control group for IJSA (\$429). The increase was \$22 and \$120 respectively for SJSA and IJSA+. Again, none of these differences were statistically significant. These findings do suggest that IJSA is more successful for those with low qualifications, and (although the findings are not reported by prior qualifications) IJSA was found to have a strong impact on the job search activities of applicants. The impact of the training element seems to be less. However, the authors did find that those on IJSA were as likely to be participating in some form of training as those on IJSA+. There is perhaps something different about these training activities that leads to the greater impact of IJSA compared to IJSA+.

Low rated studies

Marshall and Macfarlane (2000) concluded that the longer-term earnings of an ILM participant were often higher than other programmes with the same target group. As with employment outcomes, comparisons were made with various evaluations of TFW – the main programme for the integration of the long-term unemployed – Glasgow Works, the New Deal. These were however, all general comparisons and the extent to which the samples being studied were broadly comparable is not clear.

2.4.3 Impact on human capital

Seven studies reported the impact of learning on the qualifications or other measures of human capital of participants. One of these had a high/medium rating (Ore *et al.*, 1996), two a medium rating (Bos *et al.*, 2002; Payne, 1999), one a medium/low rating (Anderson *et al.*, 2004) and three a low rating (Howieson, 1996; Marshall and Macfarlane, 2000; Tao *et al.*, 1998).

High/medium rated studies

Orr *et al.* (1999) found that participation in JTPA had a statistically significant impact on the chances of unqualified women obtaining a high school diploma. Thirty-two per cent of the treatment group (ie those on JTPA) had achieved this level of qualification by the end of the 30 month period compared to 20 per cent of the control group. For men, the results were not statistically significant; however, the findings did suggest some impact on the attainment of high school credentials: 24 per cent of the treatment compared to 16 per cent of the control group gained a diploma. The analysis does not follow this through further to explore impact on employability.

Medium rated studies

Bos *et al.* (2002) – looking at just those without such qualifications – found that four per cent of the control group and 11 per cent of the programme group achieved a high school diploma during the two years following being assigned to one or other

of these groups. They report this as a 'modest increase of seven percentage points'. Nevertheless, this difference was statistically significant at the one per cent level. They also found that the programmes did not increase scores on standardised reading and maths tests. The conclusion drawn was that the programmes under study improved educational attainment but had no effect on educational achievement. A number of reasons are suggested for the lack of impact on test scores. Not all adult education is designed to increase reading and math achievement. Standardised tests may not measure the skills that were learned. The tests were administered as part of a survey, rather than in a classroom setting, which may limit their reliability.

Bos *et al.* found that those who already had higher reading and maths scores were more likely to obtain a high school diploma or GED as a result of participation: 'the welfare-to-work programs helped many individuals with higher skills levels get education credentials'. The programmes substantially increased participation and receipt of education credentials for those who said they did not like school and/or did not plan to go to school. Those with family or personal problems (eg health or emotional problems) were less likely to obtain the qualifications or show an increase in test scores.

Of particular relevance to this review are the findings on TfW and qualifications achieved (Payne *et al.*, 1999). Those who gained level 2 vocational qualifications or higher took longer to find a job than those who gained level 1 or none. This was not because they deferred their job search – they were more likely to start looking for work while still on the programme. After completing their qualifications and leaving TfW, the negative association between qualifications and job chances was largely cancelled out. However, only the very small number of participants who gained level 4 or higher qualifications, exhibited overall job chances better than those who had gained only low-level or no qualifications. Obtaining qualifications was more common in full-time off-the-job training, but the negative association between gaining qualifications and job chances remained strong when placement type was controlled.

The authors speculate that when faced with a choice between accepting a job offer and completing their qualifications, most participants opted for a job:

'It would follow from this that people who went on to complete qualifications on TfW included a disproportionately high number of people who had sought work while on the programme but who, because of characteristics or behaviour not measured in our study, had not received a job offer. This in turn would lead us to predict that these same characteristics or behaviour would cause them to continue to receive fewer than average job offers after leaving TfW, so that they failed to receive the benefits from their qualifications that might be expected.'

Medium/low rated studies

Anderson *et al.* (2004) consider the impact of the three types of WBLA training provision on the human capital of participants. Those on SJFT and LOT had few basic skill requirements, and this provision had little impact on the basic skills of participants. In contrast, one-third of BET participants reported improvements in basic skills. There was little difference in the existing qualification levels of participants – 35 per cent of those with no qualifications, and 33 per cent of those with some qualifications, reported improved basic skills.

Improvements in IT skills were also considered; however, these did not appear to take into account the nature of a training course that participants attended. There was little difference between those with no or some qualifications:

- on SJFT, 19 per cent of those with no qualifications and 17 per cent of those with some qualifications reported improved IT skills;
- on LOT, 26 per cent of those with no qualifications and 20 per cent of those with some qualifications had improved their IT skills;
- on BET, 15 per cent of those with no qualifications and 18 per cent of those with some qualifications reported improved IT skills.

All types of training increased the proportion of those with qualifications, especially those with no qualifications:

- on SJFT, 16 per cent of those with no qualifications and 16 per cent of those with some qualifications gained a qualification;
- on LOT, 29 per cent of those with no qualifications and 22 per cent of those with some qualifications gained a qualification;
- on BET, 12 per cent of those with no qualifications and six per cent of those with some qualifications gained a qualification.

Anderson *et al.* (2004) bring these data together to identify whether participation in one of the three WBLA training interventions had any impact on human capital (measured by skill improvements due to formal training and/or obtaining qualifications). For SJFT and LOT, those with no previous qualifications were more likely to have acquired human capital. On SJFT, 39 per cent of those with no qualifications and 28 per cent with some qualifications had acquired human capital; 45 and 35 per cent respectively on LOT. There was no difference between those with different prior qualifications on BET (46 and 47 per cent respectively had acquired human capital). This was, however, greater than on the other two programmes, probably owing to the proportion reporting improved basic skills. The authors point out that care should be taken in interpreting these findings – not all improvements in human capital result in increased employability, but this analysis is not taken any further.

Low rated studies

Howieson (1996) found that WOW courses were important in encouraging low qualified women to progress to other courses. WOW had helped them to overcome their often negative experience of education and their lack of confidence about entering formal education.

Marshall and Macfarlane (2000) conclude that the bulk of activity in an ILM has to be work and a normal work pattern has to be established. Their survey found that work accounted for 60 per cent of contact hours in 78 per cent of programmes. ILMs are not training courses but some participants want to progress and enter training. However, ILMs achieve twice the rate of vocational qualifications than comparable programmes (see under employment for details of these) because of their intensity and duration.

Tao *et al.* (1998) used two different measures to assess whether participants improved their basic skills. Test of Adult Basic Education (TABE) was most appropriate for projects offering GED preparation or a more academic focus. The Comprehensive Adult Student Assessment System (CASAS) was most appropriate for projects emphasising functional literacy. The study shows improvements in scores for those at all levels of starting qualifications. Overall, the beginning scores of an individual were important predictors of their post-intervention score. The authors go on to compare improvements in basic skills with those amongst a group not participating in Even Start. The overall conclusion reached was that improvements amongst participants cannot necessarily be attributed to Even Start as those not on the programme were also taking adult education programmes and showing improved levels of skill.

Tao *et al.* found that 16 per cent of adults (who did not already have the qualification) in a sample study of those participating in Even Start gained the GED in 1996/97. The likelihood of obtaining a GED increased the longer an individual remained in the programme. Achievement of GED appeared to be higher than in a broadly comparable control group. Comparisons to a control group show that adults on Even Start were more likely to achieve GED than those not. The authors go on to discuss these findings, quoting research that shows that attainment of a GED is better than not having a GED but is not as beneficial as having a high school diploma. GED attainment is not necessarily seen as credible as a traditional high school diploma by prospective employers.

Tao *et al.* (1999) found that, as well as pre-intervention levels of ability, the number of adult educators was associated with better improvements in reading. The hours of adult education and proportion of adult education instructors with at least a BA degree were associated with improvements in maths scores. These data are not reported separately for those with different levels of qualification. Even Start provided a range of support to participants, including childcare and assistance with a range of problems. Learning provision was tailored to the needs of people in the local area, to supplement existing provision.

2.4.4 Soft outcomes

This section is based on two low rated studies.

WOW courses (Howieson, 1996) were important in increasing women's self-confidence and belief in themselves and their potential. Assertiveness training, decision-making and work experience were reported to be particularly useful. While these data are not reported by level of qualification, the majority of women on these courses were low qualified – this type of training intervention was clearly providing important motivational support. However, not all were in a position to look for employment immediately following their course, because of, for example, family and childcare barriers. Two years after their course, the majority of participants were still very positive about the value of their training. Again, these data are not explicitly analysed by prior qualifications; however, the majority of these women were low qualified.

Soft outcomes were reported as important for ILMs by Marshall and Macfarlane (2000). The main soft outcome was increased confidence, eg to go to interviews, to travel and in assertiveness without aggression. They also report that employability measures such as behaviour at work, timekeeping, flexibility and working with others improve.

2.5 Implications

This section looks at some implications for policy, practice and research.

2.5.1 Policy

The broader literature generally indicates a positive association between qualification attainment and employment outcomes (see Section 1.3). People with higher qualifications tend to be more likely to be employed than those with no qualifications. However, the literature included in this review is less clear about the relationship between a learning intervention (such as a period of vocational training) on its own and employment outcomes.

McIntosh (2004) shows that if low/unqualified school leavers obtain a vocational qualification their chances of getting a job were significantly improved and the higher the qualification the better their employment rate. However Payne *et al.* (1999) suggest that taking an employer placement had a more significant employment impact than undergoing a period of training. Other studies (eg Marshall and Macfarlane, 2000; Radmacher *et al.*, 2001) also attribute the many employment outcome successes of other labour market programmes to the combination of (vocationally-related) training and other forms of support.

The other forms of support that were found to help people back into employment, or to move closer to employment, included: periods of work experience, contact with employers, assistance with job search; also general support and advice. A few

programmes provided financial support, but this seemed to have a less significant effect. There was also some evidence that tailored, individualised support is the most effective.

Some of the studies also suggest that the type of training provided is important and that it is more likely to result in successful employment outcomes if it is not just vocationally orientated *per se* but related to the needs of the local labour market. For those people furthest from the labour market, in terms of having no school-based qualifications it is likely that some form of more basic education is important. Evaluations of welfare-to-work in the United States report some data on the achievement of school leaving level qualifications. It is reported that the GED and high school diploma seem to be important to employers and, therefore, programmes focus on the achievement of these for those without them. However, these studies do not then go on to explore whether achievement of these qualifications has a positive employment outcome – although those already holding such qualifications were more likely to experience employment outcomes. The hiring practices of employers need to be taken into account, and this may vary between countries – perhaps making experience on US programmes of less relevance to Britain.

Some of the more qualitative studies examined also highlighted the importance of additional barriers to work that people can face and which may mitigate the positive impacts of and/or limit the chances of undertaking qualification-based training, eg childcare, domestic responsibilities. Furthermore, prevailing economic conditions can influence how well a programme works at different times. Not surprisingly, evaluations of welfare-to-work in the United States found that the programme was most successful in terms of employment outcomes when the local economy was buoyant.

Finally, the employment impact of training also appears to depend on a number of factors that relate to the particular individual, their prior educational attainment and attitudes towards employment. For example, poor prior educational attainment may reflect attitudes that do not make an individual particularly attractive to employers. This emphasises the importance of broader support structures if training interventions are to lead to positive employment outcomes.

The overall policy conclusion would appear to be that, while training can be an important ingredient in any labour market programme designed to help low qualified people find work, it is unlikely to be as successful on its own. It needs to be offered in combination with other measures such as support with finding jobs or job placements, perhaps more general career support and advice and, for women in particular, affordable and accessible childcare. Furthermore, the training does perhaps need to be more tailored to local labour market needs.

2.5.2 Practice

The main practical messages to emerge from the literature are the importance of looking at individual circumstances and tailoring support, where possible, to those circumstances. This implies that policies need to be able to be flexibly delivered on the ground and that the deliverers need some elements of discretion to adapt the available support to particular needs and circumstances.

Training interventions need to be accompanied by a range of broader support measures, including help in accessing the labour market.

2.5.3 Research

This study has a number of implications for further research. A general point is that there is a need to further understand the interaction between being low/unqualified and having poor basic skills. Studies rarely seem to report this. Various studies show that having poor basic skills is a disadvantage in the labour market, and that those with better qualifications do better in the labour market. While having poor basic skills is associated with being low/unqualified, there is not a complete overlap. Some training/learning interventions are aimed at improving basic skills, some at vocational qualifications, others allow a progression (usually from basic skills improvement to vocational qualifications).

Secondary analysis

A number of studies were excluded from this review because they did not look at the interaction between a training/learning intervention and being both unemployed and low/unqualified. Furthermore, amongst those included, a number only report some findings on this interaction. It seems clear that, where data are available, secondary analysis could provide some useful insight on the review question. For example, the National Adult Learning (NALS) and Pathways to Learning (PALS) Surveys both contain data on employment status, prior qualifications and recent learning and these data could be further analysed.

In addition there may be scope for further analysis of data from some evaluation studies included in this review. Such evaluations were conducted for particular purposes, for example, to evaluate the impact of an intervention on the group it aims to support. People with low/no qualifications were often included in this group – but the analysis did not always use this as one of the variables or, if it did, this analysis was not reported. It is perhaps the case that no significant findings were uncovered in relation to prior qualifications but it is rarely possible to tell as this is also not reported. There is therefore scope to examine these data further.

Primary research

A key element of this review has been to examine the research on low/unqualified, out-of-work individuals and their labour market experiences. We have been hampered by the fact that qualification level is not necessarily a variable that has

been considered in detail in many studies. If, however, support differentiated by prior qualification level is to be a main focus of government policy, then broader understanding (as well as reviews such as this) will be greatly assisted if more policy and other research ensure that data on individuals by prior qualification level are collected, included in the analysis and reported (whether or not the findings are significant).

The most interesting and conclusive studies in the review were those that: (a) involved some form of longitudinal research and (b) had some form of comparator or counterfactual and therefore were able to track the relative effects of an intervention over time. The longer the time period under study, the more likely that the effects can be monitored. One of the features of evaluation studies is that they tend to last little longer than the intervention itself. More longitudinal research – over an even longer time period, that tracks the effects of interventions on the least qualified (and possibly those with poor basic skills as well) would improve the breadth and depth of the evidence base.

A number of studies looked at the impact of a learning intervention without fully considering the interactions between different characteristics, of the individuals, the intervention, etc.

The evidence shows that employment impacts for low/unqualified individuals are less than for those with higher qualifications, and that for some individuals (whatever their qualification levels) there is no real impact. There needs to be more understanding of those groups that do not benefit from an intervention. While various barriers to work (eg lack of childcare, ill-health) are discussed in some studies, there are likely to be other underlying factors. Following a training intervention, what is it about some people that means they do not move into employment, etc.? – there is a need to unpack this further, to understand why, and for which individuals, particular interventions do not work, and that for some individuals (whatever their qualification levels) there is no real impact. There needs to be more understanding of those groups that do not benefit from an intervention. While various barriers to work (e.g. lack of childcare, ill-health) are discussed in some studies, there are likely to be other underlying factors.

3 Methods used in the review

This chapter explores the methodological approach taken in the course of the review. It outlines the nature of user involvement and the strategies adopted to search for and identify relevant studies.

3.1 User involvement

The findings from this study could potentially be useful to a range of communities. They could be used:

- in the development of programmes aimed at helping those out of work re-enter employment;
- by those who inform and provide data to policy makers;
- by those developing learning provision; supporting/advising learners; supporting/advising those out of work or otherwise looking for a job;
- by learners themselves.

Four types of users were defined for this study, all of which were represented on the formal steering group convened by the Department for Work and Pensions (DWP):

- DWP and Department for Education and Skills (DfES) researchers and economists who may use this study to inform future research;
- DWP, DfES and other government departments who may use this study in policy development;
- Jobcentre Plus and the Learning and Skills Council (LSC) who may operationalise the findings;
- the learning community (represented by National Institute of Adult Continuing Education (NIACE)).

3.2 Identifying and describing studies

3.2.1 Defining relevant studies: inclusion and exclusion criteria

A set of inclusion and exclusion criteria were developed based on the review question and the definitions discussed in Chapter 1. The initial criteria were very specific to the review question, and two further criteria were added early on during the screening process. The search resulted in a very large number of articles for screening and a decision was made to include only those published in 1993 or later. Policy relating to adult education and the provision of employment and training programmes to help those who are out of work back into work is regularly, if not constantly, evolving and a range of dates could have been selected as a cut-off point. The date of 1993 was selected because of major changes in the landscape of adult learning through the incorporation of colleges. A further criterion was added to screen out studies out of the scope of the review question. These included those which had come through the search process but were not specifically on adult learning, and a range of studies on adult learning which were not relevant to the review question but could not be directly excluded on any of the other criteria.

The exclusion criteria are the opposite of the inclusion criteria, and it is the former that were used in operationalising the study – ie studies that were not relevant were excluded on the basis of the exclusion criteria. In retrospect, the screening of articles would have been more straightforward if other criteria had been included. Of particular relevance to the review question is the interaction between the different criteria. For example, to be relevant a study had to report the impact of a learning intervention on low qualified adults who were out of work – we were looking for specific evidence of a learning intervention on this group, rather than findings that further show the generally positive impact of being better skilled and qualified. This issue was more fully addressed during the keywording and data extraction stages by emphasising to the review team that, in order to be included, studies had to report some data on the impact of an intervention on the specific group of central interest to the review.

Inclusion criteria

Studies were included if they:

- were published after 1992;
- were in the scope of the review question;
- studied those who were either out of work or in precarious employment (eg seasonal or temporary work, or under threat of redundancy), but also were either looking for work or wanting to find work at some point in the future. Those who were inactive (eg through early retirement, domestic responsibilities) were also of interest where there was evidence of a longer term employment-related outcome;

- studied those who had no, or low, qualifications at the beginning of the learning intervention;
- included anyone of working age (ie 16 to 60/65). A study might also include younger or older people, but there had to be some data clearly on the main age group of interest;
- explored some type of facilitated learning intervention (using the broad definition outlined above);
- were published in English (although could relate to any country);
- referred to a learning intervention that did not occur immediately after the end of compulsory schooling (ie there was a gap, excluding holidays, for the individuals concerned in their learning activities);
- explored the outcomes of the learning, whether directly or indirectly. These outcomes could be positive or negative; there could have been no evidence of any outcome; or the evidence could be unclear;
- provided some information on context and background, relating to the learning intervention and the learners themselves;
- were research based, providing some sort of empirical evidence or data (whether quantitative or qualitative, an evaluation, secondary analysis of data (including existing literature)).

Exclusion criteria

Studies were excluded where they:

- were published before 1993 (1)²;
- were out of the scope of the review question (2);
- only referred to those in stable, secure employment, ie the study explored the impact of learning on employees and either did not refer to any being in seasonal or temporary employment, or under threat of redundancy, or it was not clear whether any of the employees were in this type of precarious position (3);
- only referred to those who were inactive and not looking for work or not planning to look for work in the future, and provided no evidence of employment-related outcomes (4);
- only referred to learners already qualified at level 2 or above before the learning intervention. If there was no information on qualification levels or no reference to low qualified learners the study was excluded (5);
- only referred to pre-16 year olds or those over retirement age (6);

² The numbers relate to the listing of exclusion criteria in Figure 4.1.

- only referred to very informal, self-taught types of learning (ie there was no facilitated learning or learning intervention) (7);
- were not published in English (8);
- only referred to learning that followed on directly from compulsory education (ie with no gap, excluding holidays) (9);
- did not report any outcomes of the learning intervention (10);
- did not provide any context or background on the learning intervention or the learners (11);
- did not include any evidence or data, ie we were not interested in policy descriptions, personal views and opinions, conceptualisations, hypothesising, etc. unless these were supported by data (12).

3.2.2 Identification of potential studies: search strategy

Major bibliographic databases and relevant websites were searched (a list is given in Appendix B).

The free text terms used to search the databases are also listed in Appendix C. These terms were searched as free text in the subject, title and abstract fields. The thesaurus or word list was also used where these existed. The search results were stored in the bibliographic database on the Evidence for Policy and Practice Information (EPPI) website.

This approach was not appropriate for searching websites. For these, publication lists were scanned using the inclusion/exclusion criteria. Where there were extensive publication lists and these were classified by keywords, relevant keywords were selected to use when searching for articles.

The list of journals hand searched can be found in Appendix C.

In addition, material held by Institute for Employment Studies (IES) and Centre for Education Research and Development Unit, University of Sussex (CERADUS) was screened for relevance.

3.2.3 Screening studies: applying inclusion and exclusion criteria

The abstracts and titles were screened to make an initial decision as to whether they should be included or not in the review using the exclusion criteria. Records were either coded to one of the exclusion criteria, or coded to one of two include categories depending on whether they seemed very or fairly relevant. The articles classified into either of the two include categories were, where possible, obtained and assessed against the exclusion criteria, and keywords were applied.

The screening of abstracts was conducted by four members of the review team. An initial meeting was held to discuss the inclusion/exclusion criteria and how to

operationalise them. Follow-up meetings were held to discuss any issues arising and for consistency. The project manager and a director conducted a random check of screened abstracts.

Articles and reports identified as possibly relevant from this screening were then searched for and, where possible, obtained. A number of methods were used to do this. The University library catalogues were searched; an extensive internet search was made (especially as an increasing number of articles and reports are being made available in this way and not all are available in other form/from any other source) and inter-library loan requests were made. This work was done by temporary staff additional to the review team, including two graduate students and an IES associate.

3.2.4 Characterising included studies

The papers to be included were keyworded using an adapted version of the standard EPPI keywording sheet (EPPI-Centre, 2003a). The standard sheet included many keywords that were not relevant to this particular review because of our focus on adult learning rather than education *per se*. The adapted version of the keywording sheet is attached as Appendix D.

The keywording took place along with an additional screening of the articles obtained. The keywording was discussed by the team involved and through an initial group exercise. Differences in interpretation were discussed amongst the team. Articles were then individually keyworded. The first keyworded articles were checked by the project manager. The main problem was that studies in which it was not possible to explicitly identify the impacts of learning on those who were out of work and low qualified had been included. These were screened out and those conducting the keywording were further advised to exclude such studies. However, this remained a problem – until the more detailed data extraction was embarked on the extent to which studies really reported findings of relevance to the review did not always become clear. In a few cases we were still working with either summaries or partial reports of a study (although more than the original abstract), and it was only when the full report was obtained that the real relevance of a study became clear.

Articles and reports relating to the same study were linked at this stage so that keywording and data extraction were done on a study, rather than separately for each document. If there was reference to a further or fuller study report, attempts were made to obtain and include these.

3.2.5 Identifying and describing studies: quality assurance process

The EPPI-Centre checked 260 screened items. The quality assurance (QA) disagreed with a particular citation in four of the 260 cases (1.5 per cent). The studies about which there was disagreement did not conform to a particular pattern, so there was no suggestion of a systematic exclusion bias. The QA also concluded that there was some inconsistency in the application of certain exclusion criteria – especially ‘not on topic’. It was felt that, to some extent, this was inevitable, given the broad and

unspecific nature of the criterion. The practical consequences of this is that there may be under-reporting of the number of exclusions that were made simply because the citations had nothing whatever to do with the review question.

EPPI quality assured nine papers that had been keyworded by the review group:

- There was disagreement on one keyworded item in each of three papers and these were resolved.
- It was pointed out that two articles related to the same study and should be linked; furthermore that one was an executive summary and that efforts should be made to obtain the full paper (Freedman, 2000; Freedman *et al.*, 2000). This was done.
- Another article (Taylor Nelson Sofres, 2002) was found not to meet the inclusion criteria, but it was pointed out that it should be possible to find other reports which might provide relevant data. Other reports were found (Bonjour and Smeaton, 2003; White, 2003) but, although clearly including the group on which this review is focused, there were no data relating outcomes to this group. (This study has, however been included in Chapter 1 in the section on research background).
- There was disagreement about whether a further group of three articles all related to the same dataset should be included in the review (Afrassa, 2001; National Centre for Vocational Education, 2000 and 2001). At this stage it was decided by the review group to keep them in; however, at the final screening before data extraction, it became much clearer that they were of no real value to the review and they were excluded.

3.3 In-depth review

3.3.1 Moving from broad characterisation (mapping) to in-depth review

For the in-depth review, the articles included in the systematic map were further screened by three of the review team. The criteria for doing this were discussed and agreed in advance. Two articles were both screened independently by each member and their decisions discussed; three further articles were discussed in the course of a meeting of these three team members.

The additional screening excluded articles from the in-depth review that (the numbers relate to the three additional exclusion criteria at the bottom of Figure 4.1):

- were not judged to be of sufficiently high quality methodologically – the design and execution of the study was taken into consideration in relation to its aims and objectives (ie not in relation to the review question). For quantitative studies, the response rate and representativeness of response, conduct of the data collection, conduct of the data analysis and credibility of the findings were taken into account. For studies involving secondary analysis, the reputation of the data used, the conduct of the data analysis and the credibility of the findings were taken into account. For qualitative studies, the conduct of the data collection and data analysis, and credibility of the findings were taken into account (1);
- were out of the scope of the review question – some studies had come through the keywording stage that provided no real data on the particular impact of a learning intervention on those who were low qualified and out-of-work. For example, people with low qualifications were included in the study, but on further inspection it became clear that the report(s) had no useful data on the extent of their involvement or the impact of learning on this specific group; by implication those with low qualifications were probably in the sample but there was no real discussion of this (2).

In addition, it was found that a few studies looked potentially relevant, but that the articles, reports, etc. so far obtained did not provide useful data relevant to the review question, for example, the article/report obtained was only one of a series or only a summary/shortened version of a longer document. While searches and/or requests were made for further/fuller reports, further documents were not obtained and these studies were therefore excluded from the full review (3). The key difference between this and the last bullet was that in bullet two, full reports had been obtained of a study, whereas in this case, it had only been possible to obtain summary or shortened reports.

Some additional studies were screened at this stage as, following a meeting of the project steering group, the DWP and DfES suggested nine studies. Two of these were already included in the review, and two others proved relevant on screening.

3.3.2 Detailed description of studies in the in-depth review

Data extraction was done using an adapted version of the standard EPPI-data extraction and quality assessment guidelines (EPPI-Centre, 2003b) – attached as Appendix E.

This was discussed by the team and then conducted individually, with any queries being dealt with as they arose. Data extractors were instructed to focus on the findings of particular relevance to the review question – ie those that related to the impact of learning on low-qualified, out-of-work adults. The project manager and two project directors did the second data extraction on each study and any differences were resolved. This was done on paper rather than directly onto the EPPI software because of the reluctance of extractors to engage with the software. The final data extraction for each study was entered onto the software.

3.3.3 Assessing the quality of studies and weight of evidence for the review question

During the data extraction, an assessment was made of the quality of studies and a weight was given to the evidence provided. Each weight of evidence question was assessed using three categories – high, medium or low.

The soundness of the methodology of a study in relation to its overall aims and objectives was assessed, regardless of its appropriateness to this particular systematic review (QM.11 in the data extraction tool – weight of evidence (WOE) A). This assessment was based on a detailed reading of the study and responses to the questions on methodology in the data extraction tool.

In addition to this internal quality weighting, three other weightings were given:

- appropriateness of the research design and analysis for answering the review question (WOE B);
- relevance of the particular focus of the study (eg conceptual focus, context, sample) for addressing the review question (WOE C);
- each study was given an overall weight (WOE D). This took into account the quality assessment (A) and two review specific weights of evidence (B and C).

Studies with a low WOE A were excluded from the review. Therefore, WOE D for any study was not higher than WOE C.

3.3.4 In-depth review: quality assurance process

Both the further screening before data extraction and the data extraction itself were quality assured by EPPI.

EPPI looked at 25 studies for the further screening. There was agreement on the decision taken on 17 of these. Two studies the review team had included EPPI thought should be excluded, and six that the review team had excluded EPPI thought should be included.

Of those it was suggested should be included:

- One set of studies, although a major evaluation, the review team still considered did not provide evidence of the specific impact of learning on the population group of interest. This study has, however, been referred to in the research background as some findings are suggestive of an impact (Bonjour and Smeaton, 2003; Taylor Nelson Sofres, 2002; White, 2003).
- Another study was only reported on two pages. The review team had attempted to find a fuller report but without success. There were insufficient details on the methodology to make a full judgement as to its quality. However, of more importance in its exclusion was that the only information on those included in the study was that they were low income; there was no data on qualifications (Godman Brown and Davis, 2000).

- A study for which there were two papers we agreed were potentially of considerable interest, although the papers did not report any data particularly useful for this review. The study had been conducted to develop a set of questions for use across Europe, rather than strictly to collect data. Despite searching the internet and contacting an author, no full reports of this study have emerged (Saxby-Smith and Shepherd, nd; Shepherd and Saxby-Smith, nd).
- Another two related, but not necessarily linked, papers also seemed to be reporting a study of considerable interest to this review. However, the papers obtained reported little in terms of methods or outcome data. Searches were made for full reports but none were obtained (Finn, 1998 and 1999).
- Another study, when revisited by the review team was found to contain no useful information on the prior qualifications of those being researched (Creed *et al.*, 2001).

4 Identifying and describing studies: results

4.1 Studies included from searching and screening

Figure 4.1 shows the numbers of abstracts and documents screened and brought through into the in-depth review.

The main reasons for exclusion at the screening stage were that the report was published before 1993 or the study was out of the scope of the review question. Other reasons were that the study was not about those who were out of work, did not report employment-related outcomes, or did cover a group with qualifications above level 2 or of the wrong age group.

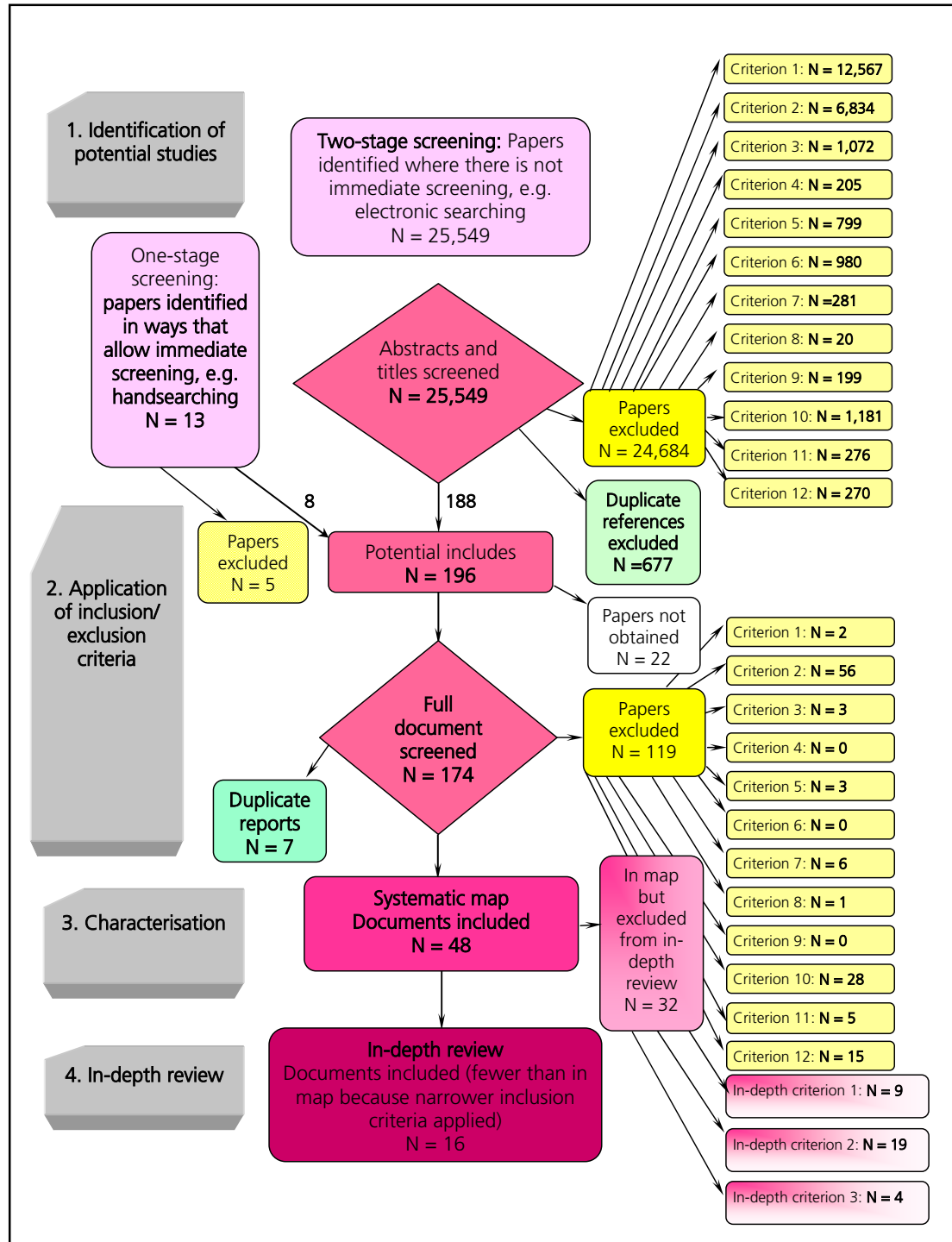
Screening of studies from the electronic databases led to 188 being identified as potentially of interest to this study. A further 13 were identified from the other searches, including studies suggested by the Department for Work and Pensions (DWP), five of which were excluded. This gave a total of 196 documents to be searched for.

Eleven per cent (22) of the 196 full documents searched for were not obtained. Of the 174 screened, around two-thirds (119) were excluded. The main reasons were that they were not relevant to the review, criterion two (usually because it was not possible to explore the impact of learning on out-of-work adults who were also low/unqualified), or because no data were reported on employment outcomes.

The systematic map (Section 4.2) was based on 48 documents (see Appendix F), representing 38 studies.

As outlined in the previous chapter, it was decided to further screen these documents, in particular to screen out any deemed to be methodologically of poor quality. However, at this stage it was found that more studies did not allow the impact of learning on adults who were out-of-work and low/unqualified to be explored. This resulted in 16 documents (see Appendix G) being included in the in-depth review – these represent 12 different studies. It is from these that the findings reported in Chapter 2 were drawn.

Figure 4.1 Filtering of papers from searching to map to synthesis (for definitions of criteria see para 2.2)



4.2 Characteristics of the included studies (systematic map)

This overview is based on 38 studies which were keyworded for inclusion in the review. This is made up of 33 single articles or reports and five studies with more than one article, giving a total of 48 articles or reports. For the purposes of keywording and data extraction each group of 'linked' articles and reports will be treated as one element (ie giving the total of 38).

4.2.1 Country

Studies reporting data from the UK and the United States were most commonly included – a total of 14 and 13 respectively. Other studies were based on Canada (three), Australia (six) and West Europe (two). This may partly reflect some of the inclusion criteria and sources searched. For example, articles and reports had to be written in English, which would have excluded some European work. There were initially many Australian studies screened as one electronic database searched specifically details these. However, the majority were excluded on a range of different criteria (again, many did not explicitly report the link between qualifications and learning outcomes). The relatively high number of studies from the US reflects the range and nature of welfare/training programmes and their extensive evaluation.

4.2.2 Whether a specific learning intervention

The majority of studies (31) were exploring a specific intervention, and 25 of these were government interventions.

The interventions (government and otherwise) reported were wide ranging in nature – including those directly focused on getting people into employment; community-based initiatives, aiming at community development or neighbourhood renewal as well as employment; and programmes emphasising families, aiming to have a longer term impact on the life chances of children. Examples include:

- various welfare to work programmes, including the New Deal in the UK and a range of different approaches in the US; some of these included an emphasis on families;
- Asian neighbourhood design (AND), QUEST (both in the USA) and others which aim to develop the skills of people in a local community while also improving some aspect of the environment in that community;
- basic skills programmes – eg Pathfinder in the UK, and the Literacy and Numeracy Training Programme (LANT) in Australia.

A few intervention studies were not exploring government interventions; these often had an element of public funding but were initiated (and partly funded) outwith the public sector. For example, WISE, which is a series of not-for-profit businesses carrying out home insulation, etc. work and environmental upgrading. Another study looked at a number of community-based initiatives aimed at reviving local economies and providing jobs in disadvantaged communities.

Studies that were not looking at specific interventions were exploring the impact of more general learning activities (for example, participation on college courses) and one article was based on a secondary analysis of the Labour Force Survey (LFS).

Alongside training, interventions had various other elements aiming to help people into work, for example, in one, people were entitled to remain on welfare; in others job subsidies were available.

4.2.3 Type of learning

The learning explored in these studies was being provided in a range of situations. It was often difficult to generalise from an article – either it was not particularly clear or the learning was provided in so many different locations. Seventeen articles included learning provided in a college and 17 in a community setting. Ten included workplace learning – this was often in the form of shadowing or work experience for those without work.

Some interventions and other learning provision were narrowly focused, for example, on basic skills or specific occupational skills. However, most interventions were providing a range of different inputs, for example, basic skills in conjunction with occupational skills, occupational skills in conjunction with job search, or all three combined. Across the 38 studies:

- 28 provided skills for specific occupations (eg care, construction, IT);
- 24 included general skills relating to returning to work (eg motivation, self-esteem, problem solving);
- 19 addressed basic skills;
- 24 covered job search and application.

4.2.4 Characteristics of learners

There were three main groups of interest in this review – those who were unemployed; those in temporary/marginal/precarious work; and other inactive groups whose learning was work-related in some way. Most studies were exploring the impact of learning on people in a range of situations and many at whom the learning was aimed experienced multiple disadvantages, for example, they were unemployed in poor communities, with poor basic skills, possibly health and other family problems as well.

The majority of learning activities in these studies were aimed at people who were unemployed: 26 studies included people who were unemployed (whether short-term or long-term unemployed). Only three focused on those in temporary/marginal/precarious work.

Some studies were evaluating programmes with an element of family learning, or that were aimed at improving communities as well as just getting individuals back to work. Ten studies included women wanting to return to work – and many of these women were unemployed or welfare recipients.

The majority (26) of learning activities covered by these studies included people of a range of ages. However, the majority of those researched were in their 20s to 40s. Five studies just looked at those aged 16 to 24. Findings were rarely reported in relation to age (in six studies, the age of participants was not clear).

Twenty-nine studies included men and women, five included women only, one just covered young men and in three participants' gender was not clear.

4.2.5 Qualifications

A key criterion for inclusion in this review is that studies included people with low or no qualifications and that the impact of learning on these could be identified.

All the studies discussed here did include people with low or no qualifications in the sample. However, the studies vary somewhat in the extent to which links can be made between specific qualification levels and learning outcomes. While some of the studies with less explicit links may be excluded at the data extraction stage, studies in which the link is implicit and that suggest interesting findings were included at the keywording stage.

In a few of the very qualitative studies, the link between qualifications and learning outcomes could only be made through referring to individual case studies.

4.2.6 Learning outcomes

The majority of studies (25) reported both short-term (ie less than six months) and longer-term learning outcomes. Longer term usually meant up to a year, but a few went beyond this. Eight studies reported short-term outcomes only.

Most studies (33) reported employment-related outcomes (including earnings), 21 qualification outcomes and 17 soft outcomes. Nine reported outcomes suggesting progression towards work but that further training or support was needed. A few reported other learning outcomes, for example, the impact on mental health, recidivism and the wider family.

4.2.7 Type of research

Twenty-eight studies were intervention studies – of these, seven were random controlled trials and four non-randomised control trials. The majority of these controlled trials were conducted in the US. Others were conducted in the UK, Australia and Scandinavia. The majority of intervention studies in the UK adopted other, often mixed, methodologies, including quantitative surveys, in-depth interviews and case studies.

5 Systematic reviews

This chapter draws out the wider lessons learnt from conducting this review for the commissioning and conduct of systematic reviews in this area more generally. It follows the key elements of the process from the nature of the research question through the searching and screening process to the data extraction and then picks up some generic points about the process.

Obviously some of the points made are specific to this review and the way it was conducted, but many have generic relevance to the systematic review methodology more generally.

5.1 The nature of the research question

In the experience of this review, the degree of specificity of the original research question posed at the outset has an important impact on the volume of the information generated in the search process (and therefore the resources devoted to that aspect of the study) and the breadth and value of the eventual findings.

Although the precise wording of the review question developed was fairly narrow, (ie examining the **employment** outcomes from training for adults **without** level 2 qualifications who were not in secure employment), the general area covered (of outcomes from training for adults) was extremely wide and multi-faceted. Thus, while we were only interested in part of the picture, the initial search process threw up material covering the whole canvas. This meant that we had a very large number of items in our initial search, the vast majority of which were eventually excluded. It also meant that a number of the final exclusions could only be made when reading the actual text. For example, a study may cover what happens to low-qualified adults after they had undergone some vocational learning. The abstract of the study includes some details on their employment status and qualification record. It is therefore included for data extraction. However, it is only on detailed scrutiny that it became clear that the relevant piece of analysis (ie what happens to the labour market status of previously unemployed low-qualified adults after a period of learning) had either not been carried out or not reported (perhaps because it was not relevant to the objectives of the particular study which was conducted for another

purpose). The emphasis on the linkage within the research question on low prior qualifications, a training intervention and employment outcomes therefore meant that a large body of material was initially generated (ie it covered at least one of these areas), went through to be scrutinised more closely (eg it covered all three areas) but was ultimately rejected (as it did not examine the relationship between the three).

The tightness/specificity of our question led to various studies being ultimately excluded that would have been of relevance to answering a more general question. For example, a question which more generally asked about the impact of learning interventions on out-of-work adults, rather than those with low qualifications, would have yielded a much broader range of literature and may have generated more concrete results (though obviously not necessarily of relevance to lowly-qualified adults). The question we adopted was specifically designed to look at this group and consequently forced us to exclude a broad range of material which did not include information about previous qualifications (even though it may have had data on employment impact of learning). Even in the material that did survive the screening and exclusion process, the data on low-qualified adults was limited.

The general lesson from systematic reviews appears to be that the narrower the research question, the simpler the process, ie the fewer articles/reports and papers come up in the initial screening and the ultimate data extraction. Although our research question was narrow in the sense that it was restrictive and specific it covered a broad scope of material. Further narrowing the research question may not have helped streamline the process.

Another approach would have been to have conducted a more layered approach starting, for example, with a more general question or scoping study³ about the impact of learning on out-of-work adults, finishing with a map of the literature and only then focusing down within this on low-qualified adults and/or employment outcomes etc.

The final comment here is that relatively little of the literature, according to this review, focuses on the learners' prior educational achievements. This may be a current policy focus, but it does not appear to have been of great research interest in the past.

5.2 The breadth of the search

The extent of the search is determined by a combination of the number of keywords and the list of databases used.

There is a tension here: the greater the width of the search, the greater the degree of confidence that the review has exhaustively covered the potential literature.

³ Evidence for Policy and Practice Information (EPPI) have some experience of conducting such initial scoping studies.

However, from the client's point of view there is a trade-off between the efficiency of the review and its exhaustiveness. From our experience though, the economic law of diminishing marginal returns applies and it is highly likely that we would have ended up with little different material for their research synthesis if we had searched fewer (but concentrated on the best) databases coupled with a search of a judicious choice of websites, supplemented by key material known to the client, researchers and other members of the steering group.

5.3 The accuracy of the search and screening process

The search strategy adopted for a review specified the sources to be searched and was a key element of the review process. It therefore requires adequate resources to be devoted to it in terms of people, their time, their capabilities and the facilities (eg information technology) at their disposal. Our team also faced a number of problems in carrying out the search and screening process which may have affected the quality of the eventual review:

- the screeners used abstracts which varied considerably in their quality and coverage;
- key wording on bibliographic databases were not always very accurate and were often limited, which makes it difficult to assess accurately whether material is relevant to the review question;
- abstracts were not always available, in which case the screeners had to rely on the title (and key wording if available), which can be far from perfect;
- it was not possible to obtain all the articles/reports which were thought to be relevant.

5.4 Use of software

Systematic reviews are software dependent. They primarily rely on computer programs for searching, for accessing material, for documenting the process, for logging the result. In these circumstances the functionality of the software used is obviously crucial to the efficiency (and to an extent the accuracy) of the process. The more 'user friendly' the software, the more effective the user's application of it. The review team had particular concerns about the mouse-dependency of the software used for this review and the need to re-key information to transfer it from one part of the system to another.

We recommend that future systematic reviewers have experience of the software that is proposed to be used for the review before they embark on the process.

5.5 Research inclusion

The eventual review was based on evidence extracted from the studies that covered the relevant ground and also passed the application of the agreed quality criteria. What was included was a function of the quality of the way the studies were reported as well the quality and relevance of the study itself.

5.5.1 The quality of reporting in primary research

One issue experienced during the review was the varied ways in which primary research is reported. The quality of reporting has significant implications for finding the evidence required to answer a review question and assessing the quality of the evidence base.

However, the quality of reporting is varied. Policy research reports can not always cover all the data collected – some would be impossibly long (at a time when the emphasis is on policy reports being much shorter). Authors often exclude reporting on some issues/relationships because they are not of interest to the client, who may also not be interested in having detailed explanations of the methodology included in the final report (with which the client might already be familiar). Policy research reports are written for particular purposes and often not with the needs of a systematic reviewer in mind.

A journal article limited in words offers limited scope for much detail of the methodology and, indeed, some journals are focused more at practitioners, etc. who want to know what was found.

It would be impossible for all primary research to be reported in a way that led it to be used in any systematic review for which they might have some relevance. However, this means that the material that is included tends to be that which is reported in a particular way, rather than necessarily the best or most relevant studies.

5.5.2 Applying quality criteria

Before the data extraction stage the studies that were about to be reviewed were assessed for their quality. While it was relatively easy to identify the poor quality (and therefore excluded) and high quality (and therefore included) studies, it was harder to assess those in the middle and less clear whether they should be included or excluded on grounds of quality (often because vital pieces of information were missing).

Studies that considered and were self-critical about their methods tended to be more harshly judged by the process than those which did not report either any doubts about or all the details of their method. Thus, the concerns raised in a report about the selection bias in the sample of participants would be noted (eg see Payne *et al.*), but no such concerns would necessarily be noted in other sample-based studies. Indeed, in many, it was difficult to consider the issue because details of the population from which the sample was drawn were not reported.

Therefore while we were able to apply 'quality criteria' in some cases, in many they referred as much to the available detail on the method than to the rigour of the research techniques applied.

The quality assessment applied before (and sometimes during) the data extraction process, appeared to favour a certain type of academic study – eg one with some form of experimental design, hypothesis testing etc. and a reporting system which clearly distinguished between data collection, data analysis and conclusions. We encountered problems applying the extraction elements relating to the method to some of the policy-related research reviewed, especially where the material was based on secondary analysis (data or literature) rather than primary data collection. It was also difficult to apply the process to linked studies. This was especially so in cases where it only became apparent at the data extraction stage that a study was linked to other research which had not found its way into, or perhaps through, the search and screening process, but contained relevant information for the data extraction (eg about method).

5.6 Conclusion

Generally we found that conducting this systematic literature review using the process adopted to be much harder and far more time-consuming than initially envisaged. We would recommend that inexperienced reviewers are provided with some key resource use assumptions and indicative timescales (based on existing practice) in any future commissioning process for a systematic review. The EPPI-Centre or others involved with a number of reviews could provide such advice.

Based on our experience, we found that systematic literature reviews are primarily about process and the mechanics of searching, screening and data extraction tend to dominate the minds and activities of the researchers involved, to the exclusion, until the very end, of the issue under review. Although the research question is obviously at the heart of the review, it is not until the end that researchers turn to considering it in detail. Over 90 per cent of the effort involved is spent on identifying potentially relevant material and documenting not only the studies that are of interest but also keeping records of those that are not. Even at the penultimate 'data extraction' stage the vast majority of the questions that have to be answered are about the methodology and reporting of the study rather than its findings. That may be part of the essential nature of being systematic, consistent and transparent. However, the key test is 'Does it produce a better result than an ordinary literature review?'. While this is primarily for the reader to judge, we found that:

- In spite of the extensive search process, very few of the studies we finally reviewed either were unknown to the project or the client before the start of the review or would not have been revealed by a fairly cursory search.
- The review did exclude some studies which were of relevance to the general area (eg about learning outcomes, which could lead to further actions resulting in employment outcomes) but not to the specific research question.

- The quality of the methodology, and the reliability and validity of the evidence were given a lot more scrutiny than would normally be the case in a standard literature review. The result is that some (low quality) material was excluded which may well have featured in a different form of review and more weight is given to the higher quality studies.
- The studies which were eventually included in the review were scrutinised in great detail to extract all findings of relevance to the review question.
- The question could be further answered through additional analysis of some of the data collected by the studies reviewed, publicly available datasets (eg National Adult Learning Survey (NALS)) and data that is not in the public domain (eg exit reports from European Social Fund (ESF) projects and probably others, that are sent to the funding body contain detailed statistical data on participants, outcomes, nature of intervention, etc.).

Appendix A

Steering group membership

The Department for Work and Pensions (DWP) convened a project steering group representing policy and user interests:

- Gillian Burgess, Skills Analysis Team, DWP (project manager);
- Jacqui Hansbro, Skills Analysis Team, DWP;
- Laura Payne, Skills Analysis Team, DWP;
- Rob Hardcastle, European Social Fund (ESF) Evaluation Team, DWP;
- Adrienne Nolan, Partnerships, Inclusion and Unemployment (PIU) Skills Team, DWP (left before end of project);
- Gareth Griffiths, Learning and Skills Analysis, Department for Education and Skills (DfES) (left before end of project);
- Stephanie Bell, DfES;
- Richard Dale, Jobcentre Plus;
- Pam Vaughn, Learning and Skills Council (LSC);
- David Gough, Evidence for Policy and Practice Information-Centre (EPPI-Centre);
- Mark Newman, EPPI-Centre;
- Jane Thompson, National Institute of Adult Continuing Education (NIACE) (representing the user voice);
- members of the Review Group.

Appendix B

Weight of evidence ratings for studies included in the review

Table B.1 Weight of evidence ratings for studies included in the review

Author and date	Weight of evidence D Overall weight of evidence in relation to review question	Weight of evidence A Internal quality assessment – can the study findings be trusted in answering the study questions?	Weight of evidence B Appropriateness of the research design and analysis for addressing the review question	Weight of evidence C Relevance of the particular focus of the study (including conceptual focus, context, sample and measures) for addressing the review question
High/medium Michalopoulos <i>et al.</i> (2000)	High/medium: A sound methodological and relevant paper. Only drawback is that most of participants under study are women.	High: Sound comparisons between programme and control group, tests of significance, builds up the analysis to 'tell a story'.	High: Sound use of control groups to provide comparative information. Looks at different programmes separately, and analysis presented clearly by prior qualifications.	High/medium: Looking at unemployed adults going through an intervention that includes training. Prior qualifications a key break in the analysis. Only drawback is that majority of participants women.
Orr <i>et al.</i> (1996)	High/medium: The study provides strong evidence on the success of voluntary employment and training programmes in increasing employment levels and the quality of that employment among adults. However, not many findings are reported in a way that distinguishes between the impact of low/ unqualified adults from the rest.	High: Detailed and thorough study of Job Training Partnership Act's (JTPA's) impact. Data and estimation issues clearly reported.	High: Research aimed at capturing the counterfactual through randomised control. Potentially applicable to other studies of the impact of learning on low-qualified adults who are out of work or at risk of losing their job.	Medium: Examines the impact of a learning intervention on improving the labour market outcomes of disadvantaged adults and young people. Provides separate data for men and women, and young participants. Drawback is that not all analysis presented by prior qualifications.

Continued

Table B.1 Continued

Author and date	Weight of evidence D Overall weight of evidence in relation to review question	Weight of evidence A Internal quality assessment – can the study findings be trusted in answering the study questions?	Weight of evidence B Appropriateness of the research design and analysis for addressing the review question	Weight of evidence C Relevance of the particular focus of the study (including conceptual focus, context, sample and measures) for addressing the review question
<p>Medium Bonnal <i>et al.</i> (1997)</p>	<p>Medium: An appropriate methodology using secondary data, however date of data used and different economic context makes findings of only some relevance to the review. Only looks at young men.</p>	<p>Medium: The analyses and conclusions based on them are trustworthy. Appropriate methodological approach to explore the issues and using the data selected.</p>	<p>Medium: An appropriate methodology using secondary data to explore impact of learning, but analysis is only of data on young men.</p>	<p>Medium: Date of data and difference economic conditions make findings of less relevance than if current data used. Only looks at young men.</p>
<p>Bos <i>et al.</i> (2002); Freedman (2000) ; Freedman <i>et al.</i> (2000); Hamilton <i>et al.</i> (1997 and 2001)</p>	<p>Medium: Provides relevant data on impact of intervention on low/unqualified. However, no multi-variate analysis looking at interactions between variables and between 89 and 97 per cent of participants (in different areas) women.</p>	<p>High: Sound comparisons between programme and control groups, significance testing and builds up a picture through various different analyses.</p>	<p>Medium/high: Sound use of control groups to provide comparative information.</p>	<p>Medium: A very relevant study in many ways, but only provides some data by prior qualifications. Most participants are women.</p>

Continued

Table B.1 Continued

Author and date	Weight of evidence D Overall weight of evidence in relation to review question	Weight of evidence A Internal quality assessment – can the study findings be trusted in answering the study questions?	Weight of evidence B Appropriateness of the research design and analysis for addressing the review question	Weight of evidence C Relevance of the particular focus of the study (including conceptual focus, context, sample and measures) for addressing the review question
Decker <i>et al.</i> (2000)	Medium: This study does include adults with low educational achievement but does not provide great detail in outcomes, particularly for the subgroups. The overall study does show that the 'learning' interventions were largely in the form of job search activities and it was more likely the motivation to contact more potential employers, than application of any learning led to reduced unemployment. The value of this study in answering the review question may be in what is not evidence of success for adults with low educational attainment, or that success in such limited terms (reduced benefit claim) is only one measure.	Medium: Rigorous and detailed in explaining findings but sometimes difficult to distinguish results from conclusions. Methods and data analysis not always clearly reported.	Medium/low: Study is rigorous but qualified: this is a macro view which is quantitative in method and this may mask some of the details in practice, such as those evident in the differences between the ten sites offering Jobseeker's Allowance in Florida.	Medium: The focus is on unemployed adults and many have low educational attainment. The quantitative overview shows general impacts but little attention to who the participants are, except by subgroup analysis, no account of learning (except to say changes were probably not a result of application of new skills) and restricted data collection (survey) that might give more details.

Continued

Table B.1 Continued

Weight of evidence C Relevance of the particular focus of the study (including conceptual focus, context, sample and measures) for addressing the review question	Weight of evidence B Appropriateness of the research design and analysis for addressing the review question	Weight of evidence A Internal quality assessment – can the study findings be trusted in answering the study questions?	Weight of evidence D Overall weight of evidence in relation to review question	Author and date
<p>Medium: The paper examines the impact of vocational qualifications on employment outcomes. It is very relevant in terms of its outcome measurements but less so in terms of inputs, eg does not distinguish between gaining a qualification and learning. The qualification may simply have acted as a labour market signal rather than add to the human capital of young people. The focus is also on young people and not all adults.</p>	<p>High: The research design involved the cross-sectional analysis of secondary data using pseudo-panels. There is no reason to suggest that such a design would not be (theoretically) appropriate for tackling the review question.</p>	<p>High: Robust analysis of high quality survey data.</p>	<p>Medium: The study provides evidence that young people without qualifications may gain an employment advantage through vocational qualifications. However, less is known about whether those who take further study are substantially different from those who do not (eg more motivated). Only looks at young people.</p>	<p>McIntosh (2004)</p>
<p>Medium: Main problem is limited reporting by prior qualifications.</p>	<p>High: An appropriate multi-variate approach for answering the review question, looking at employment outcomes over time for a group of unemployed people.</p>	<p>High: A sound study conducted by experienced researchers, using analysis and data appropriate to answer aims and objectives set.</p>	<p>Medium: Provides comparisons between groups receiving and not receiving Training for Work (TfW) but limited analysis and reporting based on prior qualifications.</p>	<p>Payne <i>et al.</i> (1999)</p>
<p>Medium: Provides some useful information in relation to the review question but limited reporting on qualifications.</p>	<p>Medium: A good qualitative methodology looking at the group of interest, but only one intervention and very specific. No comparative information.</p>	<p>High: a sound qualitative study in its own right.</p>	<p>Medium: Some information on impact on those with low/no qualifications, no comparators but a sound study in its own right.</p>	<p>Rademacher <i>et al.</i> (2001)</p>

Continued

Table B.1 Continued

Author and date	Weight of evidence D Overall weight of evidence in relation to review question	Weight of evidence A Internal quality assessment – can the study findings be trusted in answering the study questions?	Weight of evidence B Appropriateness of the research design and analysis for addressing the review question	Weight of evidence C Relevance of the particular focus of the study (including conceptual focus, context, sample and measures) for addressing the review question
Medium/low Anderson <i>et al.</i> (2004)	Medium/low: Relatively few findings relevant to group of specific interest to the review, and few findings on the impact of training.	Medium: Little information on data collection and sampling, but otherwise seems to be a sound study.	Medium/low: A sound study but relatively little analysis by prior qualifications.	Low: Provides some useful information in relation to the review, but not that much reported by prior qualifications.
Low Howieson (1996)	Low: Provides some data for different qualification levels, mostly descriptive and nothing to show what could have happened without the intervention.	Medium: A sound quantitative study in its own right. No control groups but a standard methodological approach for the UK.	Low: No comparative information, but otherwise a sound quantitative study. Relatively little analysis by prior qualifications.	Low: Some useful information but relatively little reporting based on prior qualifications. Only applies to women.
Marshall and Macfarlane (2000)	Low: Although a low-qualified and out-of work group being targeted by the programme, the report focuses more on Intermediate Labour Market (ILMs) themselves rather than the people being studied. Some information on specific impact of training.	Medium: Uses a range of data collection to evaluate ILMs. Comparative data used is only tangentially relevant.	Low: More focused on ILMs than the people themselves.	Low: Difficult to always identify specific impact of training, although training outcomes are reported to be good. Report is more focused on ILMs themselves.
Tao <i>et al.</i> (1998)	Low: Provides some data of relevance to the review. Authors discuss problems in attributing impacts to even start as no control. The report is not particularly clearly written or easy to follow.	Medium: authors report a number of design limitations which limit the quality of the study. Have a control but does not work for the study.	Medium/low: Only some analysis by prior qualifications and owing to design limitations noted in weight of evidence A.	Low: Some reporting by prior qualifications, study looking at a broader initiative, no comparative information, and information dated.

Appendix C

Search strategy for electronic databases and other sources searched

Bibliographic databases searched:

- PsychInfo;
- Assia (Applied Social Sciences Index and Abstracts);
- ERIC database;
- AEI (Australian Education Index);
- BEI (British Education Index);
- Education-Line.

Identified search words

Table C.1 Category 1 (population)

Sub categories	Terms	As used for search
Out-of-Work	Adult	Adult OR out of work
	Over 17	
	Less than 65	Below level 2
	Below level 2	
	Secondary level	
Inactive	Low skilled	Low skill* OR unqualified*
	Unqualified	
	Lone parent	Lone parent OR women return* OR early retirement*
	Women returnees	
	Early retired	Unemployment* OR benefit claim*
Unemployment		
Precarious employment	Benefit claimants	Season* work* OR temp* work*
	Seasonal workers	
	Temporary workers	Redundant* OR lose* job*
	Redundant	
	Danger of being made redundant	

Table C.2 Category 2 (learning)

Sub categories	Terms	As used for search	
General (but not very informal)	Learning	Learn* OR educate* OR train* OR teach	
	Education		
	Training	Skill* OR basic skill* OR upskill* OR essential skill* OR upgrade*	
	Skills		
	Upskilling		
	Basic skills		
	English for Speakers of Other Languages (ESOL)	Essential skills	ESOL
		Upgrading	
		Government training	Welfare-to-work
		Welfare to work	
Development	Personal development	Person* develop* OR mentor* OR coach*	
	Mentoring		
	Coaching		

Table C.3 Category 3 (outcomes)

Sub categories	Terms	As used for search
Employment	Labour market	Labour market OR unemployed* OR reduce employment*
	Unemployment	
	Reduce employment	Employ* OR job OR work
	Employment	
	Job	
	Work	Sustain* employ* OR skill* develop*
	Sustainable employment	
	Skill development	
	Promotion	
	Soft Outcomes	Qualifications
Earning		Earn* OR income
Income		
Motivated		Motivated* OR better esteem OR positive attitude OR confident*
Better esteem		
Positive attitude		
Confidence		

Websites searched:

- Department for Education and Skills (DfES)
- Department for Work and Pensions (DWP)
- Centre for Labour Market Studies (CLMS)
- Institute for Employment Research (IER)
- Joseph Rowntree Foundation (JRF)
- Learning and Skills Development Agency (LSDA)
- Learning and Skills Council (LCS)
- National Foundation for Educational Research (NFER)
- National Institute for Continuing Education (NIACE)
- Centre of Economic Performance (CEP), London School of Economics
- Institute for Public Policy and Research (IPPR)
- Institute for Fiscal Studies (IFS)
- Institute of Education (IOE)
- Policy Studies Institute (PSI)
- National Institute for Social and Economic Research (NISER)
- Policy Research Institute (PRI)
- Centre for Research on Wider Benefits of Learning

- Employment Studies Research Unit (ESRU)
- Centre for the Analysis of Social Exclusion (CASE)
- Inclusion
- Centre for Longitudinal Studies (CLS)

Journals handsearched

Adults Learning

Studies in the Education of Adults

International Journal of Lifelong Education

Appendix D

Review keywording

Keywords – Review of Adult Learning

1. Identification of report

Website

Please specify

Handsearch

Electronic database

Please specify

2. Status

Published

In press

Unpublished

Not known

3. Is this report linked to one or other reports that also report the same study?

Not linked

Linked (*please provide details of others, or their reference number*)

Not known

4. In which country/countries was the study carried out?

UK

East Europe

Australia/New Zealand

Canada

Other (*please specify*)

West Europe (excl. Scand.)

Scandinavia

USA

China/Asia

5. Which groups of people does the study cover? (*these groups should be mutually exclusive, code all that apply in relation to the different groups of people covered in an article*)

Short-term unemployed (ie up to six months)

Long-term unemployed

Unemployed (*if impossible to tell whether ST or LT*)

Women looking to return to work

Early retired looking to return to work

Prisoners/offenders

Those about to be made redundant

Those about to retire

Those in temporary/marginal/precarious work

People with a disability/health problem

Other (*please specify*)

6. If unemployed (ie one of first three categories in Q5) – Reason(s) for being unemployed:

Made redundant

Sacked

Retired

Ex-offender

Disability/health problem

Left job

Other (*please specify*)

Unknown

7. Is the study looking at a specific intervention or reviewing data/evidence more generally?

Specific intervention (ie an identifiable programme)

More general review (eg FE, range general training initiatives)

8. What did the learning intervention cover? (*code all that apply*)

Basic skills (literacy, numeracy)

Skills for specific occupation(s)

Returning to work (eg motivation to work, self esteem, etc)

Job search/application

Up-dating existing job skills

Family learning

Community/voluntary activities

Other (*please specify*)

Unknown

9. Where was the learning provided? *(code all that apply)*

A college
Community setting
Home
Correctional institution
Voluntary organisation/charity
Private training provider
Workplace
Other setting *(please specify)*
Unknown

10. Was the learning in the form of a government employment or training programme?

Yes *(please name the intervention)*

No
Unknown

11. Age of learners:

16-24 only
25-49 only
50-65 only
Mixture of all ages
Unknown

12. Sex of learners:

Male only
Female only
Both
Unknown

13. Qualifications held by learners prior to learning: *(Note: if not at least one of these two categories, article should be excluded)*

Includes those with no qualifications
Includes those with low qualifications

14. What type of learning outcomes does the study explore? *(code all that apply)*
(Note: if no outcomes reported, article should be excluded)

Employment/labour market outcomes
Qualification outcomes
Soft outcomes (eg motivation, self esteem)
Outcomes in terms of progression towards work (but needing further training / support to get there – eg LT unemployed/disabled)
Other *(please specify)*

15. Does the study concentrate on short term/immediate outcomes of the learning or address longer term outcomes?

Short term/immediate outcomes only (ie 6 months or less)

Longer term outcomes only

Both

16. What type of methodology did the study adopt

Quantitative

Qualitative

Mixture of the two

17. If the study was an evaluation of a learning intervention, what was the study design?:

Non-randomised controlled trial

Randomised controlled trial (RCT)

Other research design

Not an intervention study

Appendix E

Data extraction tool used

Table E.1 Section A: Administrative details

A.1	Name of reviewer	A.1.1 Details
A.2	Date of review	A.2.1 Details
A.3	Please enter the details of each paper which reports on this item/study and which is used to complete this data extraction. <i>A paper can be a journal article, a book or chapter in a book, or an unpublished report.</i>	A.3.1 Paper (1) A.3.2 Unique identifier A.3.3 Authors A.3.4 Title A.3.5 Source A.3.6 Status Repeat for other papers
A.4	Main paper	A.4.1 Unique identifier
A.5	Papers reporting on the study and NOT using in data extraction	A.5.1 Paper (1) A.5.2 Unique identifier A.5.3 Authors A.5.4 Title A.5.5 Source A.5.6 Status Repeat for other papers
A.6	If the study has a broad focus and this data extraction focuses on just one component of the study, please specify this here.	A.6.1 Not applicable (whole study if focus of data extraction) A.6.2 Specific focus of this data extraction (please specify)

Table E.2 Section B: Study aim(s) and rationale

B.1	<p>What are the broad aims of the study? <i>Please write in authors' description if there is one. Elaborate if necessary, but indicate which aspects are reviewers interpretation. Other, more specific questions about the research questions and hypotheses are asked later.</i></p>	<p>B.1.1 Explicitly stated (please specify) B.1.2 Implicitly stated (please specify) B.1.3 Not stated/unclear (please specify)</p>
B.3	<p>Was the study informed by, or linked to, an existing body of empirical and/or theoretical research? <i>Please write in authors' description if there is one. Elaborate if necessary, but indicate which aspects are reviewers interpretation.</i></p>	<p>B.3.1 Explicitly stated (please specify) B.3.2 Implicit (please specify) B.3.3 Not stated/unclear (please specify)</p>
B.5	<p>Do authors report how the study was funded?</p>	<p>B.5.1 Explicitly stated (please specify) B.5.2 Implicit (please specify) B.5.3 Not stated/unclear (please specify)</p>
B.6	<p>When was the study carried out? <i>If the authors give a year, or range of years, put that. If not, give a 'not later than' date by looking for a date of first submission to the journal, or for clues like the publication dates of other reports from the study.</i></p>	<p>B.6.1 Explicitly stated (please specify) B.6.2 Implicit (please specify) B.6.3 Not stated/unclear (please specify)</p>

Table E.3 Section C: Study research question(s) and its policy or practice focus

C.1	What is/are the topic focus/foci of the study? <i>For purposes of Adult Learning Review code all as C.1.3 (curriculum).</i>	LIST AS IN EPPI MASTER COPY
C.2	What is the curriculum area, if any? <i>For purposes of Adult Learning Review code all as C.21 (vocational).</i>	LIST AS IN EPPI MASTER COPY
C.2a	Where did the learning intervention cover? <i>le keyword 8. Please use this question to add further detail if applicable.</i>	C.2.1 Basic skills (literacy, numeracy) C.2.2 Skills for specific occupation(s) C.2.3 Returning to work (eg motivation to work, self esteem, etc.) C.2.4 Job search/application C.2.5 Up-dating existing job skills C.2.6 Family learning C.2.7 Community/voluntary activities C.2.8 Other C.2.9 Unknown C.2.10 Coding is based on: authors description C.2.11 Coding is based on: reviewers inference
C.7	In which country or countries was the study carried out? <i>le keyword 4. Please use this question to provide further details where relevant, eg region or city.</i>	C.7.1 Explicitly stated (please specify) C.7.2 Not stated/unclear (please specify)
C.8	If a programme or intervention is being studied, does it have a formal name? <i>le keyword 7. Please use this question to provide further details if applicable.</i>	C.8.1 Not applicable (no programme or intervention) C.8.2 Yes (please specify) C.8.3 No (please specify) C.8.4 Not stated/unclear (please specify)
C.9	Please describe in more detail the specific phenomena, factors, services or interventions with which the study is concerned. <i>The questions so far have asked about the aims of the study and any named programme under study, but this may not capture what the study is about. Please state or clarify here.</i>	C.9.1 Details
C.10	What are the study research questions and/or hypotheses? <i>Research questions or hypotheses operationalise the aims of the study. Please write in the authors description if these is one. Elaborate if necessary, but indicate which aspects are reviewers interpretation.</i>	C.10.1 Explicitly stated (please specify) C.10.2 Implicit (please specify) C.10.3 Not stated/unclear (please specify)

Table E.4 Section D: Methods – design

<p>D.1 Which type(s) of study does this report describe? <i>D.1.3 Naturally occurring evaluation – situation where eg policy in place and evaluation is conducted of how it is working, no controls.</i> <i>D.1.4 Researcher-manipulated – evaluation includes some kind of control or attempt to do this.</i></p>	<p>D.1.1 A Description D.1.2 B Exploration of relationships D.1.3 Ca Evaluation: Naturally occurring D.1.4 Cb Evaluation: Researcher-manipulated</p>
<p>D.2 Which variables or concepts, if any, does the study aim to measure or examine?</p>	<p>D.2.1 Explicitly stated (please specify) D.2.2 Implicitly stated (please specify) D.2.3 Not stated/unclear (please specify)</p>
<p>D.3 Study timing <i>Please indicate all that apply and give further details where possible:</i> – if the study examines one or more samples, but each at only one point in time it is cross-sectional – if the study examines the same sample(s), but as it/they have changed over time, it is retrospective, provided that the interest is in starting at one time point and looking backwards in time. (Eg an intervention is in place – at some point during its life people are recruited into an evaluation, their experiences, etc. are explored retrospectively.) – if the study examines the same samples as they have changed over time and if data are collected forward over time, it is prospective provided that the interest is in starting at one time point and looking forward in time. (Eg an intervention is set up and at the same time people are recruited into the evaluation – experimental and quasi-experimental designs will be of this nature.)</p>	<p>D.3.1 Cross-sectional D.3.2 Retrospective D.3.3 Prospective D.3.4 Not stated/unclear (please specify)</p>
<p>D.4 If the study is an evaluation, when were measurements of the variable(s) used for outcomes made in relation to the intervention? <i>If at least one of the outcome variables is measured both before and after the intervention, please use the before and after category.</i></p>	<p>D.4.1 Not applicable (not an evaluation) D.4.2 Before and after D.4.3 Only after D.4.4 Other (please specify) D.4.5 Not stated/unclear (please specify)</p>

Table E.5 Section E: Methods – groups

<p>E.1 If comparisons are being made between two or more groups, please specify the basis of any divisions made for making these comparisons. <i>Please give further details where possible.</i></p>	<p>E.1.1 Not applicable (not more than one group) E.1.2 Prospective allocation into more than one group (<i>eg allocation to different interventions or allocation to intervention and control group</i>) E.1.3 No prospective allocation but use of pre-existing differences to create comparison groups (<i>eg receiving different interventions, or characterised by different levels of a variable such as social class</i>) E.1.4 Other (please specify) E.1.5 Not stated/unclear (please specify)</p>
<p>E.2 How do the groups differ?</p>	<p>E.2.1 Not applicable (not more than one group) E.2.2 Explicitly stated (please specify) E.2.3 Implicit (please specify) E.2.4 Not stated/unclear (please specify)</p>
<p>E.3 Number of groups.</p>	<p>E.3.1 Not applicable (not more than one group) E.3.2 One E.3.3 Two E.3.4 Three E.3.5 Four or more (please specify) E.3.6 Other/unclear (please specify)</p>
<p>E.4 If prospective allocation into more than one group, what was the unit of allocation? <i>Please indicate all that apply and give further details where possible.</i></p>	<p>E.4.1 Not applicable (not more than one group) E.4.2 Not applicable (no prospective allocation) E.4.3 Individuals E.4.4 Groupings or clusters of individuals (please specify) E.4.5 Other (eg individuals or groups acting as their own controls) (please specify) E.4.6 Not stated/unclear (please specify)</p>
<p>E.5 If prospective allocation into more than one group, which method was used to generate the allocation sequence?</p>	<p>E.5.1 Not applicable (not more than one group) E.5.2 Not applicable (no prospective allocation) E.5.3 Random E.5.4 Quasi-random E.5.5 Non-random E.5.6 Not stated/unclear (please specify)</p>
<p>E.6 Where there was prospective allocation to more than one group, was the allocation concealed from the participants and those enrolling them until after their enrolment? <i>Bias can be introduced, consciously or otherwise, if the allocation of participants to a programme or intervention is made in the knowledge of key characteristics of those allocated.</i></p>	<p>E.6.1 Not applicable (not more than one group) E.6.2 Not applicable (no prospective allocation) E.6.3 Yes (please specify) E.6.4 No (please specify) E.6.5 Not stated/unclear (please specify)</p>
<p>E.7 Study design summary <i>In addition to answering the questions in this section, describe the study design in your own words. You may want to draw on and elaborate answers already given.</i></p>	<p>E.7.1 Details</p>

Table E.6 Section F: Methods – sampling strategy

F.1	Are the authors trying to produce findings that are representative of a given population? <i>Please write in authors description. If authors do not specify, please indicate reviewers interpretation.</i>	F.1.1 Explicitly stated (please specify) F.1.2 Implicit (please specify) F.1.3 Not stated/unclear (please specify)
F.2	Which methods does the study use to identify people, or groups of people, to sample from and what is the sampling frame? <i>eg telephone directory, electoral register, postcode, school listing, etc. There may be two stages – eg first sampling a course/intervention and then individuals within these.</i>	F.2.1 Not application (please specify) F.2.2 Explicitly stated (please specify) F.2.3 Implicit (please specify) F.2.4 Not stated/unclear (please specify)
F.3	Which methods does the study use to select people, or groups or people (from the sampling frame)? <i>eg selecting people at random, systematically, purposively in order to reach a quota for a given characteristic.</i>	F.3.1 Not applicable (no sampling frame) F.3.2 Explicitly stated (please specify) F.3.3 Implicit (please specify) F.3.4 Not stated/unclear (please specify)
F.4	Planned sample size <i>If more than one group, please give details for each group separately.</i>	F.4.1 Not applicable (please specify) F.4.2 Explicitly stated (please specify) F.4.3 Not stated/unclear (please specify)

Table E.7 Section G: Methods – recruitment and consent

G.1	Which methods were used to recruit people into the study? <i>eg letters of invitation, telephone contact, face-to-face contact.</i>	G.1.1 Not applicable (please specify) G.1.2 Explicitly stated (please specify) G.1.3 Implicit (please specify) G.1.4 Not stated/unclear (please specify)
G.2	Were any incentives provided to recruit people into the study?	G.2.1 Not applicable (please specify) G.2.2 Explicitly stated (please specify) G.2.3 Not stated/unclear (please specify)
G.3	Was consent sought? <i>Please comment on the quality of consent if relevant.</i>	G.3.1 Not applicable (please specify) G.3.2 Participant consent sought (G.3.3 not applicable to this study) G.3.4 Other consent sought
G.4	Are there any other details relevant to recruitment and consent?	G.4.1 No G.4.2 Yes (please specify)

Table E.8 Section H: Methods – actual sample

H.1	<p>What was the total number of participants in the study (the actual sample)?</p> <p><i>If more than one group is being compared, please give numbers for each group.</i></p>	<p>H.1.1 Not applicable (eg review)</p> <p>H.1.2 Explicitly stated (please specify)</p> <p>H.1.3 Implicit (please specify)</p> <p>H.1.4 Not stated/unclear (please specify)</p>
H.2	<p>What is the proportion of those selected for the study who actually participated in the study (ie response rate)?</p> <p><i>Please specify numbers and percentages if possible.</i></p>	<p>H.2.1 Not applicable (eg review)</p> <p>H.2.2 Explicitly stated (please specify)</p> <p>H.2.3 Implicit (please specify)</p> <p>H.2.4 Not stated/unclear (please specify)</p>
H.4	<p>If the individuals in the actual sample were involved with an educational institution, which type of institution was this?</p> <p><i>Based on keyword 9 – expand as necessary.</i></p> <p><i>Please give details of the institutions (eg size, geographic location, mixed/single sex, etc.) as described by the authors. If individuals were from different institutions, please give numbers for each. If more than one group is being compared, please describe all of the above for each group.</i></p>	<p>H.4.1 Not applicable (eg review)</p> <p>H.4.2 College</p> <p>H.4.3 Community setting/organisation</p> <p>H.4.4 Correctional institution</p> <p>H.4.5 Voluntary organisation/charity</p> <p>H.4.6 Private training provider</p> <p>H.4.7 Workplace</p> <p>H.4.8 Other setting (please specify)</p> <p>H.4.9 Unknown (please specify)</p> <p>H.4.10 Coding is based on: Authors description</p> <p>H.4.11 Coding is based on: Reviewers inference</p>
H.5	<p>What ages were included in the actual sample?</p> <p><i>Based on keyword 11.</i></p> <p><i>Please give the numbers that fall within each of the given categories. If necessary refer to a page number in the report (eg for a useful table).</i></p> <p><i>If more than one group is being compared, please describe for each group.</i></p> <p><i>If follow-up study, age at entry to the study.</i></p>	<p>H.5.1 Not application</p> <p>H.5.2 16-24</p> <p>H.5.3 25-49</p> <p>H.5.4 50-65</p> <p>H.5.5 Not stated/unclear (please specify)</p> <p>H.5.6 Coding is based on: Authors description</p> <p>H.5.7 Coding is based on: Reviewers inference</p>
H.6	<p>What is the sex of the individuals in the actual sample?</p> <p><i>Based on keyword 12.</i></p> <p><i>Please give the actual numbers of the sample that fall within each of the given categories. If necessary refer to a page number in the report (eg for a useful table).</i></p> <p><i>If more than one group is being compared, please describe for each group.</i></p>	<p>H.6.1 Not applicable</p> <p>H.6.2 Single sex (please specify)</p> <p>H.6.3 Mixed sex (please specify)</p> <p>H.6.4 Not stated/unclear (please specify)</p> <p>H.6.5 Coding is based on: Authors description</p> <p>H.6.6 Coding is based on: Reviewers inference</p>

Continued

Table E.8 Continued

H.7	What is the socio-economic status of the individuals in the actual sample? <i>If more than one group is being compared, please describe for each group.</i>	H.7.1 Not applicable H.7.2 Explicitly stated (please specify) H.7.3 Implicit (please specify) H.7.4 Not stated/unclear (please specify)
H.8	What is the ethnicity of the individuals within the actual sample? <i>If more than one group is being compared, please describe for each group.</i>	H.8.1 Not applicable H.8.2 Explicitly stated (please specify) H.8.3 Implicit (please specify) H.8.4 Not stated/unclear (please specify)
H.9	What is known about the special educational needs of individuals in the actual sample? <i>eg specific learning, physical, emotional, behavioural, intellectual difficulties.</i>	H.9.1 Not applicable H.9.2 Explicitly stated (please specify) H.9.3 Implicit (please specify) H.9.4 Not stated/unclear (please specify)
H.9a	What was the economic status of those in the sample? <i>Based on keyword 5. Please give the actual numbers of the sample that fall within each of the given categories. If necessary refer to a page number in the report (eg for a useful table). If more than one group is being compared, please describe for each group.</i>	H.9a.1 Short-term unemployed (ie up to six months) H.9a.2 Long-term unemployed H.9a.3 Unemployed (can't tell if ST or LT) H.9a.4 Women looking to return to work H.9a.5 Early retired looking to return to work H.9a.6 Prisoners/offenders H.9a.7 Those about to be made redundant H.9a.8 Those about to retire H.9a.9 Those in temporary/precarious work H.9a.10 Those with a disability/health problem (not working or in precarious work) H.9a.11 Other (please specify) H.9a.12 Not stated/unclear (please specify) H.9a.13 Coding is based on: Authors description H.9a.14 Coding is based on: Reviewers interpretation
H.9b	If unemployed (H.9a1, 2 or 3), what were the reasons for being unemployed? <i>Based on keyword 6. Please give the actual numbers of the sample that fall within each of the given categories. If necessary refer to a page number in the report (eg for a useful table). If more than one group is being compared, please describe for each group.</i>	H.9b.1 Not applicable (not unemployed) H.9b.2 Made redundant H.9b.3 Sacked H.9b.4 Retired H.9b.5 Ex-offender H.9b.6 Disability/health problem H.9b.7 Left job H.9b.8 Other (please specify) H.9b.9 Not stated/unclear (please specify) H.9b.10 Coding is based on: Authors description H.9b.11 Coding is based on: Reviewers interpretation
H.9c	If unemployed or inactive (from H.9a – ie responses 7, 8 or 9), are those in the study receiving any benefits? <i>Code as many as apply. Use H.9c.5 for studies not conducted of the UK.</i>	H.9c.1 Not applicable (about those in precarious work/about to loose job) H.9c.2 Incapacity benefit H.9c.3 Lone parent benefit H.9c.4 Other UK benefit (please specify) H.9c.5 Non-UK benefit (please specify) H.9c.6 Not stated/unclear

Continued

Table E.8 Continued

<p>H.9d What qualifications did those included in the article have before the learning intervention? <i>Based on keyword 13/14. (Note: If no one with below level 2 qualifications study should not be included in the review.)</i></p>	<p>H.9d.1 All had qualifications below level 2 H.9d.2 Study covers those with a range of qualification levels – including some below level 2 H.9d.3 Coding is based on: Authors description H.9d.4 Coding is based on: Reviewers interpretation</p>
<p>H.10 Is there any other useful information about the study participants?</p>	<p>H.10.1 Not applicable H.10.2 Explicitly stated (please specify, including numbers) H.10.3 Implicitly (please specify) H.10.4 Not stated/unclear (please specify)</p>
<p>H.11 How representative was the achieved sample in relation to the population the study was seeking to represent? <i>Please specify basis for your decision.</i></p>	<p>H.11.1 Not applicable (eg review) H.11.2 Not applicable — no sampling frame H.11.3 High (please specify) H.11.4 Medium (please specify) H.11.5 Low (please specify) H.11.6 Not stated/unclear (please specify)</p>
<p>H.12 If the study involves studying samples prospectively over time, what proportion of the sample dropped out over the course of the study? <i>If the study involves more than one group, please give drop-out rates from each group separately. If necessary refer to a page number in the report (eg for a useful table).</i></p>	<p>H.12.1 Not applicable (eg review) H.12.2 Not applicable (not following samples prospectively over time) H.12.3 Explicitly stated (please specify) H.12.4 Implicit (please specify) H.12.5 Not stated/unclear (please specify)</p>
<p>H.13 For studies that follow samples prospectively over time, do the authors provide information on whether and/or how those who dropped out of the study differ from those who remained in the study?</p>	<p>H.13.1 Not applicable (eg review) H.13.2 Not applicable (not following samples prospectively over time) H.13.3 Not applicable (no drop outs) H.13.4 Yes (please specify) H.13.5 No (please specify) H.13.5 Not stated/unclear (please specify)</p>
<p>H.14 If the study involves following sample prospectively over time, do authors provide baseline values of key variables such as those being used as outcomes and relevant socio-demographic variables?</p>	<p>H.14.1 Not applicable (eg review) H.14.2 Not applicable (not following samples prospectively over time) H.14.3 Yes (please specify) H.14.4 No (please specify) H.14.5 Not stated/unclear (please specify)</p>

Table E.9 Section I: Methods – data collection

I.2 Which methods were used to collect the data? <i>Please indicate all that apply and give further detail where possible.</i>	<ul style="list-style-type: none"> I.2.1 Qualitative face-to-face interviews I.2.2 Focus group I.2.3 Group interview I.2.4 Quantitative/structured face-to-face interview I.2.5 Quantitative/structured telephone interview I.2.6 Observation I.2.7 Video recordings I.2.8 Self-completion questionnaire I.2.9 Self-completion report or diary I.2.10 Practical test I.2.11 Psychological test I.2.12 Hypothetical scenario including vignettes I.2.13 College/training records I.2.14 Management information (MI) I.2.15 Secondary data such as publicly available statistics I.2.16 Other (please specify) I.2.17 Not stated/unclear (please specify) I.2.18 Coding is based on: Authors description I.2.19 Coding is based on: Reviewers interpretation
I.3 Details of data collection methods or tools. <i>Please provide details including names for all tools used to collect data and examples of any questions/items given. Also please state whether the source is stated in the report.</i>	<ul style="list-style-type: none"> I.3.1 Explicitly stated (please specify) I.4.2 Implicit (please specify) I.4.3 Not stated/unclear (please specify)
I.4 Who collected the data? <i>Please indicate all that apply and give further details where possible.</i>	<ul style="list-style-type: none"> I.4.1 Researcher (including sub-contractors) I.4.2 Teaching/training staff I.4.3 Students/learners I.4.4 LEA/government officials (eg MI) I.4.5 Other educational/training practitioner I.4.6 User of/client for the research I.4.7 Other (please specify) I.4.8 Not stated/unclear (please specify) I.4.9 Coding is based on: Authors description I.4.10 Coding is based on: Reviewers interpretation
I.5 Do the authors describe any ways they addressed the reliability of their data collection tools/methods? <i>eg test – re-test methods Where more than one tool was employed, please provide details for each.</i>	<ul style="list-style-type: none"> I.5.1 No I.5.2 Yes (please specify)

Continued

Table E.9 Continued

I.6	Do the authors describe any ways they addressed the validity of their data collection tools/methods? <i>eg mention previous validation of tools, published version of tools, involvement of target population in development of tools.</i> <i>Where more than one tool was employed, please provide details for each.</i>	I.6.1 No I.6.2 Yes (please specify)
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Table E.10 Section J: Methods – data analysis

J.1	Which methods were used to analyse the data? <i>Please give details eg how were data handled from in-depth interviews.</i>	J.1.1 Explicitly stated (please specify) J.1.2 Implicit (please specify) J.1.3 Not stated/unclear (please specify)
J.2	Which statistical methods, if any, are used in the analysis?	J.2.1 None used J.2.2 Yes (please specify)
J.3	What rationale do the authors give for the methods of analysis for the study? <i>eg for their methods of sampling, data collection or analysis.</i>	J.3.1 None given J.3.2 Rationale given (please specify)
J.4	For evaluation studies that use prospective allocation, please specify the basis on which data analysis are carried out. <i>'Intention to intervene' means that data were analysed on the basis of the original number of participants as recruited into the different groups – eg there are 100 people on an intervention and ten drop out – however, the evaluation continues to use 100 as the denominator; so if 40 find jobs, it would be reported that 40 per cent had found a job (40 out of 100).</i> <i>'Intervention received' means data were analysed on the basis of the number of participants actually receiving the intervention – using the same example as above, if ten drop out and 40 find jobs, this would be reported as 40 out of 90.</i>	J.4.1 Not applicable (not an evaluation with prospective allocation) J.4.2 'Intention to intervene' J.4.3 'Intervention received' J.4.4 Not stated/unclear (please specify)
J.5	Do the authors describe any ways they have addressed the reliability of data analysis? <i>eg using more than one researcher to analyse data, looking for negative cases, statistical test, participant validation.</i>	J.5.1 No J.5.2 Yes (please specify) J.4.3 Not stated/unclear (please specify)

Continued

Table E.10 **Continued**

J.6	Do the authors describe the ways they have addressed the validity of the data analysis? <i>eg internal or external consistency, checking results with participants, statistical tests.</i>	J.6.1 No J.6.2 Yes (please specify) J.6.3 Not stated/unclear (please specify)
J.7	Do the authors describe strategies used in the analysis to control for bias from confounding variables? <i>eg way study designed, multi-level modelling, control variables in model.</i>	J.7.1 No J.7.2 Yes (please specify) J.7.3 Not stated/unclear (please specify)
J.8	Please describe any other important features of the analysis. <i>Should be obvious from paper, but eg include discrepancies in numbers, not clear what percentages are of, different parts of study based on different numbers and no comment on how impacts on interpretation of data, etc.</i>	J.8.1 Details
J.9	Please comment on any other analytic or statistical issues, if relevant.	J.9.1 Details

Table E.11 Section K: Results and conclusions

K.1	How are the results of the study presented? <i>eg as quotations/figures within the text, in tables, appendices.</i>	K.1.1 Details
K.2	What are the results of the study as reported by the authors? <i>Please give details and refer to page numbers in the report(s) of the study where necessary (eg key tables).</i>	K.2.1 Details
K.3	Are there any obvious shortcomings in the reporting of the data?	K.3.1 Yes (please specify) K.3.2 No
K.4	Do the authors report on all variables they aimed to study as specified in their aims/research questions? <i>This excludes variables just used to describe the sample.</i>	K.4.1 Yes (please specify) K.4.2 No K.4.3 Not stated/unclear (please specify)
K.5	Do the authors state where the full, original data are stored?	K.5.1 Yes (please specify) K.5.2 No
K.6	What do the authors conclude about the findings of the study? <i>Please give details and refer to page numbers in the report as necessary.</i>	K.6.1 Details
K.7	What types of learning outcomes does the study explore? <i>Based on keyword 15.</i>	K.7.1 Employment/labour market outcomes K.7.2 Qualification outcomes K.7.3 Soft outcomes (eg motivation, self-esteem) K.7.4 Outcomes in terms of progression towards work (but needing further training/support to get there) K.7.5 Other (please specify) K.7.6 Coding based on: Authors description K.7.7 Coding based on: Reviewers interpretation

Table E.12 Section L: Quality of the study: reporting

L.1	Is the context of the study adequately described? <i>Consider answers to previous questions: Was the study informed by, or linked to an existing body of empirical and/or theoretical research? (B.3) Do the authors report how the study was funded? (B.5) When was the study carried out? (B.6)</i>	L.1.1 Yes (please specify) L.1.2 No (please specify)
L.2	Are the aims of the study clearly reported? <i>Consider answers to previous questions: What are the broad aims of the study? (B.1) What are the study research questions and/or hypotheses? (C.10)</i>	L.2.1 Yes (please specify) L.2.2 No (please specify)
L.3	Is there an adequate description of the sample used in the study and how the sample was identified and recruited? <i>Consider answers to all questions in methods sections – on sampling strategy, recruitment and consent and actual sample.</i>	L.3.1 Yes (please specify) L.3.2 No (please specify)
L.4	Is there an adequate description of the methods used in the study to collect data? <i>Consider answers to questions in section I.</i>	L.4.1 Yes (please specify) L.4.2 No (please specify)
L.5	Is there an adequate description of the methods of data analysis? <i>Consider answers to questions J.1 and J.2. Who carried out the data analysis?</i>	L.5.1 Yes (please specify) L.5.2 No (please specify)
L.6	Is the study replicable from this report?	L.6.1 Yes (please specify) L.6.2 No (please specify)
L.7	Do the authors avoid selective reporting bias? (eg do they report on all variables they aimed to study as specified in their aims/research question?)	L.7.1 Yes (please specify) L.7.2 No (please specify)

Table E.13 Section M: Quality of the study: methods and data

M.1	Are there ethical concerns about the way the study was done? <i>Consider consent, funding, privacy, etc.</i>	M.1.1 Yes, some concerns (please specify) M.1.2 No concerns
M.3	Is there sufficient justification for why the study was done the way it was?	M.3.1 Yes (please specify) M.3.2 No (please specify)
M.4	Was the choice of research design appropriate for addressing the research question(s) posed?	M.4.1 Yes (please specify) M.4.2 No (please specify)
M.5	Have sufficient attempts been made to establish the reliability of data collection methods and tools? <i>Consider answer to I.5.</i>	M.5.1 Yes – good (please specify) M.5.2 Yes – some attempt (please specify) M.5.3 No – none (please specify)
M.6	Have sufficient attempts been made to establish the validity of data collection tools and methods? <i>Consider answer to I.6.</i>	M.6.1 Yes – good (please specify) M.6.2 Yes – some attempt (please specify) M.6.3 No – none (please specify)
M.7	Have sufficient attempts been made to establish the reliability of data analysis? <i>Consider answer to J.5.</i>	M.7.1 Yes – good (please specify) M.7.2 Yes – some attempt (please specify) M.7.3 No – none (please specify)
M.8	have sufficient attempts been made to establish the validity of data analysis? <i>Consider answer to J.6.</i>	M.8.1 Yes – good (please specify) M.8.2 Yes – some attempt (please specify) M.8.3 No – none (please specify)
M.9	To what extent are the research design and methods employed able to rule out any other sources of error/bias which would lead to alternative explanations for the findings of the study? <i>Eg (1) in an evaluation was the process by which participants were allocated to or otherwise received the factor being evaluated, concealed and not predictable in advance? If not, were sufficient substitute procedures employed with adequate rigour to rule out any alternative explanations of the findings which arise as a result? (2) Was the attrition rate low and, if applicable, similar between different groups?</i>	M.9.1 A lot (please specify) M.9.2 A little (please specify) M.9.3 Not at all (please specify)
M.10	How generalisable are the study results?	M.10.1 Details
M.11	Weight of evidence: Taking account of all quality assessment issues, can the study findings be trusted in answering the study questions? <i>In some studies it is difficult to distinguish between the findings and the conclusions. In those cases, please code the trustworthiness of the combined results/conclusions.</i>	M.11.1 High trustworthiness (please specify) M.11.2 Medium trustworthiness (please specify) M.11.3 Low trustworthiness (please specify)

Continued

Table E.13 Continued

M.12	Have sufficient attempts been made to justify the conclusions drawn from the findings so that the conclusions are trustworthy?	M.12.1 Not applicable (results and conclusions inseparable) M.12.2 High trustworthiness (please specify) M.12.3 Medium trustworthiness (please specify) M.12.4 Low trustworthiness (please specify)
M.13	In light of the above, do the reviewers differ from the authors over the findings or conclusions of the study? <i>Please state any differences.</i>	M.13.1 No difference in conclusions M.13.2 Difference in conclusions (please specify)

Table E.14 Section N: Reviewing record

N.1	Section completed <i>Please indicate sections completed</i>	N.1.1 Administrative details N.1.2 Study aims and rationale N.1.3 Study research question(s) and its policy or practice focus N.1.4 Methods N.1.5 Results and conclusions N.1.6 Quality of the study N.1.7 Reviewing record
N.2	Please use this space to give any general feedback about these data extraction guidelines.	N.2.1 Details
N.3	Please use this space to give any feedback on how these guidelines apply to your Review Group's field of interest.	N.3.1 Details

Table E.15 Review specific weight of evidence

A.1	What is the review question?	A.1.1 Details
A.2	Weight of evidence B: Appropriateness of research design and analysis for addressing the question, or sub-questions, of this specific review. <i>Please specify basis for this judgement.</i>	A.2.1 High A.2.2 Medium A.2.3 Low
A.3	Weight of evidence C: Relevance of particular focus of the study (including conceptual focus, context, sample and measures) for addressing the question or sub-questions of this specific systematic review. <i>Please specify basis for this judgement.</i>	A.3.1 High A.3.2 Medium A.3.3 Low
A.4	Weight of evidence D: Taking into account quality of execution (M.11), appropriateness of design and relevance of focus, what is the overall weight of evidence this study provides to answer the question of this specific systematic review. <i>Please specify basis for this judgement.</i>	A.4.1 High A.4.2 Medium A.4.3 Low

Appendix F

Articles, reports, etc. included in systematic map

Alfrassa, T.M. (2001), *Student Level Factors that Influence the Employability of TAFE Graduates over time: A partial least-squares analysis*, http://www.avetra.org.au/abstracts_and_papers_2001/afressa_full.pdf/US <http://nla.gov.au/nla.arc-24952>

Anderson, T., Dorsett, R., Hales, J., Lissenburgh, S., Pires, C., Smeaton, D. (2004), *Work-Based Learning for Adults: an evaluation of labour market effects*, DWP Report 187, London: DWP.

Bloom, D., Scrivener, S., Michalopoulos, C., Morris, P., Hendra, R., Adams-Ciardullo, D., Walter, J., Vargas, W. (2002), *Jobs First: Final report on Connecticut's Welfare Reform Initiative*, www.mdrc.org

Bloom, D., Michalopoulos, C., (2001), *How Welfare and Work Policies Affect Employment and Income: A Synthesis of Research. A synthesis of research*, www.mdrc.org

Bonjour, D., Smeaton, D. (2003), *The Impact of Adult Skills Pathfinder Extension Activities: Stage 2 of the evaluation*, DfES Research Report No. 438, London: DfES.

Bonnal, L., Fougere, D., Serandon, A. (1997), 'Evaluating the impact of French employment policies on individual labour market histories' *Review of Economic Studies*, 64, pp. 683-713.

Bos, J.M., Scrivener, S., Snipes, J., Hamilton, G. (2002), *Improving basic skills: the effects of adult education in Welfare to Work programs*, National Evaluation of Welfare-to-Work Strategies, www.mrdc.org

Conway, M., Bear, M. (2000), *Asian Neighbourhood Design: A Case Study of a Sectoral Employment Development Approach*, Sectoral Employment Development Learning Project, Economic Opportunities Program, Aspen Institute.

Creed, P.A., Bloxsome, T.D., Johnston, K. (2001) 'Self-esteem and Self-efficacy Outcomes for Unemployed Individuals Attending Occupational Skills Training Programs', *Community, Work and Family*, Vol. 4, No. 3, pp. 285-303.

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Decker, P.T., Olsen, R.B., Freeman, L., Klepinger, D.H. (2000), *Assisting Unemployment Insurance Claimants: The long-term impacts of the Job Search Assistance Demonstration*, www.upjohninst.org/erdc

Durnan, D., Boughton, B. (1999), *Succeeding against the Odds. The Outcomes Attained by Indigenous Students in Aboriginal Community-Controlled Adult Education Colleges, Australia*: NCVET.

Finn, P. (1998), 'Texas' Project RIO (Re-Integration of Offenders)', *Program Focus*, Washington: US Department of Justice, Office of Justice Programs, National Institute of Justice.

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Freedman, S. (2000), *Four-Year Impacts of Ten Programs on Employment Stability and Earnings Growth*, National Evaluation of Welfare-to-Work Strategies, www.mdrc.org

Freedman, S., Friedlander, D., Hamilton, G., Rock, J., Mitchell, M., Nudelman, J., Schweder, A., Storto, L. (2000), *Two-Year Impacts for Eleven Programs*, National Evaluation of Welfare-to-Work Strategies, www.mdrc.org

Godman Brown, S., Davis, S. (2000), 'Putting a New Face on Self-sufficiency Programs', *American Journal of Public Health*, Vol. 90, pp. 1383-1384.

Goodison, T. (2004), *ICT and Employability: A Case Study of Clients using UK online Centres*, Research Report RR 534, London: DfES.

Griffin, P., Pollock, J., Corneille, K., Fitzpatrick, M. (1997), *Skilling Me Softly: The Impact of Adult Literacy Classes, Longitudinal Study of the Destination of Adult Literacy Students*, Melbourne: Assessment Research Centre, University of Melbourne.

Hamilton, G., Brock, T., Farrell, M., Friedlander, D., Harknett, K. *et al.* (1997) *Evaluating two welfare-to-work program approaches: Two-year findings on the labor force attachment and human capital development programs in three sites*, National Evaluation of Welfare to Work Strategies, www.mdrc.org

Hamilton, G., Freedman, S., Gennetian, L., Michalopoulos, C. *et al.* (2001), *How effective are different Welfare-to-Work approaches? Five-year adult and child impacts for eleven programs*, National Evaluation of Welfare to Work Strategies, www.mdrc.org

Howieson, C. (1996), *Making a Move: Next Steps for Women. A Follow-up Study of Women Onto Work Students*, Edinburgh: Centre for Educational Sociology.

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Marshall, B., Macfarlane, R. (2000), *The Intermediate Labour Market. A Tool for Tackling Long-term Unemployment*, Work and Opportunities Series No. 20, York: Joseph Rowntree Foundation.

McGregor, M., Ferguson, Z., Fitzpatrick, I., McConnachie, M., Richmond, K. (1997), *Bridging the Jobs Gap: An Evaluation of the WISE Group and the Intermediate Labour Market*, York: Joseph Rowntree Foundation.

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Michalopoulos, C., Schwartz, C., Adams-Ciardullo, D. (2000), *What Works Best for Whom: Impacts of 20 Welfare-to-Work Programs by Subgroup*, National Evaluation of Welfare-to-Work Strategies, www.mrdc.org

National Centre for Vocational Education (2000), *Women in VET, Australian Education Training Statistics, At a Glance*, Adelaide, South Australia: NCVET.

National Centre for Vocational Education Research (2001), *Student Outcomes Survey: In Summary*, Adelaide, South Australia: NCVET.

Orr, L.L., Bloom, H.S., Bell, S.H., Doolittle, F., Lin, W., Cave, G. (1996), *Does Training for the Disadvantaged Work? Evidence from the National JTPA Study*, Washington: The Urban Institute Press.

Payne, J., Payne, C., Lissenburgh, S., Range, M. (1999), *Work-based Training and Job Prospects for the Unemployed: An evaluation of Training for Work*, Research Report RR96, London: DfEE.

Proudfoot, J., Guest, D., Carson, J., Dunn, G., Gray, J. (1997) 'Effect of Cognitive-Behavioural Training on Job-Finding among Long-term Unemployed People', *Lancet*, July 12, 350(9071).

Rademacher, I., Bear, M., Conway, M. (2001), *Project QUEST: A Case Study of a Sectoral Employment Development Approach*. Sectoral Employment Development Learning Project Case Studies Series, Economic Opportunities Program, Aspen Institute.

Rahmani, Z. (2000), *Literacy and Numeracy Training for the Unemployed*, <http://cleo.murdoch.edu.au/confs/acal/procs.rahmani.html>, <http://nla.gov.au/nla.arc-13983>

- Rahmani, Z., Crosier, T., Pollack, S. (2002), *Evaluating the Impact of the Literacy and Numeracy Training Programme for Job Seekers*, Canberra: Commonwealth of Australia.
- Ratcliffe, M. (2001), 'Developing Good Practice in New Deal in Colleges', London: Learning and Skills Development Agency (LSDA).
- Ryan, C. (2002), *Longer-Term Outcomes for Individuals Completing Vocational Education and Training Qualification*, Adelaide, South Australia: NCVET.
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Appendix G

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