A systematic literature review of research (1988 – 2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

Review conducted by the Transitions Review Group

The EPPI-Centre is part of the Social Science Research Unit, Institute of Education, University of London

AUTHORS AND REVIEW GROUP

The Review Team comprised Denise Smith (lead researcher), Rhianne Lilley, Lucy Marris and Irene Krechowiecka.

The Review Team was supported by Lisa Flint, who undertook additional research, and by Lawrence Copeland, who provided administrative support; both were from the Centre for Guidance Studies.

Contact details

Lindsey Bowes
Research Co-ordinator
Centre for Guidance Studies (CeGS)
University of Derby
Kedleston Road
Derby
DE22 1GB

Tel: 01332 591267
Fax: 01332 622726

Email: l.j.bowes@derby.ac.uk

ACKNOWLEDGMENTS

We also acknowledge the role played by Professor Tony Watts, in reviewing the report as part of the quality-assurance process at the Centre for Guidance Studies.

CONFLICTS OF INTEREST

There are no known conflicts of interest among members of the Review Group members

LIST OF ABBREVIATIONS

AoC	Association of Colleges
BEI	British Education Index
CEG	Career education and guidance
CeGS	Centre for Guidance Studies (University of Derby)
CGAP	Career guidance action plan
CRAC	Careers Research and Advisory Centre
CV	Curriculum vitae
DfEE	Department for Education and Employment
DfES	Department for Education and Skills
EPPI	Evidence for Policy and Practice Information and Co-ordinating Centre
ERIC	Educational Resources Information Center
FE	Further education
GCE	General Certificate of Education
GCSE	General Certificate of Secondary Education
GNVQ	General National Vocational Qualification
HMI	Her Majesty's Inspectorate
HMSO	Her Majesty's Stationery Office
ICG	Institute of Career Guidance
ICT	Information and communications technology
IFP	Increased flexibility programme
KS	Key Stage
LMI	Labour market information
LSC	Learning and Skills Council
NACGT	National Association of Careers and Guidance Teachers
NFER	National Foundation for Educational Research
NIACE	National Institute of Adult Continuing Education
NICEC	National Institute for Careers Education and Counselling
NGRF	National Guidance Research Forum
NLRG	National Library Resource for Guidance
NVQ	National Vocational Qualification
OECD	Organisation for Economic Co-operation and Development
OFSTED	Office for Standards in Education
PSE	Personal and social education
PSHE	Personal, social and health education
QCA	Qualifications and Curriculum Authority
QPID	Quality and performance improvement dissemination
RCT	Randomised controlled trial
REEL	Research Evidence in Education Library
SCAA	School Curriculum and Assessment Authority
SEN	Special educational needs
SES	Socio-economic status
SOEP	Student education and occupational planning

SSRU	Social Science Research Unit
UK	United Kingdom
USA	United States of America
WoE	Weight of evidence

The opinions expressed in this review are not necessarily those of the EPPI-Centre or the review funders. Responsibility for the views expressed remains solely with the review authors.

TABLE OF CONTENTS

SUMMARY

Background

Successful transition through the education system into further work, education and training is central to current United Kingdom Government policies, designed to promote social inclusion as well as economic prosperity through the development of skills. However, by the end of 2000, one in four of all 16–18 year-olds was not in fulltime education or training; this was below international averages reported by the Organisation for Economic Co-operation and Development (OECD) (Campbell *et al.*, 2001; OECD, 2001). Campbell *et al.* (2001) found that, overall, the proportions of the workforce holding level 2 (equivalent to GCSE grades A–C) or level 3 (equivalent to A-levels) qualifications in the UK were below those in France and Germany. In England, the Government has set targets to increase the percentage of pupils gaining five or more GCSEs at Grades A*–C (or equivalent) from over 51% in 2002 to over 55% by 2004. The proportion of 19-year-olds achieving a level 3 qualification is expected to increase from over 51% in autumn 2002 to 55% in 2004 (DfES, 2004b). Access to high-quality information, advice and guidance tailored to meet young people's needs is crucial to fulfilling these targets: 'they need to be supported by information, advice and guidance services tailored to meet their needs' (Tomlinson, 2004, p 13).

The Review Team aimed to contribute to the development of the evidence base for such work, by undertaking a systematic review of existing research evidence concerned with the impact of career education and guidance (CEG) during Key Stage 4 on the transitions of young people to post-16 opportunities. The review also aimed to consider the influence of other internal and external factors on the effectiveness of CEG in relation to the outcomes of transitions.

Aims and review questions

The overall aim of the review is to identify the available research evidence in a systematic and objective way in order to ascertain the role and impact of CEG at Key Stage 4 (ages 14–16), on young people's transitions from Key Stage 4 to post-compulsory education, employment and training.

The specific aims of the study are as follows:

- To conduct a systematic review of research evidence investigating the effects of CEG during Key Stage 4 on the transitions made by young people from Key Stage 4 to post-16 opportunities

- Where CEG has taken place, to assess the influence of internal and external factors, which might include young people's motivation and capabilities, parental involvement, socio-economic constraints, demography, family relationships, support services and environmental factors, on the impact of CEG during Key Stage 4 in relation to the outcomes of transitions

- To relate this to policy developments in CEG since 1988 in England (when the Education Reform Act led to the introduction of the National Curriculum) in order to assess their impact on practice within and outside schools

- To make recommendations based on these findings so that decisions on policy and practice can be evidence-based

Our research question, considered within the context of the reforms to secondary education set out in *14-19: Opportunity and Excellence* (DfES, 2003b)*,* is as follows*:*

What is the impact of CEG policies and practice during Key Stage 4 (ages 14–16) on young people's transitions from Key Stage 4 to post-16 opportunities?

The following sub-question was also considered:

In what ways do internal/external factors influence the effectiveness and outcomes of career education and guidance?

Methods

The review methodology followed the procedures devised by the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre). The Review Team conducted a comprehensive search for reports of relevant empirical research that investigated the effect of CEG during Key Stage 4 on transition to post-16 opportunities. Potentially relevant papers were identified through electronic databases and handsearching of journals. The identified papers were screened by title and abstract against the inclusion and exclusion criteria. *Included* studies focused on CEG delivered in Key Stage 4, were written in English and were published after 1988. Studies were *excluded* if they focused solely on the general curriculum, on citizenship (the subject of a separate review) or on vocational education, were not written in English or were not based upon empirical research.

Full copies of studies that met these criteria were keyworded, using the EPPI-Centre core keywording strategy (EPPI-Centre, 2002a; see Appendix 2.4) and additional review-specific keywords (see Appendix 2.5), producing a systematic map of the relevant research. At this point it was agreed that, given the England-specific context of the review, studies not undertaken in England should be excluded from the in-depth review, along with those in which CEG was included to some extent but where it was not possible to separate out CEG and its impact from other factors and/or activities.

Detailed data extraction was then applied to all the studies remaining in the in-depth review, through the application of the EPPI-Centre standardised data-extraction guidelines (EPPI-Centre, 2002b). These guidelines provided the basis for the Review Team's assessment of the quality of the design and findings of the studies, articulated as 'weight of evidence'. The results of the data-extraction process were then synthesised according to the framework underpinning the review strategy.

Rigorous quality-monitoring procedures were applied throughout the review process to ensure that all judgements were unbiased. All decisions made were independently verified by two members of the Review Team and were moderated by staff from the EPPI-Centre. In the main, differences of opinion were resolved through discussion; consensus was reached without difficulty.

Results

The initial search yielded 8,692 reports, of which 8,684 were identified through electronic searching and 8 through handsearches. Screening by title and abstract reduced the number of potential reports for inclusion in the systematic map to 132. The subsequent two-stage screening process, based on full texts, only identified 24 studies that met all of the set inclusion criteria. The application of the additional two exclusion criteria resulted in a total of 10 studies being included in the in-depth review.

The quality of the studies included in the in-depth review varied. None of these studies was judged to provide a high weight of evidence and only two were judged as providing a medium-high weight of evidence (Morris *et al.*, 1999; SWA Consulting, 1998). The majority (N=6) provided a medium weight of evidence (Keys *et al.*, 1998; Lloyd, 2002; Maychell *et al.*, 1998; Munro and Elsom, 2000; Russell and Wardman, 1998; Wardman and Stevens, 1998). Two studies included in the in-depth review provided a medium-low weight of evidence (Hodkinson and Sparkes, 1993; Rolfe, 2000); no study provided a low weight of evidence.

Synthesis and findings

The studies in the in-depth review were found to address the main review question in three different ways. Some studies were concerned with the general impact of CEG provision; some with the impact of specific CEG interventions; and some with the impact of CEG on specific groups of young people. The synthesis therefore looked at each of these issues in turn, identifying the findings for each. Although some studies had relevance to more than one of the issues, they were considered only under the one to which they were judged as being most relevant. All the 10 studies in the in-depth review were considered to be relevant to the review sub-question concerning the influence of external/internal factors on the effectiveness of CEG, so evidence from all 10 was considered against this sub-question.

When considering all the findings and conclusions, a number of themes emerged:

A.   Career-related learning and skills and transitions

B.   General CEG provision

C.   Individual guidance

D.   Provision of information

E.   Timing of provision

F.   CEG and different groups of young people

G.   The importance of people in CEG

H.   Skills of those responsible for delivering CEG

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

The findings and conclusions are set out below under each of these themes.

A. Career-related learning and skills and transitions

i.   The level of young people's career-related skills seems to be an important factor in their transition at 16, with those with a high level of skills being less likely to modify choices or switch courses (SWA Consulting, 1998).

ii. Career exploration skills and self-awareness skills seem to be the most important of the career-related skills in terms of their impact on transition at 16 (Morris *et al.*, 1999).

iii. CEG provision, such as individual interviews, group-work sessions, access to career-related information and a wide range of work-related activities, appears to have a positive impact on the development of pupils' career-related skills (Morris *et al.*, 1999; Munro and Elsom, 2000; SWA Consulting 1998; Wardman and Stevens, 1998).

iv. Young people might more effectively acquire the skills to use labour market information (LMI), and possibly other career-related information, through the use of practical activities, such as project work about careers that interest them (Rolfe, 2000).

B   General CEG provision

i.   There appear to be inconsistencies in the quality of CEG provision and providers, with the quality varying from school to school (Keys *et al.*, 1998, SWA Consulting, 1998).

ii. The integration of career education programmes with guidance provision and with the wider curriculum may be a key factor in determining the effectiveness and impact of CEG on young people's skill development and transitions (Hodkinson and Sparkes, 1993; Morris *et al.*, 1999).

iii. Partnership working, both within school (i.e. between departments) and between the school and other agencies and organisations, can affect CEG provision, to the benefit of the pupils (Lloyd, 2002; Morris *et al.*, 1999; Munro and Elsom, 2000).

iv. CEG interventions, timetables and tools appear to be more effective if they are flexibly designed to meet the needs of individual young people, or specific groups of young people, rather than the needs of the organisation and its (and others') systems (Hodkinson and Sparkes, 1993; Keys *et al.,*1998; Lloyd, 2002; Maychell *et al.*, 1998; Munro and Elsom, 2000; Russell and Wardman, 1998).

C   Individual guidance

i.   Good-quality individual career guidance is important in the development of learning outcomes, such as career-related skills, especially opportunity awareness, career exploration and decision-making skills (Morris et al., 1999; SWA Consulting, 1998).

ii. Some young people find the guidance given by careers advisers to be the most useful form of help in making decisions about, and preparing for, post-16 transitions; others do not find it helpful (Keys et al., 1998; Maychell et al., 1998).

iii. There is evidence that young people would like more help with their career decision-making (Keys et al., 1998; Maychell et al., 1998).

iv. Young people's perceptions of how good career guidance is may be contingent upon whether they made substantive progress towards reaching a

conclusion, or resolving a dilemma, during their careers interview(s) (Hodkinson and Sparkes, 1993).

v. Young people seem to benefit from help from those providing guidance in setting a wider context within which to make their career decisions (Hodkinson and Sparkes, 1993).

D Provision of information

i. Access to information about post-16 options is important to the development of young people's learning outcomes, but provision of such information is patchy (Morris *et al.*, 1999; Munro and Elsom, 2000; SWA Consulting, 1998).

ii. Young people identify gaps in the information they receive and would like to receive more information about courses, jobs and careers, especially through the workplace and contacts with working people (Keys *et al.*, 1998; Maychell *et al.*, 1998; Morris *et al.*, 1999; Munro and Elsom, 2000; Rolfe, 2000; SWA Consulting, 1998).

iii. Care needs to be taken in the design of career information to ensure that it is seen as relevant and appropriate by its target audience (Russell and Wardman, 1998).

iv. Some types of career information may be more useful to young people in making and implementing secondary-level decisions about their options at 16 (what course or training programme to choose, etc.) rather than in making their primary-level decision (whether to remain in, or leave, education). It is important that such information provides sufficient detail to enable young people to use it for the latter purposes too (Russell and Wardman, 1998).

v. Parents are seen by young people as being a key source of information (Hodkinson and Sparkes, 1993; Maychell *et al.*, 1998; Munro and Elsom, 2000; Rolfe, 2000; Russell and Wardman, 1998; Wardman and Stevens, 1998).

vi. LMI might be more effective if it were presented in a range of formats and used successively in a variety of ways and by a variety of deliverers, including within the curriculum (Rolfe, 2000).

vii. LMI might be more likely to be more effective when it includes information that interests young people, which appears to include that related to equal opportunities (Rolfe, 2000).

viii. There seems to be a need to increase the amount of career-related information available and to ensure that it provides a more 'cosmopolitan' picture (i.e. one which goes well beyond young people's own locally based knowledge of options and occupations) (Hodkinson and Sparkes, 1993).

E Timing of provision

i. There appear to be inconsistencies in the timing of CEG interventions (Keys *et al.*, 1998).

ii. There is evidence that, while career advice and guidance is often seen as playing an important part in young people's decisions about the future, young people would have found it more useful to have received career guidance at an earlier stage of their school career (Keys *et al.*, 1998; Maychell *et al.*, 1998).

iii. There is evidence that young people would like more help with their decision-making, at times that best suit their needs (Keys *et al.*, 1998; Maychell *et al.*, 1998).

iv. Earlier CEG interventions, lower down the school, might help to raise pupils' awareness of subject-related careers and to counteract external influences

such as peer pressure, which are very strong by Year 11, when post-16 choices are made (Munro and Elsom, 2000).

v. The demands of the school option-choice system put pressure on the timings and outcomes of careers adviser interview programmes and on pupils to make up their minds early in the year (Munro and Elsom, 2000).

vi. Career information should be produced and distributed at times which meet the needs of young people (Russell and Wardman, 1998).

vii. There is evidence that young people planning to enter the labour market at 16 are less likely to have made their final decision by the summer after Year 11 than those who are planning to stay in education, suggesting that the former group of young people may benefit from a higher level of CEG intervention during Year 11. Conversely, those planning to stay in education appear more likely to have made this decision by the end of Year 10, so may benefit from earlier interventions (Russell and Wardman, 1998).

F   CEG and different groups of young people

i. CEG provision appears to have the greatest impact on pupils of moderate/higher ability in schools with lower/average achievement, typically without sixth forms (SWA Consulting, 1998).

ii. Many studies found evidence that the impact of general CEG provision is different for different groups of young people: for example, underachieving young men; those with higher or lower expected or actual attainment; those likely to leave or stay in education; and those in schools with different characteristics (Hodkinson and Sparkes, 1993; Lloyd, 2002; Maychell *et al.*, 1998; Morris *et al.*, 1999; SWA Consulting, 1998; Wardman and Stevens, 1998).

iii. Additional CEG provision, tailored to meet the needs of young people identified as being 'at risk', and delivered by those with appropriate skills, knowledge and attitudes, can have a significant impact on young people's learning outcomes and can help them to prepare for post-16 transitions (Lloyd, 2002).

iv. The influence that subject and other teachers appear to have upon the choices made by young people seems to vary for different groups of young people (Munro and Elsom, 2000).

G   The importance of people in CEG

i. There is some evidence that individual subject and other teachers have an influence upon the choices made by young people both outside and within CEG provision (Keys *et al.*, 1998; Maychell *et al.*, 1998; Munro and Elsom, 2000).

ii. Young people appear to value the involvement of people in the provision of career information, seeing them as more important and/or more helpful than written sources of information (Hodkinson and Sparkes, 1993; Keys *et al.*, 1998; Maychell *et al.*, 1998; Munro and Elsom, 2000; Rolfe, 2000; Wardman and Stevens, 1998).

iii. Parents are seen as a key source of information and influence upon a young person's career choices. Evidence suggests that both career education and the support of parents are important to help young people through the transition process (Hodkinson and Sparkes, 1993; Maychell *et al.*, 1998; Munro and Elsom, 2000; Rolfe, 2000; Russell and Wardman, 1998; Wardman and Stevens, 1998).

H   Skills of those responsible for delivering of CEG

i.   There is evidence to suggest that careers advisers need access to systematic training designed to ensure that their occupational knowledge is kept up-to-date (Munro and Elsom, 2000).
ii.   In order to work effectively with young people 'at risk', workers need to have, or to develop, a set of appropriate skills and approaches (Lloyd, 2002).
iii.   Staff development appears to be needed for those using LMI with young people, especially where it is being used within the curriculum (Rolfe, 2000).
iv.   Practitioners need to have and to use skills that will help young people to widen their views of the options open to them and provide them with strategies to counter the socio-economic factors and the social and cultural constraints that impact upon them, and increase their self-confidence and self-esteem (Hodkinson and Sparkes, 1993).

Many of these findings and conclusions support findings from previous research and reviews. Findings and conclusions in relation to general CEG provision and the importance of the development of career-related skills upon young people's transitions echo those of an earlier literature review (Moon *et al.*, 2004). This review identified that, while CEG helps students to develop the knowledge and skills which they need to make and implement course and career choices, there are inconsistencies between schools in the quality of provision, in the way in which it is planned and delivered, and in the skills of those delivering it that impact upon its effectiveness and upon the outcomes for young people. Such concerns about the quality and consistency of CEG provision were identified by schools themselves in a survey reported by the National Audit Office (2004) in which many schools reported that they did not feel that they had the capacity to provide appropriate levels of CEG for young people.

Strengths and limitations

Strengths

The systematic review process has enabled the Review Team to undertake a transparent assessment of the available research to provide a sound evidence base for practitioners and policy-makers. A systematic approach, in accordance with EPPI-Centre guidelines and procedures, was followed. Careful recording was a key feature in selecting studies found to be relevant to the review question. That only 10 studies were selected from an original total of 8,892 identified meant that attention was given to the most relevant studies for answering the question of the review as defined by the EPPI-Centre guidelines. Moreover, the EPPI-Centre quality-assurance process, which includes double data-entry by members of the Review Team and support staff from the EPPI-Centre, and moderation through the agreement of all final entries between at least two people, ensures the rigour of the review process.

Although none of the studies in the in-depth review was judged to have a high weight of evidence, with the majority being assessed as providing a medium weight of evidence, the review has identified a number of findings that are common across many of the studies.

The review process has identified gaps in the research that are relevant for young people in transition from Key Stage 4 to post-16 opportunities. The results

raise concerns about the quantity and quality of the published English research that considers the impact of CEG delivered at this crucial stage for young people. Concerns are also raised about the transparency of the methodologies recorded in the research reports.

Limitations

The Review Team is aware that there may be relevant studies that have not been identified. There is a possibility that unpublished reports and PhD theses may provide relevant research evidence, but these can be difficult to track down and the costs of doing so may be prohibitive. It should also be noted that studies that are not written in English and/or not undertaken in England might provide insights into the impact of CEG on young people's transitions in education that are relevant to practice in England.

The systematic review identified some studies that, although relevant to the research question, had to be classified as being of a medium weight of evidence either because of the lack of reported methodological processes or because the methods were not totally appropriate for addressing the research question.

For reviews asking 'what works' questions, greater weight should be given to studies that reduce selection bias. Given the qualitative nature of many of the studies considered here, it is not surprising that no studies were judged as providing a high weight of evidence, and only two were judged as providing a medium-high weight of evidence, despite their relevance to the review question. There is debate in educational and other research about the relative merits of qualitative versus quantitative research for addressing different types of research questions.

The review question, focusing as it does on CEG activity *within* Key Stage 4, its *impact* upon young people and in particular on their transitions *at the end of and beyond* Key Stage 4, also proved to be somewhat problematic. On the whole, the identified studies tended either to look at CEG activity and its impact at or close to the time of delivery, or asked young people to look back on activities in which they had taken part in a previous year. There were no longitudinal studies that looked at CEG in Key Stage 4 and its impact upon skills, and then tracked the young people into their post-16 options in order to look at the ongoing impact of CEG in Key Stage 4 upon their progress post-16.

When changes in policy and practice occur, there is inevitably a timelag before research to investigate the impact of the policy, and the resulting changes in strategy and practice, can be commissioned and completed. This means that systematic reviews such as this, which are dependent upon accessing the results of empirical research, may not cover research directly related to recent policy changes. Thus, in the present review, many of the studies included were undertaken in the 1990s and therefore predated far-reaching policy changes, such as the 'focusing agenda' and the introduction of Connexions.

Implications

The systematic review process has identified both gaps and shortcomings in the research evidence that are highly relevant to our review questions relating to young people's transitions from Key Stage 4 to post-16 opportunities. Although the conclusions have to be considered tentative because few high quality studies were identified that met the rigorous criteria applied through the EPPI-Centre

process, the results raise concerns for policy-makers, strategic planners, managers, practitioners, researchers and other end-users about the quantity and quality of published research on the impact of CEG delivered at this crucial stage for young people. These findings are particularly important in view of the decision to extend statutory provision of CEG to Years 7 and 8 from September 2004 and of current developments in relation to the 14–19 curriculum.

Policy-makers and strategic planners (both local and national), researchers, practitioners and their managers all play their part in relation to the planning and implementation of CEG. The suggested implications of the review for each of these groups are set out below.

Policy and strategy

While Government sets national policy, the responsibility for strategic planning and its delivery is largely undertaken by organisations at regional and local levels. The following implications for policy-makers and strategic planners, both local and national, can be identified from the review:

- The review revealed evidence to suggest that only one in seven pupils received a CEG package that met acceptable criteria; positive pupil outcomes were most evident in schools where career education was effectively integrated with guidance and into the wider curriculum, and where CEG tended to have a higher profile. There appears to be no recent evidence to suggest that this situation has improved. Those responsible for strategic planning should consider how best they can raise the profile of CEG and support schools to improve its quality.
- There is evidence that new initiatives can be implemented more effectively if they are set within a long enough timescale and accompanied by appropriate resources. Policy-makers should consult fully with strategic and delivery organisations before commissioning new initiatives, to ensure that the timescales and resources available allow for effective implementation of such initiatives.
- There is evidence that partnership between schools and outside agencies is important, especially in the planning and delivery of CEG provision targeted at specific groups of young people (e.g. those 'at risk'). While such partnership working needs to take place at the level of delivery, policy-makers need to consider how best they can encourage partnership working at national and local levels.
- A number of studies identified the differing impact of general CEG provision, and of specifically targeted CEG programmes, on different groups of young people. Policy-makers need to consider how best they can ensure that policy enables and encourages delivery organisations to provide CEG in a consistent yet differentiated way, to ensure that it meets the needs of such different groups.
- There is evidence in the review to suggest that CEG provision should be flexibly designed to ensure that it meets the needs of individual young people, and specific groups of young people, rather than the needs of the school and other systems. Strategic planners should consider how best they can ensure that school and other systems do not impede CEG provision being flexible and able to meet differentiated needs.

Research

The results of this review also raise a number of key issues for researchers:

- None of the ten studies in the review has been judged as providing a high weight of evidence relating to the impact of CEG on the transition from Key Stage 4 to post-16 opportunities, and only two were judged as providing a medium-high weight of evidence. There is a need for funding mechanisms to support high quality research into the impact of CEG. In addition, researchers should include full information about their research methods and, wherever possible, should append their research tools to the report, to ensure transparency to the reader.
- The majority of UK studies included in the review were carried out prior to the Careers Service 'focusing agenda' in the UK and the introduction of Connexions in England. Although some studies refer to careers companies and partnerships, there seems to be little evidence about their effectiveness.
- There is a need for further research to be funded to provide high-quality, up-to-date and detailed evaluation of the impact of general CEG provision, targeted CEG provision, and specific CEG interventions delivered in schools and/or through external organisations, upon young people in general at and beyond Key Stage 4, and on different groups of young people at the same stages.
- None of the studies in the in-depth review incorporated any long-term follow-up with the young people concerned. Longitudinal studies would provide useful information about the impact of CEG at, and well beyond, the point of transition into post-16 opportunities.
- Care should be taken to ensure that terms such as 'significance' are not used indiscriminately. Authors should also avoid the use of vague terms, such as 'knowledge and skills', without providing clear definitions for their readers.
- Researchers should, wherever possible, publish and disseminate their research findings across the policy-making and practice communities to ensure that all available evidence is accessible to users. They should also consult with, and seek feedback from, end-users of the research. Initiatives, such as the recently launched National Guidance Research Forum, may provide an appropriate forum for such dissemination and consultation.
- Only one of the studies in the in-depth review was a researcher-manipulated evaluation and none used a 'control group' to enable direct comparisons to be made between the outcomes for those who had, and those who had not, received an intervention. Researchers should consider undertaking more research of this nature, within ethical constraints.
- The review has identified that gender may be an important issue. First, it has been suggested that progress towards decision-making and decidedness on post-16 options is greater for young women than young men. Second, it seems that some young men's sex-typed attitudes towards masculinity may make it harder for them to admit that they do not know what they intend to do. Research is needed to explore whether there is any relationship between these two factors and, if so, to consider what the implications might be for CEG.
- One study, which looked at the impact of CEG provision in Key Stage 4 and its impact upon transitions, identified a need for further research to consider whether the career-related skills developed by young people up to and during Year 11, which the author found to be relatively high, are important at the point at which they implement their post-16 and subsequent decisions.

Practice

Alongside policy-makers and researchers, it is equally important that practitioners and professional bodies have access to reliable research evidence on which to base their practice. In particular, the sharing of good practice is invaluable for those involved in the delivery of CEG. It is recognised that practitioners may not always have the autonomy to be able to implement changes to their practice without reference to their managers. However, being at the 'front-line', they are well placed to consider the implications of research findings and to seek to influence those responsible for planning and managing CEG processes. The implications of the review findings for practitioners and their managers are as follows:

- The review revealed evidence to suggest that only one in seven pupils received a CEG package that met acceptable criteria; positive pupil outcomes were most evident in schools where career education was effectively integrated with guidance and into the wider curriculum, and where CEG tended to have a higher profile. Managers and practitioners should consider how career education can be effectively integrated with guidance and with the wider curriculum.
- The reviewed studies have provided some evidence to suggest that clearly targeted interventions may help young people to develop the skills they need to make and implement appropriate choices at 16. Interventions should continue to be reviewed and evaluated through high-quality research, and the findings disseminated. This will ensure that the effectiveness of interventions is monitored and that good practice is recorded and shared.
- Practitioners should work with their practice network to contribute to the sharing of best practice. Where necessary, practitioners should lobby professional bodies and policy-makers to improve provision for young people in transition.
- Research evidence to evaluate the impact of new approaches to CEG – such as distinctions between self-help, brief-assisted and intensive support, and new methods, including through one-to-one, group work, and ICT – is not available from this review. Practitioners should ensure that learning outcomes from the use of new approaches to CEG are evaluated, reported and disseminated within their practice networks and to policy-makers.
- Students have identified a need for guidance well before the point at which they need to make decisions about their future. Practitioners should actively promote the value of CEG to students from Year 7, and to staff and others in schools, in order to raise their awareness of its potential benefits.
- There is evidence in the review to suggest that person/client-led CEG provision is more effective than system-led provision. Practitioners and their managers should consider how best to ensure that provision is differentiated and available in ways and at times that meet the needs of individual young people and of particular groups of young people (e.g. those 'at risk', young women and young men, 'leavers' and 'stayers', those with expected higher/lower attainment, and those with special needs).
- There is evidence that learning outcomes are greater when students are involved in practical activities and when information is presented successively in a variety of formats and by a variety of deliverers, within and outside the curriculum. Practitioners and their managers should consider how best to ensure that CEG provision includes practical activities and the successive presentation of information using a variety of formats and deliverers, both in and out of the curriculum.

- One study identified the need for practitioners to ensure that they help young people to widen their views of the options open to them, provide them with strategies to counter the socio-economic factors/cultural constraints that impact upon them, and use techniques aimed at increasing their self-esteem and self-confidence.
- Parents are identified as key influences on young people's choices, and both CEG provision and parental support appear to be important to help young people through the transition process. Practitioners should identify ways in which they can support parents and provide them with information that will help them to support their sons/daughters.
- One study identified that young people's perceptions of guidance were influenced by whether they had made substantive progress towards reaching a conclusion or resolving a dilemma. Practitioners should ensure that young people are made aware that guidance is a process aimed at reaching a conclusion and/or resolving a dilemma, and should ensure that progress towards these objectives is summarised by the practitioner, and understood by the young person, at the end of each guidance session.

1. BACKGROUND

Successful transition through the education system into further education, training and work is central to current United Kingdom Government policies, designed to promote social inclusion as well as economic prosperity through the development of skills. However, by the end of 2000, one in four of all 16–18 year-olds was not in fulltime education or training, below international averages reported by the OECD (Campbell *et al.*, 2001; OECD, 2001). Campbell *et al.* (2001) found that, overall, the proportions of the workforce holding Level 2 (equivalent to GCSE grades A–C) or Level 3 (equivalent to A-levels) qualifications in the UK were below those in France and Germany.

1.1 Aims and rationale for the current review

Rationale

In England, the Government set targets to increase the percentage of pupils gaining five or more GCSEs at grades A*–C (or equivalent) to 55% by 2004. The Department for Education and Skills (DfES) identified that the percentage of pupils achieving five or more GCSEs at grades A*–C had risen from 50% in 2001 to just under 53% in 2003. The 2004 targets set for 19-year-olds were for 85% to achieve a level 2 qualification and 55% to achieve a level 3 qualification. The percentage achieving a level 2 qualification rose from just under 75% in autumn 2001 to just over 76% in autumn 2003; the percentage achieving a Level 3 qualification rose from over 50% to just under 52% in the same period (DfES, 2004b). Access to high-quality information, advice and guidance designed to meet young people's needs is crucial in fulfilling these targets:

> they need to be supported by information, advice and guidance services tailored to meet their needs (Tomlinson, 2004, p 13)

The importance of career education and guidance is widely acknowledged. The current review being undertaken by the Department for Education and Skills (DfES) of 14–19 education with its requirement for enhanced information, advice and guidance means that this systematic review is particularly timely and will offer a valuable contribution to the debate about who should provide career education and guidance, how and to whom. The interim report of the Working Group on 14–19 Reform (Tomlinson, 2004) highlights the need for career education and guidance programmes in schools and colleges. For young people to make the most of the opportunities in the proposed 14–19 reforms, Tomlinson argues they 'must be prepared with the skills and self-awareness to exercise their choices effectively' (p 13). The wider range of choices available to young people within the reformed curriculum will have implications for practitioners working in and with schools and young people.

The end of Key Stage 4 is a crucial time in terms of career choices. It is the period leading to the end of compulsory schooling and is for many young people the first time they have had to make significant choices about their future. It is also the first time many will have encountered the need to apply and compete for education, work or training opportunities. As the DfES (2003b) document *14–19 Opportunity and Excellence* states: 'if young people do not receive high quality

advice and guidance at critical points during the 14–19 phase, they may take the wrong decisions or even lose heart and drop out' (p 11). At the same time, Watts (1999) observes that 'the orderly pathways are disappearing: as Robin Linnecar graphically put it, it's now more like crazy paving, which individuals are having to lay for themselves' (p 2).

The refocusing of the Careers Service from 1998 onwards, followed by the incorporation of the Careers Service into the Connexions Service from April 2001, shifted the focus of support for young people towards enhanced services for young people at risk. This led to a growing perception that competing policy objectives were leaving a large number of students with unmet guidance needs, and that the expectations of what career education could achieve without complementary guidance provision might be unrealistic. OECD (2003), in the UK Country Note produced as part of its Career Guidance Policy Review, noted that:

> The introduction of Connexions has not been without controversy. Concerns that the pre-Connexions 'focusing agenda' was resulting in a diminution of career guidance services to those not deemed to be 'at risk' initially spilled over into concerns that the same might be institutionalised under Connexions (p 6).

Careers professionals and practitioners have expressed the view that targeted, focused services which aim to promote social inclusion may be doing so at the expense of the guidance needs of those pupils who are not identified as being at risk. The DfES (2001) Quality and Performance Improvement and Dissemination (QPID) survey, *A Review of Careers Service Focusing in Schools*, states:

> A key common view among teachers is that transition from Key Stage 4 is the first time in the education system that students are required to make decisions that can affect their futures. They believe the choices for students in year 11 and year 13 are becoming more and more complex, largely irrespective of the ability of the student. They find it hard to understand why guidance services would be reduced or withdrawn at a time of major change and uncertainty in the sixth form curriculum.
>
> …Teachers argue that the system needs a person who is a specialist in these issues. They see the role of careers adviser as crucial in offering students and their parents up to date information about options and explanations of the implications of choices.
>
> …Since focusing was introduced most students likely to achieve five or more GCSE passes at Grade A* to C will perhaps have had the opportunity to attend one or two small group discussions about particular occupations or progression routes they are considering. If they are successful at GCSE then the likelihood is that they will not be able to easily access further help from the careers adviser in sixth form. (p 30)

A review of the impact of CEG on young people in transition at Key Stage 4 is, therefore, very timely. It can draw together empirical data on the potential benefits of career education and guidance at this crucial stage in a young person's development, and highlight the consequences if CEG provision is eroded. In particular, the outcomes of this review could feed directly into policy, adding value to the end-to-end review of CEG currently being undertaken by the DfES.

Aims

The overall aim of the review is to identify the available research evidence in a systematic and objective way in order to ascertain the role and impact of CEG at Key Stage 4 (ages 14–16) on young people's transitions from Key Stage 4 to post-compulsory education, employment and training. The review focused on empirical research to ensure that its recommendations are evidence-based.

The review explicitly sought to identify the interventions that CEG offers during Key Stage 4 and to evaluate the effects on the transition process from Key Stage 4 to post-compulsory opportunities. There is research evidence (e.g. Macrae *et al.*, 1996) to suggest that there are overarching influences that impact on the outcomes of transition which are not necessarily the direct result of previous educational experiences, such as the views and wishes of parents/carers. Where studies consider these influences alongside CEG, the review set out to identify them and the ways in which CEG provision could take account of them in order to be more effective.

In capturing and disseminating the evidence, the review also set out aiming to inform and make recommendations for policy and practice, and to identify questions that need to be addressed by research in the future.

In summary, the specific aims of the study are as follows:

- To conduct a systematic review of research evidence investigating the effects of CEG during Key Stage 4 on the transitions made by young people from Key Stage 4 to post-16 opportunities

- Where CEG has taken place, to assess the influence of internal and external factors, which might include young people's motivation and capabilities, parental involvement, socio-economic constraints, demography, family relationships, support services and environmental factors, on the impact of CEG during Key Stage 4 in relation to the outcomes of transitions

- To relate this to policy developments in CEG since 1988 in England (when the Education Reform Act led to the introduction of the National Curriculum) in order to assess their impact on practice within and outside schools

- To make recommendations based on these findings so that decisions on policy and practice can be evidence-based

1.2 Definitional and conceptual issues

Definitions

Career Education and Guidance (CEG)

This can be a formal or informal process:

- *Formal CEG* describes activities provided through interventions that help pupils make informed choices and transitions affecting their future education,

training and employment. These could come from a range of providers for whom guidance is a professional activity: for example, schools, Connexions, Education-Business Partnerships (EBP), training providers, employers, Higher Education (HE) and Further Education (FE).

Such activities will normally be part of a planned and co-ordinated programme of career education activities in the curriculum, designed to help pupils to develop their knowledge and understanding of themselves and of opportunities in education, training and employment. The programme will also help to develop the skills necessary to obtain and handle information, to be realistic about personal capabilities and aspirations, and to make informed decisions about future career moves. Such provision may be delivered through discreet 'careers' lessons, or provided within broader programmes such as within Personal, Social and Health Education (PSHE).

- *Informal CEG* describes activities provided by those for whom guidance is not a professional activity (e.g. parents, peers, friends).

Career guidance

Career guidance refers to provision through which pupils are assisted in applying their knowledge, skills and information to make realistic choices and appropriate decisions about future options. Opportunities are provided for reviewing learning, assessing self and options, setting new goals and recording achievements. Guidance may be provided through interviews and small-group work, resulting in action planning and recording of achievement, which helps pupils make and implement their personal career plans.

Although CEG and career guidance are defined separately above, in practice they are usually interwoven, with teachers, lecturers, careers/personal advisers and others contributing to both. Thus research studies on such interventions are likely to encompass elements of both career education and career guidance.

Internal factors

Internal factors refer to an individual's self-awareness. This will include self-esteem and motivation. It also refers to capabilities, taking into account both academic and social skills. Such internal factors may be particularly important for young people who are seen as being at risk of disengaging from learning.

External factors

External factors refer to outside influences, such as the views of parents/carers and peers; the effects of gender, ethnicity, socio-economic constraints, demography and family relationships; support services; and environmental factors.

Transition

Educational progression in the UK, as in other countries, is characterised by a series of distinct phases, with boundaries between the end of one stage of education and the beginning of the next. Transition in this context describes the move between these phases, and in particular – in the context of the present review – from compulsory education to a range of post-compulsory opportunities including education, training and employment.

1.3 Policy and practice background

Change and innovation have characterised the provision of career guidance services in recent years. Until 1991, Careers Services were part of Local Education Authority provision. Between 1991 and 1995, Careers Services in England, Scotland and Wales were contracted out to private providers. Competitive tendering was introduced, which brought about a change in the culture of services, notably towards an approach driven by quantitative targets. As noted by Killeen and Kidd (1996), 'output related funding (15 per cent of funds was based on completed action plans) brought with it the danger of emphasis on meeting targets rather than on the underlying quality of services to individuals' (pp 161-162). However, the basic service remained much the same, with the new services providing guidance to all students at schools and colleges, largely through individual interviews. The role and duties of the Careers Service were set out in sections 8 to 10 of the Employment and Training Act 1973 (as amended by sections 45 and 46 of the Trade Union and Employment Rights Act 1993). The Department for Education and Employment (1997a) describes these as being 'to provide careers information and guidance to young people' (p 36). The same document set out young people's entitlement: 'everyone in schools and within at least two years of leaving fulltime education is entitled to careers information and guidance' (p 36).

This was followed from 1998 onwards by the 'refocusing' of Careers Services. The aim here was to provide more help to the young people identified as having the greatest need: those perceived to be most at risk of not continuing with any form of learning after leaving school. Although this approach was largely welcomed, it also raised concerns that the principle of a universal guidance entitlement was being eroded and that this could have a detrimental effect on those young people not in the priority group. These concerns were identified in research by Morris *et al.* (2001) into the delivery of career guidance in schools:

> Amid criticisms of the decline of the universal entitlement to individual careers guidance, some schools also felt that the focusing agenda sent out a message to students (and staff) that 'only the thick ones get to see the careers adviser' (p 32).

> Chief Executives (of Careers Service companies) suggested that the focusing agenda had led to a significant deterioration in services to clients in education, particularly those who might be seen as of average ability or the more able – a perception shared by staff in many schools (p 49).

Morris *et al.* (2001) also found that over half of the senior careers service managers felt that the focusing agenda had caused relationships with schools to become more strained and had produced significant difficulties in maintaining the profile of CEG. While schools supported the principle of meeting the needs of those at risk, they expressed a lack of confidence in the ability and capacity of careers co-ordinators to provide individual guidance to pupils in Year 11 who were outside the primary target group.

The Government's desire to enhance support services for young people considered to be 'at risk' led to the introduction of the Connexions Service, which began incorporating Careers Services in England from April 2001, with the last

partnerships being formed in 2003. Unlike the earlier process of contracting out, this was not a Careers Service under another name, but a new concept based on providing a broad range of support services to 13- to 19-year-olds, of which career guidance was just one component. Connexions support services included help on issues such as finance, housing, relationships, pregnancy and drugs; some extra resources were made available. Connexions staff were drawn from a range of professional disciplines and included qualified careers advisers. However, all staff assumed the new generic job title of 'personal adviser'.

The introduction of Connexions in England also marked a growing divergence in the way in which career guidance is delivered in the different parts of the United Kingdom. Wales and Scotland now have all-age guidance services, known as Careers Wales and Careers Scotland, and Northern Ireland is moving in the same broad direction.

The Education Act 1997 required all schools to provide a career education programme for all young people from the age of 13. From September 2004, this was extended to all young people from the age of 11 (DfES, 2004a). A non-statutory framework for CEG (DfES, 2003a) exists; however, a great deal is left to the discretion of individual schools and consequently there is considerable diversity in how career education is delivered. In a survey commissioned by the National Audit Office (2004), it was found that 'in nearly two thirds of schools that took part advice and guidance was coordinated or delivered by staff without any formal qualification in the field' (p 36). Over half of the 580 schools that took part in the survey reported they 'wanted more time allocated to careers education and guidance in their timetable and nearly half wanted more provision for young people who are not likely to become NEET' [not in employment, education or training] (p 35).

Over recent years, there has been a growth in the development of self-help tools which exploit the potential of communication technologies. The most notable of these is Connexions Direct, which is provided nationally and offers guidance and information through a telephone helpline and web-based resources that supplement online information with secure chat facilities.

The Green Paper *14–19: Extending Opportunities, Raising Standards* (DfES, 2002) reinforced the principle of meeting individual guidance needs through the provision of independent and impartial help. It emphasised the need for young people to have access to impartial and independent help in formulating and maintaining an individual learning plan and being well prepared for making relevant and appropriate choices.

The Working Group for 14–19 Reform (Tomlinson, 2004), which was set up in spring 2003 to make recommendations to the English Government on the reform of 14–19 education, has recently produced an interim report. It favours greater subject choice and diversity, and a removal of the distinction between academic and vocational qualifications to ensure parity of esteem. Emphasis is being placed on the importance of individualised learning, which increases the need for impartial guidance on subject choice and progression opportunities. There are plans to introduce a requirement for all students at the end of Year 9 (age 13) to be provided with an individual learning plan (ILP), which will be discussed with the pupils and their parents. There is some uncertainty at the moment about who will be responsible for developing ILPs; the current thinking is that it will be Year 9 tutors, with support from Connexions.

The curriculum reforms proposed by Tomlinson (2004) are the latest in a series of piecemeal changes that have taken place over the last decade. There have been changes in the qualifications structure at both pre- and post-16 levels, including Curriculum 2000 which extended the structure of A/AS-levels; the extension of work-related learning; and the Increased Flexibility Programme (IFP) which promotes vocational courses and GCSEs in vocational subjects for 14- to 16-year-olds. Alongside these developments, there have been radical changes to the structure and nature of the financial support available to young people. Education maintenance allowances for those in post-compulsory education were introduced nationally in September 2004 following extensive piloting, and financial support for students entering higher education is about to change with the introduction of variable tuition fees. These developments sit alongside the Government's policy that 50% of people should participate in some form of HE by the time they are 30.

1.4 Research background

Over the period covered by the review, research into the transitions made by young people at 16 has focused on a range of issues.

Some studies have looked particularly at the internal and external factors that affect the transitions made by young people. Jones and Martin (2004) demonstrate the differences between the transitions made by young people from different socio-economic backgrounds:

> Seventy-two percent of middle class young people were on HE pathways, compared with only 5% of working class, who were mainly on FE and training pathways (p 19).

Jones and Martin also state that recent changes in youth policies which 'assume that basic maintenance will be subsidised by parents into the mid-twenties' (p 23) have 'increased the power of parents to encourage or thwart the career plans of their children, by offering or refusing support. Parents can put pressure on young people to take their own preferred pathways (which are not necessarily those advocated by policies) and those who do not conform are disadvantaged' (pp 25–26).

Data from the Youth Cohort Study (DfES, 2003c) support the view that external factors, such as ethnicity and parental background, make a difference to the transitions of young people:

> …young people from ethnic minority backgrounds are more likely to be in fulltime education than young white people. Within these ethnic groups, those of Indian origin and other Asian origin were the most likely to be in fulltime education…. White young people were more than three times as likely to be in a fulltime job than those from the main ethnic groups (pp 1–2).

> Those whose parents were in higher professional occupations were more likely to be participating in fulltime education (81 per cent) than those from routine backgrounds (48 per cent) (p 2).

A number of studies have indicated that 'informal' CEG provided by parents and other family members and by peers has a greater influence than more formal CEG provision. Pitcher and Green (1999) identify the importance of parental and family or peer views:

> even where young people appear to be aware of the full range of post-16 options, the influence of parents and also other family members or peers may impact upon the degree to which they might consider any route other than fulltime education (pp 49–50).

Macrae *et al.* (1996) also suggest that formal CEG is not as strong an influence on choices at 16 as family: 'For most students, friends and family have a much higher profile and a more decisive role than formal advisers' (p 39). A study of a national sample of students in their last compulsory year rated parents as being on average a more helpful source of career advice and guidance than either school careers teachers or careers advisers (Connor *et al.*, 1999).

Studies, such as those described above, indicate that internal and external factors and informal provision are significant for many young people. Nevertheless, many studies demonstrate that formal CEG also has an impact on young people in general and on specific groups of young people in particular. Howieson and Croxford (1996) found that guidance teachers are most likely to have an influential role via teaching career education and that, in particular, having career education lessons positively affects young people's views of the importance of gaining academic and vocational qualifications. Semple *et al.* (2002) note that 'careers advisors can play a key role with particular groups of young people (for example, those who are the children of single or unemployed parents' (p 65).

The focus of the present review is primarily concerned with the impact of formal CEG upon the transitions made by young people. Morris *et al.* (1999) examined the relationships between career-related skills and satisfactory transitions, as well as young people's attitudes towards the choices they had made and the relationships between career-related skills and positive attitudes to lifelong learning and guidance. This study found that:

> The key factor that seemed to underpin successful transition at 16 was the level of young people's career-exploration skills. Those who demonstrated such skills by the end of Year 11 were the least likely to have made significant changes to their courses, post-16, and were more likely to have made a transition that indicated progression. (p 3)

Macrae *et al.* (1996) note that: 'Careers advisers' major function for many students is as catalysts. It is often not what they say, not any specific advice or information they give, but the sense of urgency or necessity that they instil into the students' (p 39).

Excellence in Schools (DfES, 1997b) suggests that CEG might have a role in promoting improvements in educational standards. This was subsequently investigated in a National Foundation for Educational Research (NFER) study (Morris *et al.*, 2000), which produced evidence that a comprehensive CEG programme led to improved school effectiveness, demonstrated through attainment. The Department for Education and Employment (DfEE) followed this up by publishing a document entitled *School Improvement: How Careers Work Can Help* (DfEE, 2000). More recently, an analysis of longitudinal pupil data

(Morris and Rutt, 2003) highlights the importance of CEG for young people's aspirations. It found that the development of a positive attitude towards HE was significantly related to the quality and extent of information, advice and guidance received pre-16.

The delivery of CEG has been the topic of several studies. These have focused on a range of areas, including whether the quality and effectiveness of CEG are affected by how it is delivered, who delivers it, and its timing, and whether schools have the capacity to deliver the career guidance support needed by students, particularly in view of the changing 14–19 curriculum.

A study by SWA Consulting (1998) found that the effectiveness of career sessions was undermined by short tutor periods, carousel arrangements, inadequate differentiation and a lack of focus on learning outcomes. These findings have been reinforced by other studies, such as those by Morris *et al.* (2001) and Ofsted (1998). Another study by Stoney *et al.* (1998) found that when career work was associated with PSHE its status was diminished.

Regarding the timing of CEG, young people do not need to take final decisions until Year 11, but there is evidence that many have made a choice much earlier. Foskett and Hemsley-Brown (2001) surveyed 1,284 Year 11 students and found that 42% recalled beginning the process of choosing post-16 options in Year 10 or earlier, with 5% recalling beginning to choose before the age of 13. An earlier survey of Year 11 students in Tower Hamlets found that very few of those intending to leave school at 16 changed their minds, whereas around a fifth of those intending to stay did change their minds and left school (Kysel *et al.*, 1992).

Morris *et al.* (2001) reported that that the majority of schools did not have the capacity to provide high-quality career education and guidance. A subsequent study (Morris *et al.*, 2002), found that the level of pre-16 CEG provision was insufficient to ensure that all young people were making the most appropriate choices about post-16 destinations, and reports an increased level of drop-out among students who would previously have been expected to continue in further education (FE) and/or higher education (HE).

More recently, a report on the Connexions Service produced by the National Audit Office (2004) found that of the 580 schools taking part in their survey 'the majority feel that they do not have the capacity to provide appropriate levels of careers education and guidance for young people' (p 7). Over half of the schools indicated they did not have sufficient time to incorporate careers education into the school's curriculum; and in around two-thirds of the schools 'career education and guidance is co-ordinated and delivered by staff without any formal qualification in the field' (p 35). This view is supported by the findings of a recent Ofsted evaluation of the increased flexibility programme (IFP), in which it was identified that 'advice and guidance were among the weakest elements observed in the first year of the IFP. They were unsatisfactory in one in five partnerships' (Ofsted, 2004, p 9). Following a survey of students at colleges of further education asking them about their views on career guidance, the Association of Colleges (AoC) also recently reported that many young people felt that they needed more information and advice about post-16 choices:

> 84% of respondents think Connexions should do more in schools to explain to all young people their options at 16 (AoC, 2004, p 2).

A previous literature review, which looked at the impact of CEG on the transition from Key Stage 3 to Key Stage 4 (Moon *et al.*, 2004), also identified that while 'young people's career related knowledge appears to be influenced positively by participation in specific CEG programmes' (p45), there was evidence that 'the lack of a coherent strategy for CEG across Key Stages in some schools may have a negative effect on the transition process' (p7), and that 'insufficient time is invested in assisting pupils at Key Stage 3 to identify and apply their individual strengths and aptitudes to subject choices' (p7).

In summary, there appears to be considerable evidence to suggest that internal and external factors are important in determining the a priori effectiveness of the transitions made by young people, and also that appropriate and relevant CEG can and does impact upon the transitions made by young people at the age of 16. This review will consider the relevant evidence systematically, synthesising the findings and considering their implications for all concerned.

1.5 Authors, funders and other users of the review

The Review Team and its Advisory Group include practitioners, managers, academics and policy-makers, to ensure that the current review considers the implications of the research findings in terms of the relevance and practical application for those responsible for strategic development and delivery. Further information about the Review Team and the Advisory Group is set out in Appendix 1.1.

1.6 Review questions

The research question is considered within the context of the reform to secondary education as cited in *14-19: Opportunity and Excellence* (DfES, 2003b)*.*

What is the impact of CEG policies and practice during Key Stage 4 (ages 14–16) on young people's transitions from Key Stage 4 to post-16 opportunities?

Review question for the systematic map:

What is the nature of the research evidence that considers the effects of CEG during Key Stage 4 (ages 14–16) on the transitions made by young people from Key Stage 4 to post-16 opportunities?

Review question for the in-depth review:

What is the impact of CEG on young people during Key Stage 4 (ages 14–16) and how does this affect the transition process to post-16 opportunities?

With the sub-question:

In what ways do internal/external factors influence the effectiveness and outcomes of careers education and guidance?

2. METHODS USED IN THE REVIEW

2.1 User involvement

This review focuses on the delivery of CEG with practical implications for teaching and learning. It was therefore important to include a range of users in developing the methods and focus of the review. The Review Team provided access to young people, parents, teachers and other professionals through its established networks. Partnership agreements were established with a network of organisations, including higher education institutions, Careers Services and Connexions Services, which have enabled the team to work collaboratively with schools and community groups across the United Kingdom.

2.1.1 Approach and rationale for engaging users

The Review Team was chosen to include those with a range of relevant skills, knowledge and experience, and to reflect some of the likely users for the review – practitioners, managers and researchers. It has been complemented by the Advisory Group (see Appendix 1.1), which has included representatives of all the main intended users of the research – practitioners, managers, researchers and policy-makers. The two groups have included the following:

- a Chief Executive of a Connexions Company, with links into the National Association of Connexions Partnerships

- a Principal Researcher for the DfES

- a Council member of the National Association of Careers and Guidance Teachers, who is also an experienced practitioner

- a member of the Institute for Careers Guidance's Research Committee

- a writer of careers education and guidance materials, who is also an experienced practitioner and service manager

- a Connexions Ofsted Additional Inspector, who is an experienced practitioner

- a guidance practitioner currently working in higher education, but with previous experience in school and employer settings

- the Director of the University of Derby's Centre for Guidance Studies (CeGS), which has a national and international reputation as a centre for research into careers information, advice and guidance

2.1.2 Methods used in engaging users

Members of the Review Team and the Advisory Group represent potential users of the review and have been closely involved at all stages: in defining the review questions; in drawing up the protocol; in the development of inclusion and exclusion criteria; and in keywording and data extraction (following a training session in using EPPI-Reviewer). The groups discussed the map of included studies and helped to develop the framework for synthesising the findings.

At the stage of producing draft findings, consultation with a range of practitioners, managers, academics and policy-makers took place to consider the implications

of the research findings in terms of their relevance and practical application for those responsible for strategic development and for delivery. In addition, users willing to develop user perspectives to be included on the EPPI-Centre website are being identified and commissioned. Consultation and the identification of users to develop user perspectives are being achieved through the Advisory Group and through the networks that CeGS has already established with, for example:

The Institute of Careers Guidance (ICG)
The National Association of Careers and Guidance Teachers (NACGT)
The National Institute for Careers Education and Counselling (NICEC)
The Secondary Head Teachers Association (SHA)
The Supporting Children and Young People's Group (part of the DfES)
The Central Guidance Research Network (CGRN)
The National Guidance Research Forum (NGRF)

In addition, contacts were made with groups representing parents to discuss how best to involve parents in the dissemination of the results of the research.

2.2 Identifying and describing studies

2.2.1 Defining relevant studies: inclusion and exclusion criteria

The inclusion and exclusion criteria are set out below (a fuller version can be found in Appendix 2.1). The criteria were applied hierarchically (i.e. studies were excluded on the first of these criteria that they failed).

Inclusion criteria

Studies were *included* that met *all* the following criteria:

i.   They focused on CEG delivered either within or external to school, for young people during Key Stage 4 (aged 14–16).

ii.   They included outcomes relating to young people as they approach the transition, during the transition or following the transition to post-school opportunities up to the age of 19.

iii. They were written in English.

iv.   They were based on empirical research.

v.   They were conducted from 1988.

Exclusion criteria

Studies were *excluded* that met any of the following criteria:

i.   They did not focus on CEG during Key Stage 4 (age 14-16). This applied, for example, to those that:

     –   were *only* concerned with the impact of the general curriculum at Key Stage 4;

    −   did *not* include students at Key Stage 4 (age 14-16);

    −   were *only* concerned with CEG delivered in post-compulsory learning (16–19);

    −   were *only* related to Citizenship (a separate EPPI-Centre Review Group is working on this topic);

    −   were *only* concerned with internal and/or external factors, without reference to CEG;

    −   were *only* concerned with vocational education/learning, without reference to CEG (vocational education/learning is education and/or learning geared to a particular occupation or area of employment; examples include specialised alternative provision following curriculum disapplication and 'increased flexibility' programmes).

ii.   They did not include transition outcomes 16–19, including those that only measure outcomes after the age of 19.

iii.   They were not written in English.

iv.   They were based on secondary research, theoretical discussion, or personal opinion.

v.   They were conducted before 1988.

2.2.2 Methods for identification of studies

The following sources of research literature were searched to identify relevant studies:

- Electronic databases (ERIC, BEI)
- Journal publishers' web pages (EBSCO)
- Handsearching of key journals (listed in Appendix 2.3)
- Scanning reference lists of already identified reports
- Direct requests from educational research institutions and other key informants
- Reference list of key authors/papers
- References on key websites
- Citation searches from already identified sources
- Personal contacts
- Subject information gateways

Search strategy for electronic databases

The rationale for the search strategy was formulated following consultation with members of the Advisory Group and members of staff at the EPPI-Centre.

Both free-text and thesaurus terms (also known as control terms or descriptor terms) were used to systematically search electronic databases. Further details can be found in Appendix 2.2, including an outline of a set of agreed free-text

terms that were applied to databases that had no classification system, such as subject headings.

2.2.3 Screening studies: applying inclusion and exclusion criteria

The first stage of the review involved the identification of reports that investigate the effect of career education during Key Stage 4 on the transition to post-16 opportunities and/or on the young person's learning and development. Potentially relevant reports were identified through electronic databases, handsearches, citations, websites and personal contacts. The Review Team set up a database for keeping track of and coding reports found during the review. Titles and abstracts were imported into the first database ('screen me'). Inclusion and exclusion criteria were then successively applied to (i) titles and (ii) abstracts. The first criterion against which each report failed was recorded. Reports that appeared to meet the criteria, or where there was insufficient information to make a judgement, were transferred to a second database ('get me'). Full-text reports of these were obtained and the 'inclusion' and 'exclusion' criteria were re-applied. Those that did not meet these criteria were excluded. Following full-text screening, reports meeting the criteria were transferred to a third database ('include me').

2.2.4 Characterising included studies

Those studies remaining after application of the criteria were keyworded, using the EPPI-Centre's Core Keywording Strategy (EPPI-Centre, 2002a). Additional keywords specific to the context of the review were added to those of the EPPI-Centre (see Appendices 2.4 and 2.5 for generic and review-specific keywords). All the keyworded studies have been added to the larger EPPI-Centre database (REEL), for others to access via the website.

The core keywording strategy was used to code studies according to the country in which the study was carried out, the population studied, the age and sex of learners, and the study design.

Review-specific codes were used to categorise the deliverers of CEG, types of CEG intervention, modes and places of delivery, guidance recipients, recipients' age, outcomes measured, point at which outcomes were measured, key influences on decisions, the focus of the studies and their overall conclusions. Both the core and the review specific keywords were used to produce a descriptive map of all studies meeting the inclusion criteria.

2.2.5 Identifying and describing studies: quality-assurance process

The EPPI-Centre link team collaborated with the Review Team on quality assurance throughout the review process. The screening of studies by abstract and title was undertaken by members of the Review Team independently and then cross-checked within the team. The EPPI-Centre link member of staff independently screened 40 studies. At every stage of the screening and keywording process, results were moderated within the Review Team and with EPPI-Centre staff. EPPI-Centre staff also applied keywords to 14 of the studies to ensure consistency in the process.

2.3 In-depth review

All studies investigating the impact of CEG during Key Stage 4 upon the transitions made by young people into post-16 opportunities were characterised as set out in section 2.2.4 above, to create a broad map of the research literature.

Following feedback on the review protocol by the peer reviewers identified by the EPPI-Centre, and having consulted with the review's Advisory Group, it was agreed that additional exclusion criteria should be applied to the studies remaining, as set out below.

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

Given the England-specific context of the review, as set out in Chapter 1 of this report, peer reviewers of the review protocol suggested that international studies would be less relevant than those conducted in England. In addition, a number of studies covered CEG to some extent, but did not give enough clear detail to enable CEG and its impact to be separated out from other factors/activities. It was agreed that these studies would not be able to provide appropriate information to answer the review question.

Studies that met either (or both) of the following two **additional exclusion** criteria were accordingly excluded from the in-depth review:

- Studies not carried out in England
- Studies in which CEG was included but there was insufficient detail or clarity to enable CEG and its impact to be separated out from other factors/activities

2.3.2 Detailed description of studies in the in-depth review

The EPPI-Centre's standardised set of data-extraction guidelines were applied to all studies in the in-depth review (EPPI-Centre, 2002b). These guidelines enabled the Review Team to assess the design and findings of the studies. The 'weight of evidence' for addressing the review question was judged as being high, medium or low according to a further set of guidelines (see section 2.3.3). Findings of the studies were synthesised according to the theoretical framework underpinning the review strategy, as set out in section 2.3.4.

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

Three components were identified to help in making explicit the process of apportioning different weights to the findings and conclusions of different studies. These 'weights of evidence' have been developed by the EPPI-Centre and are based on:

A. soundness of studies (internal methodological coherence), based upon the study only
B. appropriateness of the research design and analysis used for answering the review question
C. relevance of the study topic focus (from the sample measures, scenario, or other indicator of the focus of the study) to the review question
D. an overall weight taking into account A, B and C above

In order to arrive at weight of evidence D, an average of A, B and C was assessed to reach an overall judgement.

2.3.4 Methods for synthesising the findings of included studies

In considering the overall review question (the impact of career education and guidance on young people's transitions into post-16 opportunities), the Review Team analysed the study findings in terms of three categories:

- *General provision,* that is synthesising data from studies that measure the impact of broad CEG programmes (e.g. such as the general provision in school)

- *Specific interventions,* that is, synthesising data from studies that measure the impact of specific CEG interventions

- **Specific groups of young people,** that is synthesising data from studies that measure the impact of CEG on specific groups of young people

2.3.5 In-depth review: quality-assurance process

Data extraction and assessment of the weight of evidence brought by the study to address the review question were conducted by pairs of the Review Team, first working independently, and then comparing their decisions and coming to a consensus. Members of the EPPI-Centre link team also helped in quality assurance by extracting data for a sample of five studies.

3. IDENTIFICATION AND DESCRIPTION OF STUDIES: RESULTS

3.1 Results of the searching and screening process

The Review Team used a range of sources to identify studies. A total of 8,684 papers were identified through electronic searching and eight through handsearching. These papers were entered into reference management software and screened by title and abstract using the inclusion and exclusion criteria (see key to Figure 3.1). On this basis, 8,560 papers were excluded, leaving 132 papers identified as being potentially relevant to the research question. Of these, a total of 112 papers were screened by full document, applying the inclusion and exclusion criteria once more (the remaining 20 papers proved unobtainable within the timescale of the review). Of the 112 papers screened, 84 were excluded and four duplicates were found. A total of 24 studies reported in 24 reports were included in the systematic map.

At the first stage of screening (by title and abstract), just under half of the papers (4,203) failed to meet criterion 1 (focus on CEG during Key Stage 4), with 104 papers failing to meet criterion 2 (include transition outcomes measured during and/or after Key Stage 4). A total of 2,141 papers proved not to be based on empirical research and 689 were excluded because they were based on research conducted before 1988. Only seven papers were excluded because they were not written in English.

At the second stage of screening (by full document), 60 papers were identified as failing to meet criterion 1 (focus on CEG at Key Stage 4) and were therefore excluded, along with 12 papers that failed to meet criterion 2 (include transition outcomes during and/or after Key Stage 4). All the studies were written in English. A total of nine papers were found not to be based on empirical research, and three were found to have been conducted before 1988.

Key to Figure 3.1 (following)

Criteria
1. Focus on CEG during Key Stage 4
2. Include transition outcomes measured during and/or after Key Stage 4
3. Written in English
4. Based on empirical data
5. Conducted pre-1988
6. Not undertaken in England
7. CEG included but insufficient detail or clarity to enable CEG and its impact to be separated out from other factors/activities

Figure 3.1: Flowchart of searching and screening process

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

30
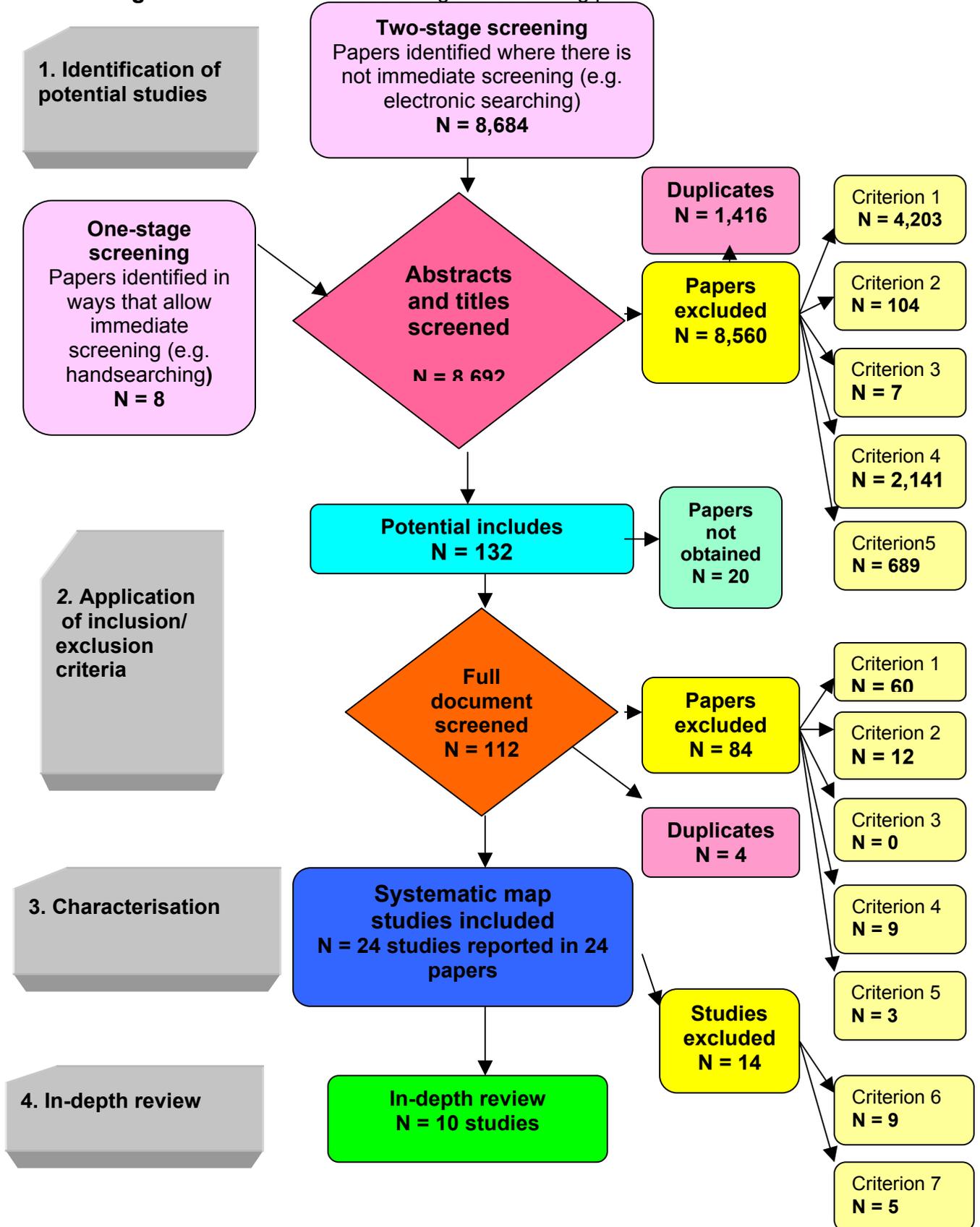
3.2 Characteristics of included studies

The characteristics of the included studies are described in this section under the following headings: the country in which the study was carried out; the focus of the study; the curriculum area of the study; the population focus of the study; the age and sex of the learners involved/described in the study; the educational settings covered by the study; and the methodological characteristics of the study. This section also describes the characteristics of the CEG covered by the studies, including the types of intervention; the various deliverers of CEG; the mode of delivery of CEG; and the place of CEG delivery. Additional information is given here about the point at which the study measured the outcomes from CEG; the age of the guidance recipients; and their key influencers. Lastly, the section looks at the overall conclusions of the study in relation to the impact of CEG.

3.2.1   Country in which the study was carried out

Table 3.1 shows the countries in which studies were carried out. The majority of studies (N=17) were carried out in the UK. Of these, twelve were specific to England, and two to Scotland (Howieson and Semple, 1996; Semple *et al.*, 2002). One study involved schools in England and Wales, and another schools in England, Scotland and Wales. It was unclear in one study whether it was specific to England or involved schools from elsewhere in the UK. Seven studies were found that were based not in the UK but in the United States of America (Fixman, 1996; Krumboltz *et al.*, 2000; Marko and Savickas, 1998; O'Brien *et al.*, 2000; Schlossberg *et al.*, 2001; Wentworth *et al.*, 1998) or South Korea (Kim and Kim, 2001).

Table 3.1: Number of included studies by country (N = 24 studies)

Country	Number
UK	17
USA	6
South Korea	1
Total (mutually exclusive)	*24*

3.2.2   Focus of the study

As set out in Table 3.2 below, over half the studies (N=13) had a curriculum focus (e.g. investigated CEG within the context of the school provision). Similarly, half (N=12) focused on teaching and learning. 'Other' foci included the effect of careers interventions on post-16 choices and non curriculum interventions such as the provision of information.

Table 3.2: Number of included studies by study focus (N = 24 studies)

Study focus*	Number
Curriculum	13
Organisation and management	2
Teaching and learning	12
Policy	1
Other topic focus	20

*Categories are not mutually exclusive.

3.2.3 Curriculum area

The curriculum-area focus for the studies is set out in Table 3.3. The majority of the studies focused on the CEG curriculum (classed as 'other curriculum'). Other curriculum areas covered by studies, often in addition to their CEG focus, include science and the general school curriculum. Eleven of the 24 studies in the systematic map did not focus on curriculum issues, focusing instead on areas such as guidance, factors affecting post-16 choices, etc.

Table 3.3: Number of included studies by curriculum focus (N = 24 studies)

Curriculum focus*	Number
General	2
Personal and social education (PSE)	1
Science	1
Other curriculum	13
Material does not focus on curriculum issues	11

*Categories are not mutually exclusive.

3.2.4 Population focus of the study

All the studies focused on learners, but some also focused on other groups: on teaching staff and senior management; on other education practitioners (generally careers advisers); on non-teaching staff in schools; and on parents. In addition, some also looked at staff outside schools, including youth workers and outdoor activity leaders. Table 3.4 shows the number of studies that focused on each of these populations.

Table 3.4: Number of included studies by population focus (N = 24 studies)

Population focus*	Number
Learners	24
Senior management	1
Teaching staff	5
Parents	4
Non-teaching staff	1
Other education practitioners	2
Other population focus	4

*Categories are not mutually exclusive.

3.2.5 Age and sex of learners

Table 3.5 shows the age and sex of the learners focused upon by the studies included in the systematic map. All 24 included studies focused on learners aged 11–16, and 14 studies also included post-16 learners aged 17–20. This reflects the nature of the review question and its focus on young people in Key Stage 4 (or equivalent) and beyond. One US study also looked at learners over 20. One English study focused on young men in Year 10 (15–16); all the other studies focused on both male and female learners.

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities　　　32

Table 3.5: Number of included studies by age and sex of learners (N = 24 studies)

Age of learners*	Female only	Male only	Mixed-sex	Total
11-16	0	1	23	24
17-20	0	0	13	13
21 and over	0	0	1	1

*Age of learner category is not mutually exclusive.

3.2.6 Educational settings

The majority (N=20) of included studies focused on CEG in secondary schools. Other educational settings covered included: special needs, residential and independent schools; post-compulsory and higher education institutions; community centres; local education authorities; the workplace; and home. Studies coded as 'other educational setting' included: outdoor centres; voluntary organisations; summer schools; and externally provided workshops. Table 3.6 indicates the educational settings covered in the studies.

Table 3.6: Number of included studies by educational setting (N = 24 studies)

Educational setting*	Number
Secondary school	20
Special needs school	1
Community centre	1
Higher education institution	1
Home	1
Independent school	1
Local education authority	1
Post-compulsory education institution	7
Residential school	1
Workplace	2
Other educational setting	5

*Categories are not mutually exclusive.

3.2.7 Methodological characteristics

Table 3.7 sets out the number of included studies by their study type. More studies in the systematic map were concerned with an exploration of relationships between variables than any other type of study. Overall, 14 studies were evaluations, with half (N=7) being evaluations of events that had occurred 'naturally', and the other half being evaluations of events manipulated by the researchers.

Of the seven evaluations of researcher-manipulated interventions, only one was carried out in England (Lloyd, 2002); the other six such studies were all non-UK studies, five of which were carried out in the USA and one in South Korea. In four of these six studies (Kim and Kim, 2001; Marko and Savickas, 1998; O'Brien *et al.*, 2000; Schlossberg *et al.*, 2001), the study designs included the use either of a control group, or of different interventions on different groups of participants. This enabled direct comparisons to be made between the outcomes for those who had, or had not, experienced the intervention concerned, or between participants who had experienced different outcomes.

Table 3.7: Number of included studies by study type (N = 24 studies)

Study type	Number
Description	1
Exploration of relationships between variables	9
Evaluation: naturally occurring	7
Evaluation: researcher-manipulated	7
Total (mutually exclusive)	***24***

3.2.8 Types of intervention

The types of intervention measured in the studies are set out in Table 3.8. Fifteen studies looked at the impact of the guidance interview. Other common types of intervention considered included careers-education sessions (N=13); education-business activities (including work experience, employer visits, and talks by employers and employed people) (N=14); information-giving sessions (N=14); computer-assisted/aided careers guidance (N=9); simulated material or activity (N=5); sessions aimed at developing job-search and/or transition skills (N=7); opportunity-awareness sessions (including college open days, visits to training providers, etc.) (N=7); record of achievement/progress file sessions (N=4); and summer activities (N=3). A total of 16 of the studies mentioned other activities not covered above, such as drama workshops, constructing lifelines, study skills development, and discussions with parents at parents' evenings. Three studies were unspecific or unclear about the range of activities covered.

Table 3.8: Number of included studies by type of intervention (N = 24 studies)

Type of intervention*	Number
Careers/guidance/counselling interview	15
Summer activities	3
Computer-assisted/aided guidance	9
Education business activity	14
Simulated material/activity	5
Record of achievement/progress file session	4
Job search skills/transition skills session	7
Opportunity awareness session	7
Information-giving	14
Careers education session (general provision of CEG in schools)	13
Other	16
Not stated/Unclear	3

*Categories are not mutually exclusive.

3.2.9 Delivery of CEG

In some studies, the staff delivering CEG fell into more than one category. Over half of the studies in the systematic map looked at CEG delivered by careers advisers (N=12) or by personal advisers or other Connexions staff members (N=1). Careers co-ordinators (N=4) and careers teachers (N=6) were also mentioned by a number of studies, as were tutors/form teachers (N=8), other school teaching staff (N=7) and other school staff (N=3). In addition, post-16 providers (N=3) and education-business links staff (N=7) were mentioned by a number of studies as being involved in the delivery of CEG. The other category included friends and relatives, those whose job titles are not commonly used in

relation to CEG in England (e.g. school counsellors) and the researchers themselves (where a specialised programme was delivered). The not stated/unclear category was used where it was unclear who had delivered CEG. For example, in some studies (e.g. SWA Consulting, 1998) it was clear that careers co-ordinators had provided the authors with information about CEG provision, but unclear as to who had delivered the CEG described. Table 3.9 shows which CEG deliverers were covered and by how many studies.

Table 3.9: Number of included studies by CEG delivery staff (N = 24 studies)

CEG delivery staff*	Number
Careers co-ordinator	4
Careers teacher	6
Careers adviser	12
Personal adviser/Connexions staff member	1
Post-16 provider	3
Education business links staff	7
Tutor/form teacher	8
Other school teaching staff	7
Other school staff	3
Parents	11
Other	11
Not stated/unclear	9

*Categories are not mutually exclusive.

3.2.10 Mode of delivery

The included studies covered a number of modes of delivery, set out in Table 3.10. The majority of the studies (N=15) covered one-to-one (face-to-face) sessions, with external provision (N=10) being the next most common mode of CEG delivery described. This latter included: external speakers; visits to career centres; visits to workplaces; work experience; and post-16 provider open events. Interactive CEG sessions, whether in small groups (N=6) or class-sized groups (N=9), also featured in a number of studies. Non-interactive class-sized provision (N=2) and whole-year group provision (N=1) did not occur often in the studies in the systematic map. Other activities (N=4) included the distribution of information, conferences, parents' evenings and one to one sessions with a computer. The final category in the table (not stated/unclear) was used where the mode of delivery was not clearly stated in the study (N=12). Studies within this category tended to refer to a range of activities within CEG programmes, but were not specific about the mode of delivery.

Table 3.10: Number of included studies by mode of delivery (N = 24 studies)

Mode of delivery*	Number
One-to-one (face-to-face) session	15
Small groups (up to 8) interactive sessions	6
Class-size sessions (interactive)	9
Class-size sessions (non-interactive)	2
Year-group provision	1
External provision	10
Other	4
Not stated/unclear	12

*Categories are not mutually exclusive.

3.2.11 Place of delivery

The majority of the studies (N=20) in the systematic map were concerned with CEG delivered at school, but other places of delivery were included in some studies. These included: employers' premises (N=11); the premises of post-16 education and training providers; the young person's home (N=9); careers library or careers resource areas (N=8); Connexions or Careers centres (N=4); and youth centres (N=1). The other category (N=4) covers places not included in the earlier categories such as job centres and outdoor activity centres. The not stated/unclear category (N=7) is used where it is unclear where particular activities were delivered. In many cases, this relates to activities such as careers evenings and exhibitions; open events; distribution of leaflets; and advice from friends, where it is unclear where these have taken place. Very often these are mentioned in addition to activities that are clearly described as school or college based. Table 3.11 sets out the places of CEG delivery covered and by how many studies.

Table 3.11: Number of included studies by place of delivery (N = 24 studies)

Place of Delivery *	Number
School	20
Employers' premises	11
Post-16 education/training providers' premises	10
Young person's home	9
Careers library/Career resource area	8
Connexions/Careers centre	4
Youth centre	1
Other	4
Not stated/unclear	7

*Categories are not mutually exclusive.

3.2.12 Measurement of outcomes

In total, three studies measured outcomes with students in more than one of the four stages categorised in the table (see Table 3.12). Foskett *et al.* (2003) looked at outcomes both with young people in Key Stage 4 (Years 10 and 11) and in post-16 education (Year 12). Howieson and Semple (1996) looked at the outcomes of guidance with young people aged between 12 and 16 and with those aged over 16. Maychell *et al.* (1998) focused primarily on young people during Key Stage 4; however, a small number of those surveyed were followed up when they were nearly at the point of leaving school.

All the other studies measured outcomes at one stage only. Of the nine studies in the systematic map that were concerned with a specific intervention (and therefore measured the outcomes following that intervention), seven were solely in the systematic map: of these, six were non-UK studies (Fixman, 1996; Kim and Kim, 2001; Krumboltz *et al.*, 2000; Marko and Savickas, 1998; O'Brien *et al.*, 2000; Schlossberg *et al.*, 2001); the seventh was a UK study (Hutchinson *et al.*, 2001) that evaluated pilot summer activities for 16-year-olds. The two UK studies in the in-depth review that looked at a specific intervention were Lloyd (2002; evaluation of a programme for underachieving young men) and Rolfe (2000; evaluation of a Government LMI initiative).

Table 3.12: Number of included studies by point of measurement of outcomes (N = 24 studies)

Point of outcome measurement*	Number
Key Stage 4	7
At point of leaving school	2
At 16-19	9
After specific intervention	9

*Categories are not mutually exclusive.

3.2.13 Guidance recipients

In all the studies, the guidance recipients included learners aged between 11 and 16 years. Studies have been allocated to Key Stage 4 where they only included students who were in the age range 14–16. Where studies also included younger students, they were allocated to the age group 11–16 and where they also included older students they were allocated to the age group 11–19. Table 3.13 sets out the ages of the guidance recipients covered by the studies. Five studies looked at the whole range of young people in Key Stage 4, while others (N=8) included young people below Key Stage 4 in their studies (e.g. Morris *et al.* (1999) included pupils in Year 9), and some included older pupils (N=11). In addition, some of the studies (N=6) looked at specific groups of young people, such as those who attended summer activities or summer schools, those who were underachieving, or those who were 'upward bound'. This is indicated by the additional line in the table.

Table 3.13: Number of included studies by age of guidance recipient (N = 24 studies)

Age of guidance recipient*	Number
Key Stage 4 pupils	5
Pupils aged 11-16	8
Pupils aged 11-19	11
Total (mutually exclusive)	*24*
Specific groups	6

3.2.14 Key influences on decisions

The studies in the systematic map looked at the key influencers of young people, as set out in Table 3.14. According to 13 of the studies, parents were key influencers on young people's decisions. However, careers advisers (N=9) and personal advisers/Connexions staff (N=1), teachers (N=9) and peers (N=9) were also found by a number of studies to be key influencers. Others identified by studies as being influential included: employers (N=5); the media (N=2); school staff other than teachers (N=2); and opportunity providers (N=1). A total of 10 studies were included in the 'other' category. As well as citing parents or teachers or other specific influences, some studies (e.g. Semple *et al.*, 2002; SWA Consulting, 1998) also mentioned 'external' or 'background' influences, including finance and travel, or 'internal' factors, such as gender, ethnicity and level of attainment. Other studies mentioned specific activities such as work experience. A total of nine studies were concerned with the impact of very specific programmes or activities and, on the whole, these tended not to look at other influences. These studies have been categorised as 'not stated'. In four of the studies, it was unclear what the key influences were on young people's decisions.

Table 3.14: Number of included studies by key influence on decisions (N = 24 studies)

Key influences on decisions*	Number
Parents	13
Peers	9
Teachers	9
Careers advisers	9
Personal advisers/Connexions staff	1
Employer	5
Media	2
School staff (other than teachers)	2
Opportunity provider	1
Other	10
Not stated	9
Unclear	4

*Categories are not mutually exclusive.

3.2.15 Overall findings/conclusions (study author reports)

This section reports the conclusions as given by the study authors. No assessment has been made by the review group as to the extent to which they agree with the conclusions made in the studies (but see Chapter 4). The included studies came to a number of conclusions about the impact of CEG during Key Stage 4, as set out in Table 3.15. A total of nine studies concluded that overall CEG aids successful transition. These included studies such as Fixman (1996), Howieson and Semple (1996), Hutchinson *et al.* (2001), and Russell and Wardman (1998), which looked at particular types of CEG intervention. Studies such as Keys *et al.* (1998), Maychell *et al.* (1998), Morris *et al.* (1999) and Taylor (1992) looked more broadly at young people's choices and the influences on them, including CEG. Some of these studies, and some others in the map (N=8), conclude that overall, regardless of whether CEG had an impact or not, other factors had more of an impact on transition than did CEG. These studies were Foskett *et al.* (2003), Hagell and Shaw (1996), Howieson and Semple (1996), Keys *et al.* (1998), Munro and Elsom (2000), SWA Consulting (1998), Taylor (1992) and Wardman and Stevens (1998).

A total of 14 studies conclude that CEG aids heightened understanding, achievement and attitudes. These five include non-UK studies (Fixman, 1996; Kim and Kim, 2001; Marko and Savickas, 1998; O'Brien *et al.*, 2000; Schlossberg *et al.*, 2001). The nine UK studies that came to this conclusion included one Scottish study (Howieson and Semple, 1996) and eight English studies (Hutchinson *et al.*, 2001; Lloyd, 2002; Morris *et al.*, 1999; Rolfe, 2000; Russell and Wardman, 1998; SWA Consulting, 1998; Taylor, 1992; Wardman and Stevens, 1998).

A total of 12 studies were categorised as drawing other or additional conclusions, which varied in nature. A number (e.g. Foskett *et al.*, 2003; Pitcher and Green, 1999; Taylor, 1992) found that there were a number of inter-related factors that affected young people's choices and transitions, and that it was hard to separate out the different effects of each of them. Some studies (e.g. Howieson and Semple, 1996) found that the impact of guidance depended to a large extent on the skills and attitudes of the practitioner. Hodkinson and Sparkes (1993) identified that the action-planning model used within the Youth Credit pilot did not

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

38

match the way in which young people made decisions; however, the authors felt that CEG had the potential to aid young people in their decision-making, provided it was designed to meet young people's needs, integrated into school CEG provision, and delivered by people with the appropriate skills. Krumboltz *et al.* (2000) found that a specific CEG intervention (Virtual Job Experience) had an effect upon those who used it, but that the effect was only within a very narrow occupational focus.

Table 3.15: Number of included studies by overall conclusions (N = 24 studies)

Focus of study *	Number
Aids successful transition	9
Other factors have more of an impact on transition than CEG	8
Aids heightened understanding, achievement, attitudes	14
Other	12

*Categories are not mutually exclusive.

3.3 Results of quality assurance

EPPI-Centre staff screened a sample of 40 citations against the inclusion and exclusion criteria, and keyworded a sample of 14 studies in the systematic map to ensure consistency in the process. Disagreements and inconsistencies were minor, focusing on the topic focus of the study, and were amicably resolved through discussion.

4. IN-DEPTH REVIEW: RESULTS

This chapter shows how studies from the systematic review were selected for the in-depth review. It compares the characteristics of the studies in the systematic map with those in the in-depth review, and sets out the quality judgements for the studies in the in-depth review. It then reports a synthesis of the data from the studies in terms of the nature of the CEG, its impact, and the factors influencing young people in transition, and then describes the results from the quality assurance procedures and the degree of user involvement in the review.

4.1 Selecting studies for the in-depth review

Further in-depth review criteria were applied to those studies included in the systematic map. To be included in the in-depth review:

- studies had to be carried out in England
- studies had to include evidence of the impact of CEG which was distinguishable from the impact of other activities/factors

Only 10 studies of the 24 that are included in the systematic map are also included in the in-depth review. Citation details of the studies can be found in the References list (section 6.1).

4.2 Comparing the studies selected for in-depth review with the total studies in the systematic map

In general, the types and proportions of CEG activities, CEG deliverers, modes of delivery and the point at which the outcomes were measured were similar in the studies in the systematic map and the studies in the in-depth review. The dates when the studies were carried out were also similar. More than half the studies in the systematic map were undertaken in the 1990s (N=14), as were over two-thirds of those in the in-depth review (N=7). All these studies therefore predate the far-reaching changes in England, such as the 'focusing agenda' and the introduction of Connexions. Of the three more recent studies in the in-depth review, two were published in 2000 (Munro and Elsom; Rolfe) and the third was published in 2002 (Lloyd).

The *proportion* of studies concerned with an exploration of relationships was much higher for the studies in the in-depth review (70%) than for the studies in the systematic map (37.5%). It is particularly interesting to note that only one study in the in-depth review (Lloyd, 2002) was a researcher-manipulated evaluation, whereas there were seven such studies in the systematic map. (See Appendix 4.1 for a comparison of studies in the systematic map and the in-depth review.)

4.3 Further details of studies included in the in-depth review

The weight of evidence (WoE) each study brought to the in-depth review varied (Table 4.1). All the studies were classified as having medium methodological quality in their terms for addressing their own study questions (WoE A). In terms of the questions for this particular systematic review, some studies lost ground on the basis of the execution and appropriateness of the research design and analysis for addressing the question, or sub-question, of the review (WoE B). The majority of studies (N=8) were judged as having medium relevance for addressing the research questions (WoE C), with only two (Morris *et al.*, 1999; SWA Consulting, 1998) being judged to have high relevance to the review question.

For the overall WoE (D), two studies were judged as providing medium-high weight of evidence (Morris, 1999; SWA Consulting, 1998). These were both large-scale studies, which covered a range of CEG interventions and were highly relevant to the review question. Two studies were judged to provide a medium-low weight of evidence: Hodkinson and Sparkes (1993) was a small-scale study which looked at a single CEG intervention in one pilot area; and Rolfe (2000) was concerned with only one aspect of CEG (the use of labour market information). The remaining studies were judged to provide a medium weight of evidence.

Table 4.1: Judgements of the weights of evidence in the studies in the in-depth review (N = 10)

Study	Country	Weight of evidence A	Weight of evidence B	Weight of evidence C	Weight of evidence D
Hodkinson and Sparkes (1993)	UK	Medium	Low	Medium	Medium-Low
Keys *et al.* (1998)	UK	Medium	Medium	Medium	Medium
Lloyd (2002)	UK	Medium	Medium	Medium	Medium
Maychell *et al.* (1998)	UK	Medium	Medium	Medium	Medium
Morris *et al.* (1999)	UK	Medium	Medium	High	Medium-High
Munro and Elsom (2000)	UK	Medium	Medium	Medium	Medium
Rolfe (2000)	UK	Medium	Low	Medium	Medium-Low
Russell and Wardman (1998)	UK	Medium	Medium	Medium	Medium
SWA Consulting (1998)	UK	Medium	Medium	High	Medium-High
Wardman and Stevens (1998)	UK	Medium	Medium	Medium	Medium

4.4 Synthesis of evidence

The synthesis is based on emerging themes from the review which address in different ways the review question and sub-question:

What is the impact of careers education and guidance (CEG) on young people during Key Stage 4 (ages 14–16) and how does this affect the transition process to post-16 opportunities?

In what ways do internal/external factors influence the effectiveness and outcomes of careers education and guidance?

The three different ways in which the studies address the main review question are as follows:

- What is the impact of *general CEG provision* during Key Stage 4 and how does this affect the transition process to post-16 opportunities?

- What is the impact of *specific CEG interventions* during Key Stage 4 and how does this affect the transition process to post-16 opportunities?

- What is the impact of CEG during Key Stage 4 on *specific groups of young people* and how does this affect the transition process to post-16 opportunities?

In considering the effects of CEG, the synthesis is divided into three sections (see section 4.4.1): one considering the impact of *general* CEG provision (N=3 studies); one considering the impact of *specific* CEG interventions (N=3 studies) which includes some studies evaluating Government initiatives; and one considering the impact of CEG on *specific groups* of young people (N=4 studies) which includes studies evaluating a programme aimed at a particular group of young people (Lloyd, 2002), and studies that evaluated the effects of general CEG provision on identified groups of young people. Although some of the studies (Keys *et al.*, 1998; Maychell *et al.*, 1998; Russell and Wardman, 1998) had some relevance to more than one of the above synthesis questions, for the sake of simplicity they are included only under one heading – the one to which they are judged to be most relevant.

All ten studies are included in the section considering the sub-question: the factors that influence the effectiveness and outcomes of CEG (section 4.4.2). Each study is referred to by the name of the author(s). Full references can be found in section 6.1.

In the summaries of the studies in the in-depth review, the conclusions shown are those of the study authors. In general, the review authors agreed with the conclusions of the study authors. However, in two cases (Hodkinson and Sparkes, 1993; Morris *et al.*, 1999), the review authors considered the study authors' conclusions went beyond their data and their conclusions should be considered as more tentative. The synthesised findings set out below include references to the studies from which they are taken to help the reader to identify where findings might be judged to be more tentative than others (e.g. where they are solely from one of these two studies).

4.4.1 What is the impact of CEG on young people during Key Stage 4 (ages 14–16) and how does this affect the transition process to post-16 opportunities?

What is the impact of *general CEG provision* during Key Stage 4 and how does this affect the transition process to post-16 opportunities?

Three studies (Morris *et al.*, 1999; Munro and Elsom, 2000; SWA Consulting, 1998) focused on the impact of general CEG provision in schools. Two (Morris *et al.*, 1999; SWA Consulting, 1998) were judged as providing a medium-high weight of evidence; the other (Munro and Elsom, 2000) was judged to provide a medium weight of evidence. All three studies were publicly funded, but two of

them (Munro and Elsom, 2000; SWA Consulting, 1998) had additional funding from a variety of sources. Two of the studies (Morris *et al.*, 1999; SWA Consulting, 1998) sought to examine the relationships between a range of CEG interventions received by young people, their skill development, and their outcomes and transitions at the end of Year 11. One study (Munro and Elsom, 2000) aimed to investigate the impact of careers advisers and subject teachers on the decisions made by Year 11 young people about science subjects and about science and technology careers.

Morris *et al.* (1999) is a UK study, which used student survey data, interviews with school and careers staff (number not known) and examination results to measure the impact of CEG on transition. This was done via a comparison between baseline data (N=3,750) collected in 1995/6 and follow-up data collected in January 1998 (N=1,624) and May 1998 (N=938). The study examined changes in young people's career-related skills, the relationship between career-related skills and satisfactory transitions, young people's attitudes to the choices they had made, and the relationship between career-related skills and positive attitudes to lifelong learning and guidance. Although the results are reported in terms of significance, it is not clear which of the relationships reported are statistically significant and which are not.

The authors report that the range of CEG activities to which young people had access and in which they remembered taking part increased between Years 9 and 11. Young people who engaged in such activities as discussions with a careers adviser, access to career-related information and a wide range of work-related activities tended to have higher levels of career-related skills. Individual career discussions tended to be key to the development of opportunity awareness, career exploration skills and decision-making skills, with computer-aided guidance contributing to opportunity awareness and professional career-related inputs contributing to opportunity awareness and career exploration skills.

The authors indicate that pre-16 CEG provision could have significant medium-term (and possibly long-term) outcomes for young people; that where young people had been enabled to develop a range of career-related skills (particularly those related to career exploration and to considering and applying an awareness of self), they appeared to be more likely to make satisfactory transitions at 16 and less likely to have modified or switched courses. Conversely, young people lacking such skills were far more likely to be amongst the groups of young people who had made changes to their courses or had dropped out of education or training altogether.

Young people identified gaps in the kinds of information that they were given about post-16 courses, and two-thirds of those participating in the study indicated that they would like further help and guidance in choosing what to do next. Furthermore, those with the most positive attitudes to obtaining further guidance were those who had demonstrated a higher level of self-awareness and opportunity awareness and who had higher levels of attainment – though they tended to lack career exploration skills. The study also identified that the integration of career education and guidance programmes with careers service provision and with the wider curriculum (that is, 'guidance community' schools[1])

---

[1] Morris *et al.*'s model of interactive practice distinguishes between the following:

Parallel provision: Careers education was seen as the province of teachers in school, while guidance took the form of a careers service interview that was generally a single event, isolated from the wider school curriculum. This model was characterised by very little interaction or

appeared to be a key factor in the development of young people's career-related skills.

SWA Consulting (1998) used pupil-completed questionnaires to collect baseline data in October 1996. A follow-up questionnaire was distributed at Easter 1997, closely followed by one-to-one interviews designed to provide an independent assessment of pupils' career-related outcomes. The authors targeted 1,000 pupils in the East Midlands (50 Year 11 pupils in each of 20 schools) and were able to collect a full data set from 603 of them. As well as the pupil-level data collected in this way, school-level information was collected from schools and/or LEAs. The study sought to gather data on, and analyse the relationships between, the quantity and quality of CEG (inputs) received by Year 11 pupils and the skills and knowledge of the pupils (the outcomes). The intention was to examine the data to provide evidence for the influence of CEG on relevant skills and knowledge development during Year 11 and at the end of the year.

The report concentrated on the results of the analysis of the relationships between individual CEG inputs or background factors and outcomes achieved. The authors found that pupils assessed themselves as having reached an already generally high standard of learning outcomes at the start of Year 11; on average, pupils made further progress during Year 11 in most learning outcome areas; and by the final questionnaire, 93% of pupils were reasonably or definitely decided about their post-16 option, but only 60% were reasonably or definitely decided about their longer-term career. However, pupils' self-assessment of their self-awareness and decision-making ability was generally higher than independent assessments undertaken through the one-to-one interviews. In particular, the independent assessments suggested that only around half of the pupils had established satisfactory decision-making skills.

The authors found that the CEG inputs associated with progress during Year 11 related to the school, rather than to the careers service. This development was seen in skill rather than knowledge development and also in transition confidence. The quality of school-provided inputs seemed to be inconsistent. For some elements, such as careers libraries, the quality was generally good, whereas for other elements the quality was poor (such as the integration of CEG within the school curriculum) or had room for improvement (e.g. providing unbiased information to pupils on the full range of post-16 options). Overall, only one in seven pupils was judged to have received a CEG package that met acceptable criteria. Improvements in pupil outcomes were most evident in schools where CEG was effectively integrated into the wider curriculum and where CEG tended to have a higher profile.

---

information flow between the key players: the careers adviser, the school staff, and the young person.

Pyramidal model: With a greater flow of information, young people were better prepared for their careers service interview, which was seen as the culmination of the guidance process. However, the outcomes of the interview rarely played any further part in continuing careers education, while the student became, effectively, an individual client of the service.

Guidance community model: Provision of careers education and of careers guidance was closely integrated, with careers advisers being actively involved in curriculum planning and review and in providing feedback from interviews that informed future curriculum development.

As far as careers service provision is concerned, pupils having more group sessions during Year 11 seemed to have made greater progress in applying information about post-16 opportunities. Those having had more than one action plan had made greater progress in applying decision-making skills (perhaps because they had changed their views). A consistent pattern that emerged was the importance of a good-quality guidance interview to many aspects of learning outcomes.

The authors suggest that CEG had the greatest influence upon pupils of moderate/higher ability in schools with lower or average achievement, typically without their own sixth forms. They indicate that career provision might have more impact on these pupils because of the necessity of leaving school, and perhaps also because they might consider the widest range of options beyond 16. Overall, the authors conclude that, consistent with other research findings, background factors were the dominant force in determining the level of career-related learning outcomes achieved. CEG inputs were found to add to the effects of these factors, but did not appear to exert sufficient strength to overcome their influence.

The authors also suggest that a research issue for future studies is whether career provision *prior* to Year 11 might be more significant for end of Year 11 outcomes than inputs received *during* Year 11. Further, given the relatively high level of learning outcomes achieved by the start of the study, Year 11 outcomes might be of greater importance at the very end of and beyond Year 11, as the pupils began to implement their post-16 career decisions.

Munro and Elsom (2000) aimed to investigate the influences of science teachers and careers advisers on pupils' decisions in Year 11 about science subjects and about science and technology careers, and to look at whether science and careers departments in school worked together to improve the quality of pupils' decision-making in relation to such choices.

The authors used five focus groups of careers advisers (four or five per group) to design a questionnaire that was distributed to 292 careers advisers working in seven careers service companies (five in England, one in Scotland and one in Wales). A total of 165 responses were received and followed up by telephone interviews with careers service managers for clarification and to collect further information. The last stage of the research included visiting six very different 'case-study' schools across England, to interview a variety of senior managers and teachers, careers advisers, other staff, and small groups of Years 9, 10 and 11 pupils. The authors were not explicit about how the research participants were chosen and what efforts were made to ensure that they were representative of the relevant population cohort. Although of relevance to the research question, the focus of the study was narrow, being confined to young people's choices in relation to science subjects and to careers in science and technology.

Although science teachers did not see themselves as influential or wish to be involved with career choices, the authors identified that they did appear to influence pupils' choices through the pupils' experiences in the classroom, through extra-curricular activities, through the provision of information about post-16 courses in science, and through individual discussions with pupils and their parents. The authors also found that the work of school careers co-ordinators, form tutors and others involved in delivering career education often seemed to be greatly influenced by the demands of the school option-choice system and timetable. This put pressure on the timing and outcomes of the careers advisers'

interview programmes and on pupils to make their minds up early in the year. The roles of careers and other staff seemed to be sharply separated, coming together only if individual pupils were seen as a 'problem'. The careers advisers lacked systematic updating and training in occupational information.

The authors conclude that pupils had to make subject choices which crucially affected their future options at a time when their motivation in science subjects was reducing and their perceptions of what, for many, were largely invisible careers was very hazy. They were also at an age when peer-group pressure was very strong. Lower motivation meant that pupils were less likely to seek information out for themselves, so it was largely chance that determined whether an individual's interest might be engaged in some aspect of science. The 'chance' could be increased by good teaching, by extra-curricular activities within school, and by career education and guidance; however, in spite of these, other influences might well prevail. The authors raise the question of whether careers advisers' time might be better used in supporting activities lower down the school, designed to enhance pupils' awareness of links between science and employment, and to counteract the limiting effects of simplistic stereotyping.

Summary (impact of *general CEG provision*)

Findings and conclusions based on studies with a medium-high weight of evidence:

- There is evidence that CEG provision – such as individual guidance interviews, group-work sessions, access to career-related information and a wide range of work-related activities – can have a positive impact on the development of pupils' career-related skills (Morris *et al.*, 1999; SWA Consulting, 1998).
- Young people's career exploration skills and self-awareness skills are suggested to be the most important of the career-related skills in terms of their impact upon transition at 16 (Morris *et al.*, 1999).
- Good-quality individual career guidance can be important in the development of learning outcomes, such as career-related skills, especially opportunity awareness, career exploration and decision-making skills (Morris *et al.*, 1999; SWA Consulting, 1998).
- There is evidence to suggest that the level of young people's career-related skills is an important factor in their transition at 16, with those with a high level of skills being less likely to have modified their choices or switched courses. Conversely, those with a low level of skills are more likely to have made changes to their courses or have dropped out of learning altogether (Morris *et al.*, 1999).
- The quality of CEG provision varies from school to school, depending on a range of factors that can be seen as indicators of quality, including integration of CEG into the curriculum, the provision of a careers library of acceptable quality, and the provision of unbiased information about all post-16 options. The vast majority of pupils are judged to have received CEG provision of a less than acceptable standard. In particular, the research shows that the integration of career education programmes with guidance provision and the wider curriculum (as in 'guidance community' schools) may be a key factor in the effectiveness and impact of CEG upon young people's skill development and transitions (SWA Consulting, 1998).

- CEG provision appears to have the greatest impact on pupils of moderate/higher ability in schools with lower/average achievement, typically without sixth forms (SWA Consulting, 1998).
- Research could usefully be undertaken to find out whether the career-related skills developed by young people up to Year 11 are more significant for Year 11 outcomes than inputs received during Year 11, and whether Year 11 outcomes may be more important at the point at which they implement their post-16, and subsequent, career decisions (SWA Consulting, 1998).

Findings and conclusions based on studies with medium-high and medium weight of evidence:

- Access to impartial information about post-16 options can be important to the development of young people's learning outcomes, but provision of such information is patchy and young people themselves indicate that there are gaps in the information they receive (Morris *et al.*, 1999; Munro and Elsom, 2000; SWA Consulting, 1998).

Findings and conclusions based on studies with medium weight of evidence:

- The demands of the school option-choice system put pressure on the timings and outcomes of careers adviser interview programmes and on pupils to make up their minds early in the year (Munro and Elsom, 2000).
- There is little evidence of partnership working between subject and careers departments in schools for the benefit of the full range of pupils (Munro and Elsom, 2000).
- Earlier CEG interventions lower down the school might help to raise pupils' awareness of subject-related careers and to counteract external influences, such as peer pressure, which are very strong by Year 11 when post-16 choices are made (Munro and Elsom, 2000).
- There is evidence to suggest that careers advisers need access to systematic training designed to ensure that their occupational knowledge is kept up-to-date (Munro and Elsom, 2000).

What is the impact of *specific CEG interventions* during Key Stage 4 and how does this affect the transition process to post-16 opportunities?

Three UK studies looked at a specific type of CEG intervention. One (Hodkinson and Sparkes, 1993) looked at career action planning within one of the Training Credits pilots. This study was judged as providing a medium-low weight of evidence. The other two studies looked at career information. The first of these was an evaluation of a national pilot project to improve the quality and use of labour market information (Rolfe, 2000). This study was also judged as providing a medium-low weight of evidence. The second of the two studies concerned with career information (Russell and Wardman, 1998) looked more generally at the value of information types and sources for Year 11 decision-making and was judged as providing a medium weight of evidence.

Hodkinson and Sparkes (1993) used group interviews with young people (N=115) and individual interviews with careers advisers (N=10) and careers teachers (N=8) to explore the relationship between a specific career guidance action plan, used within one of the original Training Credit pilot schemes, and young people's decision-making. This was a small-scale study and the authors state that they are aware of the dangers of generalising from it. They give little

information about their sampling frame or how the participants were identified and recruited. No detailed description is given of the questions used in either the group interviews with pupils or the one-to-one interviews with careers advisers and teachers.

The action planning system within the Training Credits initiative consisted of a three-stage process. The authors identify that both the design of the system and the way in which it was fitted into the school year assumed that pupils not only passed through the three stages of the system in order, but did so within a time pattern determined by external constraints. They note that the action planning system presumed a technically rational approach to decision-making, while the evidence suggested that young people used restricted pragmatic rationality to make their decisions[1]. Their view was that the use of a technically rational approach misunderstood the ways in which individuals interacted with each other and with society. By over-estimating the power of the individual, it disguised and ignored inequalities in society that greatly reduced the options for disadvantaged and oppressed groups such as women, the working classes and ethnic minorities. However, they indicate that an appropriate model of action planning, which built on an effective programme of career education, closely integrated with the guidance provision, could enhance pragmatic rationality by building on and changing existing systems of relevancy rather than ignoring them.

This would involve those providing CEG in the following:

i.   increasing their understanding of the social and cultural opportunities, and constraints within which young people live and helping young people to develop strategies to challenge them

ii.   widening the perceived context within which young people make decisions, by helping them modify and expand their systems of relevancies in relation to career opportunities

iii. increasing the amount of information available and making it more 'cosmopolitan' (i.e. ensuring it goes well beyond young people's own locally based knowledge of options and occupations), in ways that still relate to the individual's system

iv.   increasing the self-confidence and self-esteem of young people

The study by **Rolfe** (2000) is an evaluation of four pilot projects of a Government initiative designed to make relevant labour market information (LMI) more accessible through the production of customised information for young people and those who influence them. The pilots were based in the North West, West Midlands and South East of England and in London. The evaluation aimed to identify the extent to which the projects had met the Government's four expected outcomes from the initiative:

i.   increased interest and awareness of LMI and how it can be used

---

[1] Hodkinson and Sparkes' definitions of decision-making:

Technical rationality	**Restricted pragmatic rationality**
Total information	Partial information
Cosmopolitan	Localised
Context-free	Context-specific
Planned	Opportunistic
Linear, monochromic time	Lived, polychronic time

ii.   customised materials for the various target groups to improve individuals' choices and decision-making and/or to improve the relevance and responsiveness of provision

iii. improved decision-making

iv.   better understanding among providers and influencers of why LMI is important

The evaluation had two phases. In the first phase – the process evaluation – the authors examined the processes involved in establishing the pilots. In this phase, one-to-one interviews were undertaken with a variety of people, including those in Government offices who had commissioned the projects; those in the organisations responsible for developing and implementing the projects; and around four key users of the information in each area, the majority of the latter being in schools. No information is given about the number of people interviewed during this phase of the evaluation, although the generic topic guide used is appended to the research report.

The second phase of the project – the impact evaluation – was designed to assess the impact of the LMI products on the 'end-users' (mainly young people in schools), including their awareness of and attitudes towards labour market opportunities, their views of the LMI products, and any impact on their decisions about post-16 routes and choices. This was only undertaken in three of the projects, as the fourth project had not focused on young people but on the development of a website for use by training providers. In this second phase, group and one-to-one interviews were undertaken with young people in schools and colleges (N=165) from Year 9 upwards. It is unclear how many were in each year-group, how they were chosen, and what the make-up of each group was in terms of sex, socio-economic status and ethnicity. One-to-one interviews were also undertaken with senior managers, careers co-ordinators, teachers and careers advisers in schools, but no information is given about the numbers seen.

The author found that the four pilot projects produced a range of high-quality materials for use with their target groups (young people and their influencers), but that, possibly due to the short timescales and level of resources allocated to the pilots, the products were often distributed without sufficient back-up and support to potential user organisations. In particular, more training was needed for teachers in the use of LMI.

Although the author was able to assess that young people understood the main messages of the LMI, she found it difficult to identify a strong impact on their awareness of LMI issues. However, it was apparent that their understanding was greater where they had heard the message beforehand (for example, during lessons in curriculum subjects), with equal-opportunities messages being amongst those with the most noticeable impact, because they were of more interest to young people. The author suggested that there is a need for LMI to be delivered in a range of situations and settings, as well as through different formats.

The author had some difficulty in identifying improved decision-making amongst young people following the use of the enhanced LMI; however, she felt that this might have been due to the limited use that had been made of it at the time of the evaluation. The research identified that young people who had been taught how to access the information appeared to draw a distinction between lessons about careers in class and accessing information about jobs and careers. It is

suggested that future LMI materials might be linked to practical activities, such as project work about careers of particular interest to the pupils.

Young people said that they wanted:

- a variety of activities (e.g. role plays and surveys as well as 'ticking boxes')
- a variety of deliverers of LMI
- visits to workplaces, with the opportunity to talk to people about their jobs and find out fairly basic information about entry requirements

Many teachers and advisers involved in the evaluation identified a need for greater awareness of the labour market at a much earlier stage, including in primary education.

Russell and Wardman (1998) aimed to assess the effectiveness of a range of career-related information available to young people, both those planning to remain in education and those planning to enter the labour market. The evaluation was commissioned by DfEE in order to help to provide better targeted and more appropriate careers materials to young people in their last year of compulsory education. One-to-one interviews were conducted with 462 Year 11 pupils drawn from eleven mixed-sex schools within four careers service areas (Buckinghamshire, South Yorkshire, Staffordshire and Tyneside). In order to enable comparisons to be made between those planning to stay in education and those intending to enter the labour market, a quota of 50% was set for each of these groups. In addition, a 50/50 quota was set for gender. The authors stressed that no attempt had been made to ensure that these quotas reflected the actual population of Year 11s, either nationally or in terms of the areas sampled. Profile information about the chosen schools was appended to the report.

The authors found that pupils planning to remain in education were more likely to have made an earlier decision than their labour-market peers. The majority of the education cohort had decided what they would like to do by the end of Year 10, with the majority of the labour-market cohort making the decision in Year 11. This had implications for the timing of the distribution of literature. Many young people claimed to be keeping an open mind about their post-16 options, with half in each group saying that they would still consider the opposite alternative. A majority of pupils in each group had come to a firm conclusion by the summer after Year 11 about what they would do next, but this differed between the two groups (75% for those planning to stay on; 66% for those planning to enter the labour market).

The majority of young people in each group said that they were satisfied with the type and amount of career information, the only significant criticism being that documents lacked sufficient detail (e.g. on specific careers, Youth Training, etc.). However, few documents had been read extensively by either group. When asked why, the answer most commonly given was that they had already decided what steps to take post-16 so did not see the documents as being relevant to them. The FE prospectus was one of the most used documents, along with training opportunities information. While many of those who had not decided what they would like to do said that the information had had an influence on their final decision, overall the authors identified that few users viewed the materials as influencing their broad post-16 decision, but rather saw them as supporting their choices within this broad decision (choice of course, application information, reassurance). On the whole, young people reported finding careers teachers and

careers advisers helpful and supportive, although a minority did not find this to be the case.

Most documents were described as being well designed (i.e. clear layout; effective use of colour; look relevant or are relevant to the target age-group). Where documents were described by young people as being badly designed, this was because they had few or no images, or the images used were not eye-catching, because the front cover was not enticing, or because the document looked boring or inappropriate to the targeted age-group, was difficult to follow, was poorly laid out or made poor use of colour.

Summary (impact of *specific CEG interventions*)

Findings and conclusions based on studies with a medium weight of evidence

- Career information should be produced and distributed at times which meet the needs of young people (Russell and Wardman, 1998).
- There is evidence that young people planning to enter the labour market at 16 are less likely to have made their final decision by the summer after Year 11 than those who are planning to stay in education, suggesting that the former group may benefit from a higher level of CEG interventions during Year 11. Conversely, those planning to stay in education appear to be more likely to have made this decision by the end of Year 10, so may benefit more from earlier interventions (Russell and Wardman, 1998).
- Some types of career information material may be more useful to young people in making and implementing secondary-level decisions about their options at 16 (which course to choose, which training programme to go on, what information to put on the application form) rather than in making their primary-level decision on whether to remain in, or leave, education. It is, therefore, important that such information provides sufficient detail to enable young people to use it for the latter purposes (Russell and Wardman, 1998).
- Care needs to be taken in the design of career information material to ensure that it is seen as relevant and appropriate to its target audience (Russell and Wardman, 1998).

Findings and conclusions based on studies with a medium-low weight of evidence:

- It seems to be important for those providing CEG to ensure that they provide young people with strategies to overcome their social and cultural constraints and use techniques to increase their self-confidence and self-esteem (Hodkinson and Sparkes, 1993).
- Young people seem to need help from those providing CEG to set a wider context within which to make their career decisions (Hodkinson and Sparkes, 1993).
- CEG interventions, timetables and tools might be more effective if they are designed to meet the needs of individual young people rather than to meet the needs of school and other systems (Hodkinson and Sparkes, 1993).
- Action-planning models, which build on effective programmes of career education, closely integrated with career guidance, could enhance 'pragmatic rationality' by building on and changing young people's existing systems of relevancy rather than ignoring them (Hodkinson and Sparkes, 1993).
- There seems to be a need to increase the amount of career-related information available and to ensure that it provides a more 'cosmopolitan'

picture (i.e. that which goes well beyond young people's own locally based knowledge of options and occupations) (Hodkinson and Sparkes, 1993).

- LMI might be more effective if it could be provided earlier than at present, in a range of formats, and used successively in a variety of ways by a variety of deliverers, including within the general curriculum (Rolfe, 2000).
- Staff development appears to be needed for those using LMI with young people, especially where it is being used within the general curriculum (Rolfe, 2000).
- LMI (and probably other career-related information) might be more effective if it included information that interests young people; this appears to include that related to equal opportunities (Rolfe, 2000).
- Young people might more effectively acquire the skills to use LMI (and probably other career-related information) through the use of practical activities, such as project work about careers that interest them (Rolfe, 2000).
- Young people indicate that they would like more access to basic information about jobs and careers, especially through visits to the workplace and contact with working people (Rolfe, 2000).
- Development activity is more likely to produce effective outcomes if it is commissioned with appropriate timescales and resources (Rolfe, 2000).

What is the impact of CEG during Key Stage 4 on *specific groups of young people* and how does this affect the transition process to post-16 opportunities?

Four UK studies looked at the effects of CEG on specific groups of young people. Two of these are related studies aimed at identifying the factors that affect young people's decisions about post-16 education: one (Keys *et al.*, 1998) focused on young people who had decided to stay on in fulltime education; the other (Maychell *et al.*, 1998) focused on young people who had decided to leave fulltime education at 16. A third study (Wardman and Stevens, 1998) focused on young people who had switched courses early in their post-16 education. The fourth study (Lloyd, 2002) was concerned with the development and evaluation of a course aimed at underachieving young men in schools. All four studies are judged as providing a medium weight of evidence.

Keys *et al.* (1998) considered a specific group of those staying on in education. The research had three main aims: to identify the factors that influenced young people's decisions about staying on in fulltime education; to explore the factors that affected their choice of course and location; and to identify aspects of good practice in the provision of advice to young people. The authors used self-completion questionnaires administered to young people in 25 school sixth-forms (N=367), nine sixth-form colleges (N=140) and 27 further education (FE) colleges (N=925). These were followed up by one-to-one interviews with young people (N=42) in all three types of institution, in order to build on, extend and illuminate the data from the questionnaires. Schools and colleges were also asked to complete a short questionnaire giving background information about the institution. As the sixth-form college sample was judged to be too small to enable reliable conclusions to be drawn from the data, the information relating to these young people was omitted from the statistical analysis. Clear information was given about participants' sex, ethnicity and socio-economic status; however, it is unclear how the schools and colleges from which participants were drawn were selected. The questionnaire used did not form part of the study report.

The authors found that, overall, young people's reasons for wishing to remain in education were positive, with the three most frequently cited reasons being the need to obtain qualifications to get a job, the wish to carry on studying, and the need to obtain qualifications for university entrance. Only a minority had chosen to stay in education because no jobs were available. FE students were more likely to give 'get a job' as the reason for staying on, whereas sixth-form students were more likely to cite university entrance requirements.

The authors indicated that students' responses suggested inconsistencies in the timing of career advice to young people. The young people were divided about when they would have preferred to receive advice, but those who had received their first career guidance interview in Year 11 were most likely to say that they would have liked to receive the information earlier. Students' recollections suggested that a wide range of sources was used to obtain advice and information on careers and post-16 options. The most frequently used sources were individual careers interviews, written information about other institutions, attendance at open days in other institutions, careers lessons, presentations by members of staff from other institutions, talks from outside speakers about their jobs, and group discussions. While roughly similar proportions of students in FE colleges and school sixth forms had been given advice by careers teachers and advisers, FE students were less likely to recall having been given advice by their parents or subject teachers.

When asked to identify the most helpful sources of advice, students were more likely to cite people than written information. The people mentioned were: careers advisers, parents/relatives, careers teachers and other teachers. The research found that over 40% of students would have liked more help in making decisions. The majority of all students asked for more information on the range of courses open to them, this being especially the case for school sixth-form students. Many indicated that they would have welcomed information about different kinds of jobs and courses available in other institutions. Discussions with the students also highlighted the importance of speaking to people with personal experience of a particular career, course or institution.

Maychell *et al.* (1998) looked at young people who had decided to leave education at 16. The study compared the views and attitudes of those who planned to leave fulltime education at 16 with those who intended to remain in education. It aimed to identify the factors that affected young people's decisions about staying on or leaving fulltime education; the reasons why some young people chose to leave fulltime education at 16, and aspects of good practice in the provision of advice to young people on careers and post-16 education and training. It also considered young people's perceptions of the career advice and guidance they had received and their attitudes to school and education. A developmental phase, in which pupils from Years 8, 11 and 12 in secondary schools (no numbers were provided) were interviewed, was used to inform decisions about the focus of the research key questions and the survey design. Following this developmental phase, self-completion questionnaires were given to Year 8 (N=863) and Year 11 (N=821) pupils in 42 maintained schools in England. (This review focuses on the data that relate to Year 11 pupils.)

Follow-up one-to-one interviews were undertaken with some Year 11 pupils (N=33) in order to extend and illuminate the information from the questionnaires. Although no information is provided about how the schools were selected, the authors compare the pupils responding with the pupil population in England. The authors also weight their evidence to take account of certain factors, such as sex

and social class, with pupils intending to leave being taken as the reference group. Information about pupils' sex and social class is provided, but no information is given about their ethnicity or about their special educational needs (SEN). No information is provided about how the pupils interviewed were selected. The questionnaires used do not form part of the study report.

The research found that career advice and guidance usually played an important part in young people's decisions about the future, with the majority consulting some adult about what they wanted to do. However, half of the Year 11 pupils felt that it would have been more useful to have received the career advice for the first time in Year 9 or 10. The authors suggest that schools and other providers should consider increasing awareness of career choices at an earlier age, not necessarily in careers sessions but possibly as part of other subject lessons.

The authors found that pupils had consulted and discussed their careers with several different people. While most had spoken to their parents/guardians about their career plans, and parental advice was felt to be more important by those planning to leave education, the person perceived by pupils to be most useful was the visiting professional careers adviser. The authors suggest that pupils may value an external 'expert' who is prepared to spend time with them, listening to what they want to do with their future, and may see the careers adviser as being more impartial than other adults who they have consulted.

Half of the Year 11 pupils planning to leave education said they would have liked more information on the courses available; a quarter would have liked more information on schools and colleges. Just under 40% of students planning to stay in education expressed an interest in more information on combining work with training. It is suggested by the authors that there are two key areas in which additional information would be helpful: firstly, in helping to make the crucial decision to continue or leave education; and secondly, once that decision has been made, in informing pupils about the more specific options open to them.

Wardman and Stevens (1998) looked at young people who had made early changes to their initial post-16 choice. The research aimed to identify the impact of CEG on preventing inappropriate decision-making and subsequent post-16 course switching. In the first phase of the research, in-depth interviews were undertaken with young people (N=44) in four careers service areas in England (Merseyside, Leeds, Nottinghamshire, Avon (now Bath and North East Somerset) and Gloucestershire). The participants were young people who had left or switched from four different courses in four types of provider: A-level courses in school sixth-forms or sixth-form colleges; fulltime National Vocational Qualification (NVQ) courses at FE colleges; intermediate General National Vocational Qualification (GNVQ) courses in school sixth-forms; and training courses (non-employed status), mostly Youth Training (YT) courses. As four of the young people interviewed were found not to have switched course, only 40 interviews were included in the data analysis. The information collected during these interviews was used to inform the design of the questionnaire for the second phase of the research, in which semi-structured interviews were conducted with 'course switchers' (N=208). Copies of the questionnaires used are not included in the report. The authors acknowledge that this was a small-scale qualitative study, with a sample drawn from restricted areas in England, and that care should be taken not to extrapolate the findings too widely.

The research identified that CEG provision varied markedly across schools, with greater importance being attached to it by some schools than by others. The

quality and availability of careers teachers was also found to have varied. Despite this variability, there was evidence that those who had received components of career education were more likely to have reached a decision in Year 11 about what they were going to do, and to regard themselves both as having been prepared for the transition at 16, and as having decided what they were going to do. The authors suggested that there was a relationship between the amount of career education received and the degree of self-assessed preparation and decision-making attained.

Nearly all the participants (nearly 90%) had seen a careers adviser at some point in either Years 10 or 11. Only a small number (N=27) had not seen a careers adviser while at school. The authors found some evidence that young people who disliked school were less likely than others to have had an interview (one in six as opposed to one in ten). Around 30% of those who had an interview said that it was useful or helpful, while one in seven believed the opposite. There were indications that some careers advisers failed to provide the support or guidance that young people felt they required. Young people either seemed to feel that they were being pushed to go in directions that they did not want, or they complained of lack of direction. The authors found that a common reaction was the feeling that the interview had not advanced their decision-making or that other options had not been explored fully. They suggest that, for young people who are forming their career plans, the perception of how good guidance is may be contingent upon whether they made substantive progress towards reaching a conclusion or resolving a dilemma.

One of the conclusions that the authors drew from the research was that there was no apparent 'system failure', in terms of the provision of CEG, which helped to explain course-switching. While not all young people felt adequately prepared, the research evidence suggested that CEG was available to young people who later switched courses. They found that young people fell into two broad camps, regardless of switching cohort. The first of these was identified as being those with 'closed minds', who had decided on their first transition and were resistant to advice. The second was young people who did not have a clear idea of what they wanted to do, and became frustrated at the failure of guidance to direct or help them to choose between the options available. The authors identify that for many of these young people CEG did not play a significant influence on career or educational choice in Year 11. The guidance interview was, for some, only one of the sources of advice and information, and not the most important (other than for switchers from YT courses).

Lloyd (2002) was concerned with underachieving young men. The author aimed to demonstrate how a tailor-made course targeted at young men at risk could improve their motivation and their understanding of work and of the needs of the labour market. The author developed such a programme, called 'Into Work', trialling it with three Year 10 pilot groups (N=33) from three Lewisham secondary schools. It was 30 hours long and was designed to supplement existing CEG programmes in schools. Schools were chosen because they: had substantial numbers of underachieving young men; were situated within socially deprived areas; ran an existing career programme; were keen to work with other agencies to improve delivery; and were willing to adapt their curriculum to meet the career needs of underachieving young men. All the participants were identified by their schools as being 'at risk' and all were underachieving in some part of the curriculum. Following the pilots, the programme was revised, and was run with two Year 10 groups (N=18) in two of the original schools.

The author identified skill, experience and knowledge components of particular importance, and developed the programme accordingly. These included: presentation and interview skills; communication skills; ability to recognise and communicate own strengths and weaknesses; ability to see themselves through the eyes of employers; direct experience of workplaces; knowledge of the changing workplace; increased knowledge of the career options open to them and the provision of individual support to focus on career paths; and identification of what they could realistically achieve before they left school.

The young men involved in the two final programmes were asked to complete a pre- and post-course questionnaire; a copy of the questionnaire used is appended to the report, along with copies of the course materials used. Of the 18 young men on the two final programmes, 14 completed the course and agreed to undertake an assessment programme; the author reports that all 14 were successful. However, no information is provided about the standards used for the assessment, and no measures are given of the progress made by the participants. The evaluative information provided by the author is in the form of the participants' comments and self-assessments.

The author states that the 14 young men who completed the course found all aspects of the course to be very useful. When asked what was most useful, there was a broad spectrum of answers, with interviews (11 responses), phone experience (six responses), college visits (five responses) and individual help (four responses) being cited most often. The majority liked the practical and informal approach, and most liked the size of the group. The young men also indicated that the course had changed their views of the workplace and careers in four main areas: it had increased their understanding and knowledge; it had helped them to identify and focus upon a career path; it had increased their confidence; and it had identified barriers that would need to be overcome.

As appendices to the report, the author sets out a number of recommendations for schools interested in delivering such programmes, along with a list of skills, knowledge areas and competences that would be useful for practitioners delivering them. The author concludes that, to ensure the success of such a programme, there needed to be clarity about the skills to be developed, workers with skills in working with young men, and practical materials that would engage them easily and effectively. He also indicated that, for schools (and other settings) to integrate such programmes within the curriculum, they would need to become even more flexible in their approach and attitudes towards life-related non-academic programmes. In addition, they would also need to be willing and able to work in partnership with other agencies and organisations in order to develop and deliver the programmes. His view is that underachievement of young men primarily involves difficulties in engaging young men in school-based activities, and also difficulties for school staff in engaging with them; and that workers' skills and approaches are central to the effectiveness of such programmes.

Summary (impact of CEG on *specific groups of young people*)

Findings and conclusions based on a medium weight of evidence:

- There appear to be inconsistencies in the timing of CEG interventions and in the quality and quantity of provision and providers (Keys *et al.*, 1998; Wardman and Stevens, 1998).

- There is evidence that, while career advice and guidance is often seen as playing an important part in young people's decisions about the future, young people would have found it more useful to have received career guidance at an earlier stage of their school career (Keys *et al.*, 1998; Maychell *et al.*, 1998).
- Some young people find the guidance given by careers advisers to be the most useful form of help in making decisions about, and preparing for, post-16 transitions; others do not find it helpful (Keys *et al.*, 1998; Maychell *et al.*, 1998).
- There appears to be a relationship between the amount of career education received and the degree of self-assessed preparation and decision-making attained (Wardman and Stevens, 1998).
- For many of those who switch courses early in their post-16 options, CEG does not appear to have had a significant influence on career or educational choice in Year 11 (Wardman and Stevens, 1998).
- There is some evidence that, for young people who are forming their career plans, the perception of how good the guidance they receive is may be contingent upon whether they have made substantive progress towards reaching a conclusion or resolving a dilemma (Wardman and Stevens, 1998).
- Young people appear to value the involvement of people in the provision of career information, preferring this to the written word (Keys *et al.*, 1998; Maychell *et al.*, 1998).
- Some young people would like to receive more information about the range of jobs and courses open to them (Keys *et al.*, 1998; Maychell *et al.*, 1998).
- There is evidence that young people would like more help with their decision-making, at a time that best suits their needs (Keys *et al.*, 1998; Maychell *et al.*, 1998).
- Additional CEG provision, tailored to meet the needs of young people identified as being 'at risk' and delivered by those with the appropriate skills, knowledge and attitudes, can have a significant impact upon young people's learning outcomes and can help them to prepare for post-16 transitions (Lloyd, 2002).
- Schools that wish to integrate programmes aimed at those 'at risk' will need to be flexible in their approach and attitudes towards such programmes and towards the young people, and be prepared to work in partnership with other agencies and organisations in order to develop and deliver the programmes (Lloyd, 2002).
- In order to work effectively with young people 'at risk', workers need to have, or develop, a set of appropriate skills and approaches (Lloyd, 2002).

4.4.2 Sub-question: *In what ways do internal/external factors influence the effectiveness and outcomes of careers education and guidance?*

Career education and guidance does not impact on young people in isolation. They are also subject to other factors, both internal and external, many of which are likely to modify or influence the effectiveness of the career education and guidance that they receive and their learning and transition outcomes during Key Stage 4 and in post-16 options. This section attempts to identify factors other than *general CEG provision, specific interve*ntions provided in schools, or effects of *CEG on specific groups of young people*, that are considered within the studies in the in-depth review.

All the studies in the review were judged as being able to provide information about how internal and/or external factors influence the effectiveness and outcomes of CEG. Two were judged to provide a medium-high weight of evidence (Morris *et al.*, 1999; SWA Consulting, 1998); two a medium-low weight of evidence (Hodkinson and Sparkes, 1993; Rolfe, 2000); and the remaining six, a medium weight of evidence.

Influence of parents, relatives and friends

Munro and Elsom (2000) identify that young people's perceptions of local opportunities were often filtered through family and friends. This was echoed by Hodkinson and Sparkes (1993), who found that many of those young people who had clear ideas about what they wanted to do said that they had been influenced by close relatives, friends or neighbours who worked in the same fields – an 'insider' whose judgement they could trust because they knew them personally. This forms part of the social context which the authors recognise as constraining young people's choices.

Keys *et al.* (1998) asked students who had stayed in education about who had given them advice. Parents/guardians were most commonly identified; in fact, they were identified by 69% of students who had stayed in a school sixth form and 56% of students who had gone to an FE college. It should be noted, though, that both of these groups of students identified the advice and guidance given by careers advisers as *more helpful* (sixth-form students 30%; FE college students 22%) than that given by parents (sixth-form students 15%; FE college students 19%). Maychell *et al.* (1998) also found that Year 11 pupils were most likely to have received advice from parents, and this finding was reported too by Russell and Wardman (1998). Interestingly, Maychell *et al.* (1998) found that pupils consistently cited people as being more helpful providers of advice than written sources of information.

Family and friends were cited ahead of careers advisers as people with whom the 'course switchers' studied by Wardman and Stevens (1998) discussed their feelings about their futures. These authors found careers advisers to be *less influential* than parents. This finding was echoed by Rolfe (2000).

The evidence suggests that young people seem to be more likely to consult their parents, family and friends, and to take notice of what they say, and that this will affect the way in which they respond to CEG provision – and thus the effectiveness of CEG upon their outcomes and transitions.

Influence of subject and other teachers

Three studies identified that subject and other teachers could influence the impact of CEG by influencing pupil choices through the pupils' experiences of classroom and extracurricular activities and through their role in the provision of post-16 information (Munro and Elsom, 2000). However this relationship was found to differ depending on post-16 destinations. Keys *et al.* (1998) found that, of pupils who stayed on in school sixth forms, 55% said they had talked to subject teachers; the corresponding figure for those in FE colleges was 31%. Lower figures are reported in a second study (Maychell *et al.*, 1998): 27% of Year 11 students who were planning to leave education and 29% of those planning to

stay on in education had consulted subject and/or other teachers about their options.

Studies noted an inconsistency between the extent to which students found this advice helpful. In Keys *et al.* (1998) of the pupils who had stayed in school sixth forms, 26% had found the advice of teachers to be helpful, with fewer (22%) identifying careers advisers as helpful; the opposite was true for those who went to an FE college (12% for teachers; 30% for careers advisers). However, in the study by Maychell *et al.* (1998), only 3% of those planning to leave and 7% of those planning to stay had listed 'other teacher' (i.e. not careers teacher) as being amongst the three most helpful sources of advice about careers. The studies suggest that young people can see subject teachers as a source of useful help and advice, which could affect CEG.

Socio-economic factors

Socio-economic factors were also found to play a significant role in young people's career decision-making. Social class was found to be strongly related to post-16 choices, with two-thirds of Year 11 pupils who planned to leave fulltime education being from skilled manual or partly skilled backgrounds. On the other hand, only one-fifth of Year 11 pupils who had made this decision were from professional or managerial backgrounds (Maychell *et al.*, 1998). In addition, financial difficulties were sometimes cited as a reason for changing option or course post-16 (Morris *et al.*, 1999).

Lloyd (2002), following an intervention designed for young people considered to be 'at risk' suggests that jobs in heavy industry, manufacturing and other labour-intensive industries had been replaced by lower-paid and sometimes part-time jobs in sectors that many men see as 'women's work'. At the same time, well-paid jobs with prospects are increasingly dependent upon academic qualifications. Both of these were identified as factors that influenced underachieving young men's attitudes to the workplace, making them reluctant to learn, reluctant to accept the changing workplace, and impatient and reluctant to work harder for what they wanted. This was seen as making their transition into work particularly difficult, requiring the response to them to be complex.

The studies suggest that young people's career decisions may be influenced not just by financial concerns, such as course costs, but also the social and cultural opportunities and constraints within which they live. Hodkinson and Sparkes (1993), in their discussion of the importance of socio-cultural factors, recommend that guidance practitioners increase their own understanding of these constraints, and should endeavour to widen the perceived context within which young people make their decisions: for example, by helping the young people to be more receptive to the whole range of information presented to them.

Institutional factors

SWA Consulting (1998) identify that progress towards career-related learning outcomes was most commonly associated with, and tended to be greatest for pupils in, schools in more deprived areas and those with lower overall staying on rates. They conclude that this might be because more pupils in such schools actually made a transition and therefore required a higher level of relevant learning outcomes in order to effect that transition. The authors found that there

were other factors relating to the school that appeared to be associated with greater progress in career-related learning outcomes, these being the size of the Year 11 cohort (with pupils in medium-sized schools making most progress) and schools where more pupils were eligible for free school meals. A second study by Wardman and Stevens (1998) identifies that GNVQ switchers were more likely that other course switchers to complain about poor course organisation, suggesting that both the environments prior to the post-16 transition and following the post-16 transition could affect the impact of CEG.

Expected/actual academic attainment

Expected/actual academic attainment was identified as a factor in young people's transitions by five studies. Morris *et al.* (1999) found that the young people with the clearest ideas about progression were most likely to be young people with higher levels of attainment, and also those with higher levels of self-awareness and opportunity awareness. Young people with the least idea of progression were those who had dropped out from a post-16 course of study or training; amongst this group, the least able lacked 'career exploration' skills – the skills most strongly associated with successful transitions at 16.

Keys *et al.* (1998) found that GCSE achievement was associated with choice of post-16 option, with those who had achieved a greater number of high-grade GCSEs being more likely to choose to study A/AS levels. A second study by Maychell *et al.* (1988) found that, conversely, the majority of Year 11 pupils planning to leave education at 16 expected poor examination results. Wardman and Stevens (1998) found that one-third of the students who dropped out of A-level courses had been allowed to proceed to an A-level course with fewer than five GCSE passes at grades A* to C, while others in this group had not achieved outstanding results. The authors conclude that lack of academic ability largely explained the cohort's need to switch. Lloyd (2002) suggests that underachievement affected both interest and capabilities and could severely affect the relationships between young men and their teachers. Clearly this would be likely to affect the way in which young men responded to CEG, their outcomes from it and the transitions they made.

Gender

Maychell *et al.* (1998) found that young males accounted for a higher proportion of pupils planning to leave education at 16; and SWA Consulting (1998) identified that progress towards decision-making and decidedness on post-16 options was greater among female than male pupils. Lloyd (2002) was particularly concerned with how to help underachieving young males to prepare more effectively for transition at 16. He suggested that a gendered set of attitudes towards masculinity could make it harder for young men to admit that they did not know what they were planning to do; this could clearly have an impact upon the effectiveness of general CEG provision, in which these attitudes might not be taken into account.

Summary (ways in which *internal/external factors* influence CEG)

Career education and guidance is one of a number of factors that influence young people in transition from Key Stage 4 to post-16 opportunities. Four external and two internal factors, other than CEG, are identified as having a possible effect on the impact of CEG on young people's transitions. The external

factors are parents, family and friends; subject and other teachers; other factors associated with the educational institution; and socio-economic background. Internal factors are the young person's expected or actual level of attainment and their gender.

Findings and conclusions based on studies with medium-high, medium and medium-low weight of evidence:

- Many studies found evidence that the impact of general CEG provision is different upon different groups of young people: for example, underachieving young men, those with higher or lower expected or actual attainment, those likely to leave or stay in education, and those in schools with particular characteristics (Hodkinson and Sparkes, 1993; Lloyd, 2002; Maychell *et al.*, 1998; Morris *et al.*, 1999; SWA Consulting, 1998; Wardman and Stevens, 1998).

Findings and conclusions based on studies with medium weight of evidence:

- There is evidence that subject teachers have an influence upon the choices made by young people both outside and within CEG provision; however, this seems to vary for different groups of young people (Keys *et al.*, 1998; Maychell *et al.*,1998; Munro and Elsom, 2000).
- CEG provision needs to take account of factors, such as young men's gendered set of attitudes towards being a man, that could make it harder for young men to admit that they do not know what they want to do (Lloyd, 2002).

Findings and conclusions based on studies with medium and medium-low weight of evidence:

- Young people see people as being more important/more helpful than written sources of information (Hodkinson and Sparkes, 1993; Keys *et al.*, 1998; Munro and Elsom, 2000; Rolfe, 2000; Wardman and Stevens, 1998).
- Parents are seen as a key source of information and influence upon a young person's career choices. Evidence suggests that both career education and the support of parents are important to help young people through the transition process (Hodkinson and Sparkes, 1993; Maychell *et al.*, 1998; Munro and Elsom, 2000; Rolfe, 2000; Russell and Wardman, 1998; Wardman and Stevens, 1998).
- Socio-economic factors have an impact upon the CEG process and upon the choices and transitions made by young people. Practitioners should use their skills to help young people to widen their views of the options open to them (Hodkinson and Sparkes, 1993; Lloyd, 2002; Maychell *et al.*, 1998).

4.5 In-depth review: quality-assurance results

Members of the EPPI-Centre link team data-extracted five of the studies. The differences between the Review Team's and the EPPI-Centre link person's versions of the data-extraction of studies were in most cases different expressions of the same fundamental opinion; a final version was agreed with ease, usually by combining the two versions. Some differences in the two versions stemmed, in the early stages, from misunderstandings or different interpretations of terminology. Through moderation with the EPPI-Centre link person, this was resolved in the later stages of the process. Generally,

differences were resolved through discussion between members of the Review Team, and consensus was reached without difficulty. Such discussion either resulted in one version or the other, or a combination of the two, being taken forward into the final version.

4.6 Nature of the actual involvement of users in the review and its impact

As described in Chapter 2, the Review Team has drawn on the expertise of a pool of associates and established networks of researchers and practitioners in the process of this review. Members of the Advisory Group were consistent in attending meetings as far as was possible within their busy schedules. When face-to-face meetings were not possible, communication by email ensured that the Group were consulted about the various stages of the review and kept informed of progress. The Advisory Group actively contributed to the formulation of the protocol, suggested references and provided feedback on written documents. Members of staff of, and CeGS Associates involved with, the National Library Resource for Guidance (NLRG) assisted with searches for references and documents.

5. FINDINGS AND THEIR IMPLICATIONS

5.1 Summary of principal findings

The review question for this review was is follows:

What is the impact of CEG on young people during Key Stage 4 (ages 14–16) and how does this affect the transition process to post-16 opportunities?

In order to address all the aims of the review, the subsidiary question is as follows:

In what ways do internal/external factors influence the effectiveness and outcomes of careers education and guidance?

This chapter considers the main findings, strengths and weaknesses of the review and the implications for policy, practice and research.

5.1.1 Identification of studies

The Review Team conducted a comprehensive search for reports of empirical research that were of relevance to the review. Literature was identified through handsearches and searches of electronic databases. The search process was recorded and the results stored in a database. The initial search identified 8,692 papers. Screening by title and abstract resulted in a total of 132 papers with potential for inclusion. Of these, 20 were unobtainable, leaving 112 to be screened by the full document. Of the 112 papers screened, four were found to be duplicates and 84 were excluded, leaving 24 studies (reported in 24 papers) in the systematic map.

5.1.2 Mapping of all included studies

The included studies were keyworded according to the EPPI-Centre generic keywords (EPPI-Centre, 2002a; see Appendix 2.4), augmented by additional review-specific keywords that provided further detail about the focus of the study, the nature of the intervention, its delivery, its recipients and their key influencers, and the outcomes of the intervention (see Appendices 2.4 and 2.5). The keyworded studies were used to create a map of the literature describing the research that had investigated the impact of CEG at Key Stage 4.

Systematic map

Some of the characteristics of the studies included in the systematic map are described below, with further details being set out in Appendix 3.1.

Fifteen of the studies were carried out in the UK, of which 13 were specific to England. The other two UK studies were specific to Scotland. Of the further seven studies included in the systematic map, six were carried out in the USA, with the remaining study having been undertaken in South Korea.

The studies focused on CEG delivered either within or external to the school during Key Stage 4, examining outcomes of CEG relating to young people as they approached, or during, the transition from Key Stage 4 to post-16 opportunities, and/or student development and learning during Key Stage 4 and/or in post-16 opportunities. All were based on empirical data, written in English and conducted after 1988. Thirteen of the studies focused on CEG within the curriculum. Some studies focused on particular interventions, while other studies solely or additionally had non-curricular foci that included careers guidance and the value of information for decision-making in Year 11.

In accordance with the description supplied by the EPPI-Centre (2002b), four categories were used to code the type of study: descriptive; evaluation of a naturally-occurring intervention; evaluation of a researcher-manipulated intervention; and exploration of relationships between variables. One study was identified as being a description and 14 were found to be evaluations. Of the studies categorised as evaluations, seven were categorised as evaluations of naturally occurring interventions and seven were categorised as evaluations of researcher-manipulated interventions. Nine studies were categorised as explorations of relationships between variables.

5.1.3 Nature of studies selected for the in-depth review

The studies in the systematic map were then considered against two additional criteria, with only those undertaken in England and those in which it was possible to differentiate the effects of CEG from the effects of other interventions being included in the in-depth review.

The weight of evidence of the studies included in the in-depth review was judged using EPPI-Centre guidelines (EPPI-Centre, 2002b). Two studies were judged as having a medium-high weight; six studies were judged as providing a medium weight; and two were judged as providing a medium-low weight.

5.1.4 Synthesis of findings from studies in the in-depth review

The studies in the in-depth review were found to address the main review question in three different ways. Some studies were concerned with general CEG provision, some with specific CEG interventions, and some with the impact of CEG on specific groups of young people. All the 10 studies in the in-depth review were considered to be relevant to the review sub-question concerning the influence of external/internal factors on the effectiveness of CEG.

When considering all of the findings identified in the synthesis, a number of themes emerged:

A. Career-related learning and skills and transition

B. General CEG provision

C. Individual guidance

D. Provision of information

E. Timing of provision

F. CEG and different groups of young people

G. The importance of people in CEG

H. Skills of those responsible for delivering CEG

I. Other

The findings and conclusions from the studies are set out below under each of these themes.

A Career-related learning and skills and transition

i.   The level of young people's career-related skills seems to be an important factor in their transition at 16, with those with a high level of skills being less likely to modify choices or switch courses (SWA Consulting,1998).
ii. Career-exploration skills and self-awareness skills seem to be the most important of the career-related skills in terms of their impact on transition at 16 (Morris *et al.*, 1999).
iii. CEG provision – such as individual interviews, group-work sessions, access to career-related information and a wide range of work-related activities – appears to have a positive impact on the development of pupils' career-related skills (Morris *et al.*, 1999; Munro and Elsom, 2000; SWA Consulting, 1998; Wardman and Stevens, 1998).
iv. Young people might more effectively acquire the skills to use LMI (labour market information) and possibly other career-related information, through the use of practical activities, such as project work about careers that interest them (Rolfe, 2000).

B General CEG provision

i.   There appear to be inconsistencies in the quality of CEG provision and providers, with the quality varying from school to school (Keys *et al.*, 1998, SWA Consulting, 1998).
ii. The integration of career-education programmes with guidance provision and with the wider curriculum may be a key factor in determining the effectiveness and impact of CEG on young people's skill development and transitions (Hodkinson and Sparkes, 1993; Morris *et al.*, 1999).
iii. Partnership working, both within school (i.e. between departments) and between the school and other agencies and organisations, can affect CEG provision, to the benefit of the pupils (Lloyd, 2002; Morris *et al.*, 1999; Munro and Elsom, 2000).
iv. CEG interventions, timetables and tools appear to be more effective if they are flexibly designed to meet the needs of individual young people, or specific groups of young people, rather than the needs of the organisation and its (and others') systems (Hodkinson and Sparkes, 1993; Keys *et al.*, 1998; Lloyd, 2002; Maychell *et al.*, 1998; Munro and Elsom, 2000; Russell and Wardman, 1998).

C Individual guidance

i.   Good-quality individual career guidance is important to the development of learning outcomes, such as career-related skills, especially opportunity awareness, career exploration and decision-making skills (Morris *et al.,* 1999; SWA Consulting, 1998).
ii. Some young people find the guidance given by careers advisers to be the most useful form of help in making decisions about, and preparing for, post-16 transitions; others do not find it helpful (Keys *et al.*, 1998; Maychell *et al.*, 1998).
iii. There is evidence that young people would like more help with their decision-making (Keys *et al.*, 1998; Maychell *et al.*, 1998).

iv.   Young people's perceptions of the quality of career guidance may be contingent upon whether they made substantive progress towards reaching a conclusion, or resolving a dilemma during their career interview(s) (Hodkinson and Sparkes, 1993).

v.   Young people seem to benefit from help from those providing guidance in setting a wider context within which to make their career decisions (Hodkinson and Sparkes, 1993).

D   Provision of information

i.   Access to information about post-16 options is important to the development of young people's learning outcomes, but provision of such information is patchy (Morris *et al.*, 1999; Munro and Elsom, 2000; SWA Consulting, 1998).

ii.   Young people identify gaps in the information they receive and would like to receive more information about courses, jobs and careers, especially through the workplace and contacts with working people (Keys *et al.*, 1998; Maychell *et al.*, 1998; Morris *et al.*, 1999; Munro and Elsom, 2000; Rolfe, 2000; SWA Consulting, 1998).

iii.   Care needs to be taken in the design of career information to ensure that it is seen as relevant and appropriate by its target audience (Russell and Wardman, 1998).

iv.   Some types of career information may be more useful to young people in making and implementing secondary-level decisions about their options at 16 (which course to choose, which training programme to go on, what information to put on the application form) rather than in making their primary-level decision about whether to remain in, or leave, education. It is important that such information provides sufficient detail to enable young people to use it for the latter purposes too (Russell and Wardman, 1998).

v.   Parents are seen by young people as being a key source of information (Hodkinson and Sparkes, 1993; Maychell *et al.*, 1998; Munro and Elsom, 2000; Rolfe, 2000; Russell and Wardman, 1998; Wardman and Stevens, 1998).

vi.   LMI might be more effective if it were presented in a range of formats and used successively in a variety of ways and by a variety of deliverers, including within the curriculum (Rolfe, 2000).

vii.   LMI might be more likely to be more effective if it included information that interests young people; this appears to include information that relates to equal opportunities (Rolfe, 2000).

viii.   There seems to be a need to increase the amount of career-related information available and to ensure that it provides a more 'cosmopolitan' picture (i.e. one which goes well beyond young people's own locally based knowledge of options and occupations) (Hodkinson and Sparkes, 1993).

E   Timing of provision

i.   There appear to be inconsistencies in the timing of CEG interventions (Keys *et al.*, 1998).

ii.   There is evidence that, while careers advice and guidance is often seen as playing an important part in young people's decisions about the future, young people would have found it more useful to have received careers guidance at an earlier stage of their school career (Keys *et al.*, 1998; Maychell *et al.*, 1998).

iii.   There is evidence that young people would like more help with their decision-making, at times that best suit their needs (Keys *et al.*, 1998; Maychell *et al.*, 1998).

iv. Earlier CEG interventions, lower down the school, might help to raise pupils' awareness of subject-related careers and to counteract external influences such as peer pressures, which are very strong by Year 11, when post-16 choices are made (Munro and Elsom, 2000).

v. The demands of the school option-choice system put pressure on the timings and outcomes of careers adviser interview programmes and on pupils to make up their minds early in the year (Munro and Elsom, 2000).

vi. Career information should be produced and distributed at times which meet the needs of young people (Russell and Wardman, 1998).

vii. There is evidence that young people planning to enter the labour market at 16 are less likely to have made their final decision by the summer after Year 11 than are those planning to stay in education, suggesting that the former group of young people may benefit from a higher level of CEG intervention during Year 11. Conversely, those planning to stay in education appear more likely to have made this decision by the end of Year 10, so may benefit from earlier interventions (Russell and Wardman, 1998).

F   CEG and different groups of young people

i.   CEG provision appears to have the greatest impact on pupils of moderate/higher ability in schools with lower/average achievement, typically without sixth forms (SWA Consulting, 1998).

ii.   Many studies found evidence that the impact of general CEG provision is different for different groups of young people, such as underachieving young men; those with higher or lower expected or actual attainment; those likely to leave or stay in education; and those in schools with different characteristics (Hodkinson and Sparkes, 1993; Lloyd, 2002; Maychell *et al.*, 1998; Morris *et al.*, 1999; SWA Consulting, 1998; Wardman and Stevens, 1998).

iii.   Additional CEG provision, tailored to meet the needs of young people identified as being 'at risk', delivered by those with the appropriate skills, knowledge and attitudes, can have a significant impact on young people's learning outcomes and can help them to prepare for post-16 transitions (Lloyd, 2002).

iv.   The influence that subject and other teachers appear to have upon the choices made by young people seems to vary for different groups of young people (Munro and Elsom, 2000).

G   The importance of people in CEG

i.   There is some evidence that subject and other teachers have an influence upon the choices made by young people both outside and within CEG provision (Keys *et al.*, 1998; Maychell *et al.*, 1998; Munro and Elsom, 2000).

ii.   Young people appear to value the involvement of people in the provision of career information, seeing them as more important and/or more helpful than written sources of information (Hodkinson and Sparkes, 1993; Keys *et al.*, 1998; Maychell *et al.*, 1998; Munro and Elsom, 2000; Rolfe, 2000; Wardman and Stevens, 1998).

iii.   Parents are seen as a key source of information and influence upon a young person's career choices. Evidence suggests that both careers education and the support of parents are important to help young people through the transition process (Hodkinson and Sparkes, 1993; Maychell *et al.*, 1998; Munro and Elsom, 2000; Rolfe, 2000; Russell and Wardman, 1998; Wardman and Stevens, 1998).

H   Skills of those responsible for delivering CEG

i.   There is evidence to suggest that careers advisers need access to systematic training designed to ensure that their occupational knowledge is kept up to date (Munro and Elsom, 2000).

ii.   In order to work effectively with young people 'at risk', workers need to have, or to develop, a set of appropriate skills and approaches (Lloyd, 2002).

iii. Staff development appears to be needed for those using LMI with young people, especially where it is being used within the curriculum (Rolfe, 2000).

iv.   Practitioners need to have and use skills that will help young people to widen their views of the options open to them, providing them with strategies to counter the socio-economic factors and the social and cultural constraints that impact upon them, and to increase their self-confidence and self-esteem (Hodkinson and Sparkes, 1993).

I   Other

i.   Research could usefully be undertaken to find out whether the career-related skills developed by young people up to Year 11 are more significant for Year 11 outcomes than inputs received during Year 11, and whether Year 11 outcomes may be more important at the point at which they implement their post-16, and subsequent, career decisions (SWA Consulting, 1998).

ii.   Development activity is more likely to produce effective outcomes if it is commissioned with appropriate timescales and resources (Rolfe, 2000).

Many of these findings support findings from previous research and reviews discussed in Chapter 1. Findings in relation to general CEG provision and the importance of the development of career-related skills and upon young people's transitions echo the findings of an earlier literature review (Moon *et al.*, 2004). This review identified that CEG helps students to develop the knowledge and skills that they need to make and implement course and career choices. However, there are inconsistencies between schools in the quality of provision, the way in which it is planned and delivered, and the skills of those delivering it, that impact upon its effectiveness and upon the outcomes for young people. Such concerns about the quality and consistency of CEG provision were identified by schools themselves in a survey reported by the National Audit Office (2004) in its report on Connexions, in which many schools said that they did not feel that they had the capacity to provide appropriate levels of CEG for young people.

The in-depth review was based on studies carried out in England; however, it is interesting to note that some of the non-England studies identified in the systematic map evaluated the impact of specific CEG interventions, using rigorous research techniques. Two such studies, which were randomised controlled trials, were by Krumboltz *et al.* (2000) who studied the effect of an interactive computer job simulation, and Schlossberg *et al.* (2001) who looked at the impact of a counsellor led developmental guidance unit approach. While these studies were not included in the in-depth review because they were seen as being less relevant to the England specific context of the review, practitioners may find that they contain useful information, and show it is possible to carry out experimental evaluations of CEG.

5.2 Strengths and limitations of this systematic review

Strengths

The systematic review process has enabled the Review Team to undertake a transparent assessment of the available research to provide a sound evidence base for practitioners and policy-makers. A systematic approach as outlined by the core EPPI-Centre review process was followed. Careful recording was a key feature in relation to selecting studies found to be relevant to the review question. That only 10 studies were selected from an original total of 8,692 identified, and then from the 132 studies identified as having potential for inclusion, may seem to be a weakness. However, the progressive focusing that is central to the EPPI-Centre review process meant that studies were initially identified through a variety of search methods and entered into a database ('screen me'). They were then screened by title and abstract, and those that met the criteria were entered into a second database ('get me'). Full copies of these papers were obtained and screened against the inclusion and exclusion criteria, with those that met the criteria being keyworded using the EPPI-Centre standardised keywording strategy, with additional review-specific keywords. Finally, based on consultation with the Review Team and the review's Advisory Group, the studies to be included in the in-depth review were identified, coded and stored in the final data-base ('include me'). Thus the identification of the 10 studies meant that detailed attention could be given to the most relevant studies for answering the review question. Moreover, the EPPI-Centre quality-assurance process, which includes double data-entry by members of the Review Team and support staff from the EPPI-Centre, and moderation through the agreement of all final entries between at least two people, ensures the rigour of the review process. Critical reading of the report by Professor Tony Watts as part of the quality-assurance procedures at the Centre for Guidance studies also helped ensure rigour in the content of the review.

Although none of the studies in the review was judged to have a high weight of evidence, with the majority being judged as providing a medium weight of evidence, the review has identified a number of findings and conclusions that are common across many of the studies.

The review process has identified gaps in the research that are relevant for young people in transition from Key Stage 4 to post-16 opportunities. The results raise concerns about the quantity and quality of research undertaken and published in England that considers the impact of CEG delivered at this crucial stage for young people. Concerns are also raised about the transparency of methodologies in research reports.

Limitations

The Review Team is aware that there may be studies that have not been identified. There is a possibility that unpublished reports and PhD theses may provide relevant research evidence, but these can be difficult to identify and track down and the costs of doing so may be prohibitive. It should also be noted that studies that are not written in English and/or not undertaken in England might also provide insight into the impact of CEG on young people's transitions in education.

The systematic review identified some studies that, although relevant to the research question, had to be classified as comprising a medium weight of evidence, either because of the lack of reported methodological processes or because the methods were not considered to be totally appropriate for addressing the research question.

For reviews asking 'what works' questions, greater weight should be given to studies designed to reduce selection bias. Given the qualitative nature of many of the studies, it is not surprising that no studies were judged as providing a high weight of evidence, and only two were judged as providing a medium-high weight of evidence, despite their relevance to the review question. There is a debate within educational and other research on the relative merits of qualitative versus quantitative research for addressing different types of research questions.

The review question, focusing as it does on CEG activity *within* Key Stage 4, its *impact* upon young people and upon their transitions *at the end of* and beyond Key Stage 4, also proved to be somewhat problematic. On the whole, the identified studies either tended to look at CEG activity and its impact at or close to the time of delivery, or were asking young people to look back on activity in which they had taken part in a previous year. There were no longitudinal studies in the in-depth review that looked at CEG in Key Stage 4 and its impact upon skills, and then tracked the young people into their post-16 options to look at the impact of CEG in Key Stage 4 upon their progress post-16.

When changes in policy and practice occur, there is a timelag before research to investigate the impact of the policy, and the resulting changes in strategy and practice, can be commissioned and completed. This means that systematic reviews such as this, which are dependent upon accessing the results of empirical research, may often not have access to research that post-dates recent policy changes. Thus, in the present review, many of the included studies were undertaken in the 1990s and therefore predated far-reaching policy changes, such as the 'focusing agenda' in the UK and the introduction of Connexions. However, it is the Review Team's view that this fact does not invalidate the findings of the review. On the contrary, the introduction of Connexions and the resulting change in the way in which careers guidance is delivered along with the development planned for the 14–19 curriculum, make it essential that there is a greater understanding of the impact of both careers education and guidance. Only through such understanding will policy-makers, strategic planners and practitioners be well placed to ensure that the needs of young people are met effectively within current and likely future delivery structures.

The terminology used by some authors can be misleading. For example, the unqualified use of the term 'significant' means that it may sometimes be read as implying statistical significance when such an interpretation is not intended or justified. A further example is the use of the terms 'knowledge and skills'. In some cases, authors use these terms to describe particular pre-defined knowledge and skills that are subject to measurement in the studies. However, there are also cases where the terms are used generically, with no qualification. Such instances lead to vague conclusions, which can be misleading for the reader.

5.3 Implications

The systematic review process has identified both gaps and shortcomings in the research evidence that are highly relevant to our review questions relating to young people transitions from Key Stage 4 to post-16 opportunities. Although the conclusions have to be considered tentative because few high quality studies were identified that met the rigorous criteria applied through the EPPI-Centre process, the results raise concerns for policy-makers, strategic planners, managers, practitioners, researchers and other end-users about the quantity and quality of published research on the impact of CEG delivered at this crucial stage for young people.

However, the review did identify some common findings across a number of studies. The existing evidence suggests that the development of career-related skills is an important factor in enabling young people to make effective transitions at 16, and that CEG provision can have a positive impact on the development of these skills, if delivered appropriately by adequately trained staff, at a time that best meets the needs of individual young people, and specific groups of young people. The evidence also suggests that access to full information about courses and career options is important to, and valued by, young people – even more so when it is provided by people rather than impersonally. These findings are particularly important in view of the decision to extend statutory provision of CEG to Years 7 and 8 from September 2004, and the current developments relating to the 14–19 curriculum.

Policy-makers and strategic planners (both local and national), researchers, practitioners and their managers all play their part in relation to the planning and implementation of CEG. The suggested implications of the findings of this review for each of these groups are set out below.

5.3.1 Policy and strategy

While Government sets national policy, the responsibility for strategic planning and its delivery is largely undertaken by organisations at regional and local level. The following implications for policy-makers and strategic planners, both local and national, can be identified from the review:

- The review revealed some evidence to suggest that only one in seven pupils received a CEG package that met acceptable criteria and that positive pupil outcomes were most evident in schools where career education was effectively integrated with guidance and into the wider curriculum, and where CEG tended to have a higher profile. There appears to be no recent evidence to suggest that this situation has improved. Those responsible for strategic planning should consider how best they can raise the profile of CEG and support schools to improve its quality.

- There is some evidence that new initiatives can be implemented more effectively if they are set within a long enough timescale and accompanied by appropriate resources. Policymakers should consult fully with strategic and delivery organisations before commissioning new initiatives, to ensure that the timescales and resources available allow for effective implementation of such initiatives.

- There is some evidence that partnership between schools and outside agencies is important, especially in the planning and delivery of CEG provision targeted at specific groups of young people (e.g. those 'at risk'). While such partnership working needs to take place at the level of delivery, policy-makers need to consider how best they can encourage partnership working at national and local levels.

- A number of studies identified the differing impact of general CEG provision, and of specifically targeted CEG programmes, on different groups of young people. Policy-makers need to consider how best they can ensure that policy enables and encourages delivery organisations to provide CEG in a consistent yet differentiated way, to ensure that it meets the needs of such different groups.

- There is some evidence in the review to suggest that CEG provision should be flexibly designed to ensure that it meets the needs of individual young people, and specific groups of young people, rather than the needs of the school and other systems. Strategic planners should consider how best they can ensure that school and other systems do not impede CEG provision being flexible and able to meet differentiated needs.

5.3.2 Research

The results of this review also raise a number of key issues for researchers:

- None of the ten studies in the review has been judged as providing a high weight of evidence relating to the impact of CEG on the transition from Key Stage 4 to post-16 opportunities, and only two were judged as providing a medium-high weight of evidence. There is a need for funding mechanisms to support high quality research into the impact of CEG. In addition, researchers should include full information about their research methods and, wherever possible, should append their research tools to the report, to ensure transparency to the reader.

- The majority of UK studies included in the review were carried out prior to the Careers Service 'focusing agenda' in the UK and the introduction of Connexions in England. Although some studies refer to careers companies and partnerships, there seems to be little evidence about their effectiveness.

- There is a need for further research to be funded to provide high-quality, up-to-date and detailed evaluation of the impact of general CEG provision, targeted CEG provision, and specific CEG interventions delivered in schools and/or through external organisations, upon young people in general at and beyond Key Stage 4, and on different groups of young people at the same stages.

- None of the studies in the in-depth review incorporated any long-term follow-up with the young people concerned. Policy-makers should consider commissioning longitudinal studies that would be capable of assessing the impact of CEG at, and well beyond, the point of transition into post-16 opportunities.

- Care should be taken to ensure that terms such as 'significance' are not used indiscriminately. Authors should also avoid the use of vague terms, such as 'knowledge and skills', without providing clear definitions for their readers.

- Researchers should, wherever possible, publish and disseminate their research findings across the policy-making and practice communities to ensure that all available evidence is accessible to users. They should also consult with, and seek feedback from, end-users of the research. Initiatives, such as the recently launched National Guidance Research Forum, may provide an appropriate forum for such dissemination and consultation.

- Only one of the studies in the in-depth review was a researcher-manipulated evaluation; and none used a 'control group' to enable direct comparisons to be made between the outcomes for those who had, and those who had not, received an intervention. Researchers should consider undertaking more research of this nature, within ethical constraints.

- The review has identified that gender may be an important issue. Firstly, it has been suggested that progress towards decision-making and decidedness on post-16 options is greater for young women than young men. Secondly, it seems that some young men's gendered attitudes towards masculinity may make it harder for them to admit that they do not know what they intend to do. Research is needed to explore whether there is any relationship between these two factors and, if so, to consider what the implications might be for CEG.

- One study, which looked at the impact of CEG provision in Key Stage 4 and its impact upon transitions, identified a need for further research to consider whether the career-related skills developed by young people up to and during Year 11, which the author found to be relatively high, are important at the point at which they implement their post-16 and subsequent decisions.

5.3.3 Practice

Alongside policymakers and researchers, it is equally important that practitioners and professional bodies have access to reliable research evidence on which to base their practice. In particular, the sharing of good practice is invaluable for those involved in the delivery of CEG. It is recognised that practitioners may not always have the autonomy to be able to implement changes to their practice without reference to their managers. However, being at the 'front-line', they are well placed to consider the implications of research findings and to seek to influence those responsible for planning and managing CEG processes.

The implications of the review findings for practitioners and their managers are as follows:

- The review revealed some evidence to suggest that only one in seven pupils received a CEG package that met acceptable criteria and that positive pupil outcomes were most evident in schools where career education was effectively integrated with guidance and into the wider curriculum, and where CEG tended to have a higher profile. Managers and practitioners should consider how career education can be effectively integrated with guidance and with the wider curriculum.

- The reviewed studies have provided some evidence to suggest that clearly targeted interventions may help young people to develop the skills they need to make and implement appropriate choices at 16. Interventions should continue to be reviewed and evaluated through high-quality research, and the findings disseminated. This will ensure that the effectiveness of interventions is monitored and that good practice is recorded and shared.

- Practitioners should work with their practice network to contribute to the sharing of best practice. Where necessary, practitioners should lobby professional bodies and policymakers to improve provision for young people in transition.

- Research evidence to evaluate the impact of new approaches to CEG, such as distinctions between self-help, brief-assisted and intensive support, and new methods, including through one-to-one, group work, and ICT, is not available from this review. Practitioners should ensure that learning outcomes from the use of new approaches to CEG are evaluated, reported and disseminated within their practice networks and to policy-makers.

- There is some evidence that students identified a need for guidance well before the point at which they need to make decisions about their future. Practitioners should actively promote the value of CEG to students from Year 7, and to staff and others in schools, in order to raise their awareness of its potential benefits.

- There is some evidence in the review to suggest that person/client-led CEG provision is more effective than system-led provision. Practitioners and their managers should consider how best to ensure that provision is differentiated and available in ways and at times that meet the needs of individual young people and of particular groups of young people (e.g. those 'at risk', young women and young men, 'leavers' and 'stayers', those with expected higher/ lower attainment, and those with special needs).

- There is some evidence that learning outcomes are greater when students are involved in practical activities and when information is presented successively in a variety of formats and by a variety of deliverers, within and outside the curriculum. Practitioners and their managers should consider how best to ensure that CEG provision includes practical activities and the successive presentation of information using a variety of formats and deliverers, both in and out of the curriculum.

- One study identified the need for practitioners to ensure that they help young people to widen their views of the options open to them, provide them with strategies to counter the socio-economic factors/cultural constraints that impact upon them, and use techniques aimed at increasing their self-esteem and self-confidence.

- Parents are identified as key influences on young people's choices, and both CEG provision and parental support appear to be important to help young people through the transition process. Practitioners should identify ways in which they can support parents and provide them with information that will help them to support their children.

- One study identified that young people's perceptions of guidance were influenced by whether they had made substantive progress towards reaching a conclusion or resolving a dilemma. Practitioners should ensure that young people are made aware that guidance is aimed at reaching a conclusion and/or resolving a dilemma, and should ensure that progress towards these objectives is summarised by the practitioner and understood by the young person at the end of each guidance session.

6. REFERENCES

6.1 Studies included in synthesis and in-depth review

Hodkinson P, Sparkes AC (1993) Young people's career choices and careers guidance action planning: a case study of training credits in action. *British Journal of Guidance and Counselling* **23**: 246–261.

Keys W, Maychell K, Evans C, Brooks R, Lee B, Pathak S (1998) *Staying On: A study of young people's decisions about school sixth forms, sixth-form colleges and colleges of further education.* Slough: NfER.

Lloyd T (2002) *Underachieving Young Men Preparing for Work: A report for practitioners.* York: Joseph Rowntree Foundation/YPS. Available online at: http://www.jrf.org.uk/bookshop/eBooks/1842630903.pdf

Maychell K, Evans E, Brooks R, Lee B, Pathak S (1998) *Leaving at 16: A study of factors affecting young people's decision to leave full-time education.* Slough: NfER.

Morris M, Golden S, Lines A (1999) *The Impact of Careers Education and Guidance on Transition at 16.* RD21. Sheffield: DfEE.

Munro M, Elsom D (2000) *Choosing Science at 16: The influence of science teachers and careers advisers on students' decisions about science subjects and science and technology careers.* Cambridge: CRAC. Available online at: http://www.crac.org.uk/nicec/publications/pdfs/choosing_science.pdf

Rolfe H (2000) *Improving Responsiveness to the Labour Market among Young People.* RR190. Norwich: DfEE.

Russell M, Wardman M (1998) *The Value of Information Types and Sources for Year 11 Decision Making.* RD15. Suffolk: DfEE.

SWA Consulting (1998) *The Influence of Careers Education and Guidance upon Pupils in Year 11*. RD17A. Sheffield: DfEE.

Wardman M, Stevens J (1998) *Early Post-16 Course Switching.* RR53. Sudbury: DfEE.

6.2 Studies included in the systematic map but not included in the in-depth review

Fixman CS (1996) *College and Careers Project, 1993–96: Final report to the fund for the improvement of post-16 secondary education.* Philadelphia: Philadelphia Education Fund.

Foskett N, Dyke M, Maringe F (2003) *The Influence of the School on the Decisions to Participate in Learning Post-16.* RR538. Nottingham: DfES. Available online at: http://www.dfes.gov.uk/research/data/uploadfiles/RR538.pdf

Hagell A, Shaw C (1996) *Opportunity and Disadvantage at Age 16.* London: Policy Studies Institute.

Howieson C, Semple S (1996) *Guidance in Secondary Schools.* Edinburgh: Research Intelligence Unit, Scottish Office Education Department.

Hutchinson J, Henderson D, Francis S (2001) *Evaluation of Pilot Summer Activities for 16 Year Olds: Summer 2000.* RR260. Nottingham: DfEE. Available online at: http://www.dfes.gov.uk/research/

Kim TH, Kim YH (2001) The effect of a computer assisted career guidance program on secondary schools in Korea. *Asia Pacific Education Review* **2:** 111–118.

Krumboltz JD, Vidalakis N, Tyson J (2000*)* Virtual job experience: try before you choose. Paper presented to the Annual Meeting of the American Educational Research Association. New Orleans, LA, USA: April 24–28.

Marko KW, Savickas ML (1998) Effectiveness of a career time perspective intervention. *Journal of Vocational Behavior* **52:** 106–119.

O'Brien KM, Bikos LH, Epstein KL, Flores LY, Dukstein RD, Kamatuka NA (2000) Enhancing the career decision-making self efficacy of upward bound students. *Journal of Career Developmen*t **26:** 277–293.

Pitcher J, Green AE (1999) *Factors Affecting the Choices Made by Young People Aged 16: Final report to FOCUS Central London.* Warwick: Institute for Employment Research, University of Warwick.

Schlossberg SM, Morris JD, Leiberman MG (2001) The effects of a counselor-led guidance intervention on students' behaviour and attitudes*. Professional School Counseling* **4:** 156–164.

Semple S, Paris M, Howieson C (2002) *A Longitudinal Study of Young People in Ayrshire.* Glasgow: University of Strathclyde.

Taylor M (1992) Post-16 options: young people's awareness, attitudes, intentions and influences on their choice. *Research Papers in Education* **7:** 301–335.

Wentworth NM, Monroe EE, Smith BA (1998) The Impact of Student Education and Occupational Planning on Course Selection in Mathematics and Science*. American Secondary Education* **27:** 11–22.

6.3 Other references used in the text of this report

Assocation of Colleges (2004) Press release published on the Association's website. Available online at:
www.aoc.co.uk/Members/admin/connexions_careers_advice

Campbell M, Baldwin S, Johnson S, Chapman R, Upton A, Walton F (2001) *Skills in England 2001: The research report*. SEIO1: London: DfES. Available online at: http://www.dfes.gov.uk/research/data/uploadfiles/SIEO1.PDF

Connor H, Burton R, Pearson R, Pollard E, Regan J (1999) *Making the Right Choice: How students choose universities and colleges*. Report to the CVCP, HEFCE and UCAS. London: Universities UK.

Department for Education and Employment (1997a) *Careers Education and Guidance in Schools.* SCHBK 97. Sudbury: DfEE.

Department for Education and Employment (1997b) *Excellence in Schools.* London: HMSO.

Department for Education and Employment (2000) *School Improvement: How careers work can help. Curriculum and standards guidance for headteachers and senior managers responsible for pupils' progression and support and links with the Connexions Service.* Ref. 0207/2000. Nottingham: DfES.

Department for Education and Skills (2001) *A Review of Careers Service Focusing in Schools.* Quality Performance and Improvement Dissemination (QPID) Study Report 93. Sheffield: DfES.

Department for Education and Skills (2002) *14–19: Extending Opportunities, Raising Standards: Consultation document.* London: HMSO. Available online at: http://www.dfes.gov.uk/14-19greenpaper

Department for Education and Skills (2003a) *Careers Education and Guidance in England: a National Framework 11–19: Guidance on curriculum, examinations and assessment.* 0163/2003. Nottingham: DfES. Available online at: http://www.teachernet.gov.uk/teachingandlearning/subjects/CEG

Department for Education and Skills (2003b) *14–19: Opportunity and excellence*. Nottingham: DfES. Available online at: http://www.dfes.gov.uk/14-19/main.shtml

Department for Education and Skills (2003c) *Youth Cohort Study: the Activities and Experiences of 17 Year Olds: England and Wales 2003.* London: DfES. Available online at: www.dfes.gov.uk/rsgateway/DB/SFR

Department for Education and Skills (2004a) *Careers Education and Guidance for Pupils.* London: DfES. Available online at: http://www.teachernet.gov.uk/teachingand learning/14to19/careerseducation

Department for Education and Skills (2004b) *National Statistics – Trends in Education and Skills*. London: DfES. Available online at: http://www.dfes.gov.uk/trends/index

Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) (2002a) *Core Keywording Strategy: Data collection for a register of educational research.* Version 0.9.7. London: EPPI-Centre, Social Science Research Unit.

Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) (2002b) *Review Guidelines for Extracting Data and Quality Assessing*

Primary Studies in Educational Research. Version 0.9.7. London: EPPI-Centre, Social Science Research Unit.

Foskett N, Hemsley-Brown J (2001) *Choosing Futures: Young people's decision-making in education, training and career markets*. London: Routledge Falmer.

Howieson C, Croxford L (1996) *Using the Youth Cohort Study to Analyse the Outcomes of Careers Education and Guidance.* Sheffield: DfEE.

Jones G, Martin G (2004) *The Parenting of Youth: Social protection and economic dependence.* Swindon: Economic and Social Research Council (R000238379). Available online at:
http://www.regard.ac.uk/research_findings/R000238379/report.pdf

Killeen J, Kidd JM (1996) The careers service. In: Watts AG, Law B, Killeen J, Kidd J, Hawthorn R (eds) *Rethinking Careers Education and Guidance: Theory, policy and practice*. London: Routledge.

Kysel F, West A, Scott G (1992) Leaving school: attitudes, aspirations and destinations of fifth year leavers in Tower Hamlets. *Educational Research* **34:** 87–105.

Macrae S, Maguire M, Ball S (1996) Opportunity knocks: 'choice' in the post-16 education and training market. In: Foskett N (ed.) *Markets in Education: Policy, Process and Practice, Vol. 2: Markets in post-compulsory education*. Southampton: Centre for Research in Education Marketing, School of Education, University of Southampton.

Moon S, Lilley R, Morgan S, Gray S, Krechowiecka I (2004) A systematic review of recent research into the impact of careers education and guidance on transitions from Key Stage 3 to Key Stage 4 (1988–2003). In: *Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education.

Morris M, Golden S, Lines A (1999) *The Impact of Careers Education and Guidance on Transition at 16.* RD21. Sheffield: DfEE.

Morris M, Rudd P, Nelson J, Davies D (2000) *Contribution of Careers Education and Guidance to School Effectiveness in 'Partnership' Schools*. RR198. Sheffield: DfEE.

Morris M, Rickinson M, Davies D (2001) *The Delivery of Careers Education and Guidance in Schools.* RR296. Nottingham: DfES. Available online at:
http://www.dfes.gov.uk/research/data/uploadfiles/RR296.PDF

Morris M, Aiston S, Lines A, O'Donnell L, Spielhofer T, Stoney SM (2002) *16–19 Learner Support Arrangements: Financial and non-financial support for 2003.* Slough: NfER. Available online at www.dfes.gov.uk/youngpeople/fefs.html

Morris M, Rutt S (2003) *Aspirations to Higher Education: A baseline analysis*. Excellence in Cities Evaluation Consortium Report 11. Slough; NfER.

National Audit Office (2004) *Department for Education and Skills: Connexions Service: Advice and guidance for all young people.* Report by the Comptroller and Auditor General HC 484. London: Stationery Office. Available online at:

http://www.nao.org.uk/publications/nao_reports/03-04/0304484.pdf

Office for Standards in Education (1998) *National Survey of Careers Education and Guidance in Schools*. London: Ofsted/DfEE.

Office for Standards in Education (2004) *Increased Flexibility Programme at Key Stage 4: Evaluation of the First Year.* HMI 2074. London: Ofsted.

Organisation for Economic Co-operation and Development (2001) *Education at a Glance: OECD indicators 2001.* Paris: Organisation for Economic Co-operation and Development.

Organisation for Economic Co-operation and Development (2003) *Review of Career Guidance Policies – United Kingdom Country Note.* Paris: OECD. Available online at: www.oecd.org/edu/careerguidance

Pitcher J, Green AE (1999) *Factors Affecting the Choices Made by Young People Aged 16.* Warwick: University of Warwick.

Semple S, Paris M, Howieson C (2002) *A Longitudinal Study of Young People in Ayrshire.* Glasgow: University of Strathclyde.

Stoney S, Ashby P, Golden S, Lines A (1998) *Talking about 'Careers': Young People's Views of Careers Education and Guidance at School.* RD 18. Sheffield: DfEE.

SWA Consulting (1998) *The Influence of Careers Education and Guidance upon Pupils in Year 11*. RD17A. Sheffield: DfEE.

Tomlinson M (2004) *14-19 Curriculum and Qualifications Reform: Interim report of the working group on 14-19 reform*. Nottingham: DfES. Available online at: www.14019reform.gov.uk

Watts AG (1999) Reshaping career development for the 21st Century. Inaugural Professorial Lecture. Derby: Centre for Guidance Studies, University of Derby. Available online at: www.derby.ac.uk/cegs/researchers/youth-policy.html

Appendix 1.1: Advisory Group Membership

The Review Team was brought together with a group of experts to act in an advisory capacity, as the review's Advisory Group.

Core members		
Name	**Role**	**Organisation**
Rob Mayall (Chair)	Chief Executive	Connexions Lincolnshire and Rutland
Dr Jenny Bimrose	Former Chair and current member of the Research Committee	Institute for Career Guidance (ICG)
Lindsey Bowes	Research Co-ordinator	Centre for Guidance Studies
Deirdre Hughes	Director	Centre for Guidance Studies
Liz Musgrove	Council member	National Association of Careers and Guidance Teachers (NACGT)
Tim Shiles	Head of Research Intelligence Team, Strategic Analysis Research, International and Modelling Division	Department for Education and Skills
Georgie Pomfrey	Team Leader, Education Links Team	Department for Education and Skills
Review Team		
Rhianne Lilley	Research Assistant	Centre for Guidance Studies
Irene Krechowiecka (Protocol Developer)	Associate	Centre for Guidance Studies
Lucy Marris (Researcher)	Associate	Centre for Guidance Studies
Denise Smith (Project Manager and Writer)	Associate	Centre for Guidance Studies
Supporters/advisers		
Kate Mason	Principal Information Officer	Learning and Skills Council National Office
Phil Meadows	Research Manager	Derbyshire Skills and Learning Council

The Review Team considers that the main users of the review will be researchers, practitioners and policy-makers. These perspectives are reflected in the 'user perspectives' accompanying the report, as are those of parents.

The Review Team acknowledges that pupils and governors are not formally represented in these groups. However, these groups, along with parents, will be taken into account in the dissemination strategy.

Appendix 2.1: Inclusion and exclusion criteria

Inclusion criteria

Studies were **included** that met **all** the following criteria:

- They focused on CEG delivered either within or external to school for young people during Key Stage 4 (aged 14–16).

- They included outcomes relating to the young person as they approach the transition, during the transition or following the transition to post-school opportunities up to the age of 19.

- They were written in English.

- They were based on empirical research.

- They were conducted from 1988.

Exclusion criteria

Studies were **excluded** that met any of the following criteria:

- They did not focus on CEG during Key Stage 4 (age 14-16). This applied, for example, to those that:

    – were *only* concerned with the impact of the general curriculum at Key Stage 4

    – did *not* include students at Key Stage 4 (age 14-16)

    – were *only* concerned with CEG delivered in post-compulsory learning (16–19)

    – were *only* related to Citizenship (a separate EPPI-Centre Review Group is working on this topic)

    – were *only* concerned with internal and/or external factors, without reference to CEG

    – were *only* concerned with vocational education/learning, without reference to CEG (vocational education/learning is education and/or learning geared to a particular occupation or area of employment: examples include specialised alternative provision following curriculum disapplication and 'increased flexibility' programmes)

- They did not include transition outcomes 16–19, including those that only measure outcomes after the age of 19.

- They were not written in English.

- They were based on secondary research, theoretical discussion, or personal opinion.

- They were conducted before 1988.

In addressing the research question considering the impact of CEG, only empirical studies have been selected. Descriptive articles and explorations of relationships have been

included, along with studies concerned with the evaluation of outcomes that include a variety of methods and means of data collection and analysis.

Studies that consider the complexity of personal circumstances and their influence on the choices and pathways made by young people at Key Stage 4 have also been included: for example, studies that consider the extent to which the quality and nature of CEG processes are influenced by 'opportunities' and 'threats' within schools; and research that considers the views of parents/carers and other external influences impacting on the effectiveness of CEG and thus on decisions made by young people at 'transition' from Key Stage 4 to post-16 opportunities. This assists in the evaluation of the extent to which CEG policies and practices have successfully facilitated 'transition' and how they can be improved.

Studies included may be prospective (e.g. focusing on those who are undergoing this change) or retrospective (e.g. focusing on those who have completed successful and/or unsuccessful transitions into post-16 opportunities), and be related to CEG being carried out within schools or through external organisations. Studies that were carried out in any country have been included in the systematic map; however, given the England-specific context of the review, only studies undertaken in England have been synthesised in the in-depth review. In addition, only studies in which it was possible to differentiate the effects of CEG from those of other interventions were included in the in-depth review.

Appendix 2.2: Search strategy for bibliographic databases

Search engine/ website	Search string/search term
British Education Index (BEI) Dialog 1976 – December 2003	PUPIL OR KEY STAGE FOUR OR KEY STAGE 4 OR VOCATIONAL GUIDANCE OR 1 term(s): BEI Subject Headings=("COMPULSORY EDUCATION") OR 1 term(s): BEI Subject Headings=("DEVELOPMENT EDUCATION") OR 1 term(s): BEI Subject Headings=("HIGH SCHOOLS") OR 1 term(s): BEI Subject Headings=("ELEMENTARY EDUCATION") OR 1 term(s): BEI Subject Headings=("WORK AND SCHOOL") OR 1 term(s): BEI Subject Headings=("WORK AND EDUCATION") OR 1 term(s): BEI Subject Headings=("SCHOOL") OR 1 term(s): BEI Subject Headings=("CURRICULUM 11-16") OR 1 term(s): BEI Subject Headings=("SECONDARY SCHOOL CURRICULUM") OR 1 term(s): BEI Subject Headings=("SECONDARY SCHOOL") OR 1 term(s): BEI Subject Headings=("CAREERS") OR 1 term(s): BEI Subject Headings=("CAREERS SERVICE") OR 1 term(s): BEI Subject Headings=("CAREERS TEACHERS") OR 1 term(s): BEI Subject Headings=("CAREER PLANNING") OR 1 term(s): BEI Subject Headings=("CAREER EXPLORATION") OR 1 term(s): BEI Subject Headings=("CAREER EDUCATION") OR 1 term(s): BEI Subject Headings=("CAREER COUNSELLING") OR 1 term(s): BEI Subject Headings=("PASTORAL CARE (EDUCATION)") OR 1 term(s): BEI Subject Headings=("COUSELLING") OR 1 term(s): BEI Subject Headings=("GUIDANCE & COUNSELLING") OR 1 term(s): BEI Subject Headings=("GUIDANCE") OR 1 term(s): BEI Subject Headings=("EDUCATIONAL COUNSELLING") OR 1 term(s): BEI Subject Headings=("WORK EXPERIENCE") OR 1 term(s): BEI Subject Headings=("VOCATIONAL GUIDANCE") OR 1 term(s): BEI Subject Headings=("SCHOOL LEAVERS") OR 1 term(s): BEI Subject Headings=("PRE-VOCATIONAL EDUCATION") OR 1 term(s): BEI Subject Headings=("LEAVING SCHOOL") OR 1 term(s): BEI Subject Headings=("TRANSITION EDUCATION") OR EDUCATIONAL GUIDANCE OR DESTINATION PLANNING OR WORK RELATED LEARNING OR HIGH SCHOOL GRADUATES OR PERSONAL ADVISER? OR CONNEXIONS OR 7TH GRADE OR 8TH GRADE OR 9TH GRADE OR 10TH GRADE OR CAREER? EDUCATION OR CAREER? GUIDANCE OR YEAR 11 OR YEAR 10 AND OPTIONS AT 16+ OR DEVELOPMENTAL CONTINUITY OR VOCATIONAL APTITUDE OR FOUNDATION COURSES OR TRANSITIONAL SCHOOLS OR TRANSITIONAL COURSES OR LINK COURSES OR YOUTH EMPLOYMENT OR CAREER AWARENESS OR EMPLOYMENT POTENTIAL OR OCCUPATIONAL CHOICE OR VOCATIONAL CHOICE OR CHOICE OR FURTHER EDUCATION OR WORK OR 1 term(s): BEI Subject Headings=("TRANSITION FROM SCHOOL TO WORK") OR 1 term(s): BEI Subject Headings=("TRANSITION") OR 1 term(s): BEI Subject Headings=("DECISION MAKING") OR 1 term(s): BEI Subject Headings=("EMPLOYMENT OPPORTUNITIES") OR 1 term(s): ("PROFESSIONAL EDUCATION") OR 1 term(s): ("POST-COMPULSORY EDUCATION") OR 1 term(s): ("NATIONAL VOCATIONAL QUALIFICATIONS") OR 1 term(s): ("PROFESSIONAL TRAINING") OR 1 term(s): ("JOB TRAINING") OR 1 term(s): ("TRAINEES") OR 1 term(s): BEI Subject Headings=("TRAINING") OR 1 term(s): BEI Subject Headings=("EFFECTS ON EDUCATION, VOCATIONAL TRAINING & EMP") OR 1 term(s): ("JOB ASPIRATIONS") OR 1 term(s): ("COMMUNITY COLLEGES") OR 1 term(s): ("TERTIARY COLLEGES") OR 1 term(s): ("SIXTH FORM COLLEGES") OR 1 term(s): ("TECHNICAL COLLEGES") OR 1 term(s): ("COLLEGES OF FURTHER EDUCATION") OR 1 term(s): ("COLLEGE ATTENDANCE") OR 1 term(s): BEI Subject Headings=("COLLEGES") OR 1 term(s): BEI Subject Headings=("16-19 INITIATIVE") OR 1 term(s): BEI Subject Headings=("ADOLESCENTS, 16-19 YEARS") OR 1 term(s): BEI Subject Headings=("VOCATIONAL PREPARATION OF ADOLESCENTS, 16-19 YE") OR 1 term(s): BEI Subject Headings=("VOCATIONAL PREPARATION OF SCHOOL LEAVERS") OR 1 term(s): BEI Subject Headings=("VOCATIONAL PREPARATION COURSES FOR ADOLESCENTS,") OR 1 term(s): BEI Subject Headings=("VOCATIONAL PREPARATION") OR YOUTH TRAINING SCHEMES OR POST-SCHOOL CHOICE OR POST-SCHOOL OPPORTUNIT? OR OPTIONS AT 16 OR EMPLOYABILITY OR EMPLOYMENT AND TRAINING PATHWAYS OR EDUCATION TO EMPLOYMENT OR APPRENTICESHIPS OR APPRENTICESHIP OR VOCATIONAL QUALIFICATION OR AS LEVEL OR A LEVEL

Search engine/ website	Search string/search term
ERIC Dialog 1990 – September 2003	CAREER OR SCHOOL OR SCHOOL LEAVERS OR SECONDARY SCHOOL LEAVERS OR CONNEXIONS SERVICE OR PSE OR CAREER ADVICE OR VOCATIONAL EDUCATION OR WORK RELATED LEARNING OR 16 OR 16 YEAR OLDS OR COMPULSORY EDUCATION OR SECONDARY SCHOOL OR YEAR 11 OR KEY STAGE 4 OR CAREER GUIDANCE OR CAREER EDUCATION OR INFORMATION OR ADVICE OR GUIDANCE OR CAREER? AND VOCATIONAL OR TRAINING OR EMPLOYABILITY OR EDUCATION TO EMPLOYMENT OR ASPIRATIONS OR CAREER DECISION OR OPTIONS OR SCHOOL TO WORK OR TRAINING INITIATIVES OR OPPORTUNITY OR POST SCHOOL OR FURTHER EDUCATION OR POST COMPULSORY EDUCATION OR APPRENTICESHIP OR TRANSITION OR CAREER PLANNING OR DESTINATION PLANNING
ERIC Dialog 1990 – September 2003	POST COMPULSORY EDUCATION OR POST SECONDARY EDUCATION OR POST SCHOOL OPPORTUNITY OR TRAINING OR EMPLOYMENT OR WORK OR OUTCOMES OF EDUCATION OR TRAINING INITIATIVES OR YOUTH TRAINING SCHEMES OR EDUCATION TO EMPLOYMENT OR SUCCESSFUL TRANSITION OR TRAINING PATHWAYS OR CAREER CHOICE OR CAREER ASPIRATIONS OR EMPLOYABILITY OR APPRENTICESHIP OR SIXTH FORM OR COLLEGE OR FURTHER EDUCATION OR CAREER EXPLORATION OR CAREER PLANNING OR LIFE PLANNING OR CAREER AWARENESS OR OPTIONS AT 16+ OR TECHNICAL COLLEGE OR TERTIARY COLLEGE OR TRANSITION AND CAREER? EDUCATION OR CAREER? GUIDANCE OR COMPULSORY EDUCATION OR SECONDARY EDUCATION OR VOCATIONAL EDUCATION OR CURRICULUM OR EDUCATIONAL COUNSELING OR EDUCATIONAL POLICY OR WORK EXPERIENCE OR SCHOOL LEAVERS OR KEY STAGE 4 OR CONNEXIONS SERVICE OR SCHOOL OR CAREER? SERVICE OR HIGH SCHOOL GRADUATES OR 16 YEAR OLDS OR 16-19 EDUCATION OR CAREER ADVICE OR INFORMATION OR GUIDANCE OR PERSONAL ADVISER OR YEAR 11 OR GCSE OR IMPACT
ERIC Dialog 1990 – September 2003	KEY STAGE 4 OR SECONDARY SCHOOL LEAVERS OR SCHOOL LEAVERS OR YEAR 11 OR TRANSITION AND POST COMPULSORY EDUCATION OR TRAINING OR EMPLOYMENT AND CAREER? EDUCATION OR CAREER? GUIDANCE AND POST COMPULSORY EDUCATION OR TRAINING OR EMPLOYMENT
ERIC Dialog 1990 – September 2003	POST COMPULSORY EDUCATION OR TRAINING OR EMPLOYMENT AND CAREER? EDUCATION OR CAREER? GUIDANCE

Search engine/ website	Search string/search term
ERIC Dialog 1990 – September 2003	VOCATIONAL PREPARATION OR CAREER? SERVICE OR CAREER? TEACHER? OR PERSONAL ADVISER? OR WORK RELATED LEARNING OR CONNEXIONS OR VOCATIONAL GUIDANCE OR TRANSITION EDUCATION OR VOCATIONAL EDUCATION OR 1 term(s): ERIC Subject Headings=("INFORMATION") OR 1 term(s): ERIC Subject Headings=("GUIDANCE COUNSELORS") OR 1 term(s): ("EDUCATIONAL COUNSELING") OR 1 term(s): ERIC Subject Headings=("WORK EXPERIENCE") OR 1 term(s): ERIC Subject Headings=("COUNSELING") OR 2 term(s): ("ADVICE" OR "ADVISERS") OR 2 term(s): ("ADVICE" OR "ADVISERS") OR 7 term(s): ("CAREER AWARENESS" OR "CAREER COUNSELING" OR "CAREE... OR 1 term(s): ERIC Subject Headings=("CAREERS") AND SECONDARY SCHOOL STUDENTS OR 7TH GRADE OR 8TH GRADE OR 9TH GRADE OR 10TH GRADE OR KEY STAGE FOUR OR KEY STAGE 4 OR YEAR 11 OR YEAR 10 OR 1 term(s): ERIC Subject Headings=("HIGH SCHOOL STUDENTS") OR 1 term(s): ERIC Subject Headings=("HIGH SCHOOLS") OR 1 term(s): ERIC Subject Headings=("HIGH SCHOOL") OR 1 term(s): ERIC Subject Headings=("COMPULSORY EDUCATION") OR 1 term(s): ERIC Subject Headings=("SECONDARY EDUCATION") OR 2 term(s): ERIC Subject Headings=("SECONDARY SCHOOL CURRICULUM" OR "SECONDARY SCHOOL ... AND 16 YEAR OLDS OR OPTIONS AT 16 OR 16-19 YEAR OLDS OR ASPIRATIONS OR DESTINATION PLANNING OR DESTINATION? OR 1 term(s): ERIC Subject Headings=("DECISION MAKING") OR SIXTH FORM OR 1 term(s): ERIC Subject Headings=("COLLEGES") OR POST COMPULSORY EDUCATION OR 1 term(s): ERIC Subject Headings=("POSTSECONDARY EDUCATION") OR YOUTH TRAINING SCHEMES OR ERIC Subject Headings=TRAINING OR 2 term(s): ERIC Subject Headings=("APPRENTICESHIP PROGRAMS" OR "APPRENTICESHIPS") OR 1 term(s): ERIC Subject Headings=("EMPLOYMENT POTENTIAL") OR 1 term(s): ERIC Subject Headings=("EMPLOYMENT OPPORTUNITIES") OR 1 term(s): ERIC Subject Headings=("YOUTH EMPLOYMENT") OR 2 term(s): ERIC Subject Headings=("EMPLOYABILITY" OR "EMPLOYABLE SKILLS") OR 1 term(s): ERIC Subject Headings=("WORK") OR 2 term(s): ERIC Subject Headings=("FURTHER EDUCATION" OR "FURTHER EDUCATION COLLEGES"... OR HIGH SCHOOL GRADUATES OR SCHOOL LEAVERS OR LEAVING SCHOOL OR 1 term(s): ERIC Subject Headings=("SCHOOL TO WORK TRANSITION") OR 1 term(s): ERIC Subject Headings=("YOUTH TRANSITION INTO THE LABOUR MARKET") OR 1 term(s): ERIC Subject Headings=("TRANSITION")
EBSCO	School-to-work transitions
EBSCO	Secondary school leavers
EBSCO	School to further education transitions
EBSCO	School to post-compulsory education
EBSCO	Post-school opportunity
EBSCO	Post-school training
EBSCO	Successful transition from school
EBSCO	Vocational training
EBSCO	Education to employment
EBSCO	Career* guidance
EBSCO	Career* education & school
EBSCO	Key Stage 4 and guidance
EBSCO	14-16
EBSCO	Age 16 and choice or opportunity or options or directions or pathways

Table of free-text terms applied to databases that had no classification system

This table is arranged into three columns:

1. Terms to indicate that a study is about CEG policies and practices
2. Terms to indicate that a study focuses on the impact of CEG interventions at Key Stage 4
3. Terms to indicate the transition from compulsory education to post-compulsory education opportunities

In addition to free-text terms, the subject/thesaurus indexes of each electronic database were utilised in order to take advantage of the classification system of the specific databases and to increase the chances of identifying papers of interest.

Careers education and guidance	At Key Stage 4	Post-compulsory education opportunities
Career(s) guidance	Key Stage 4	16–19
Career(s) education	Year 10	16–19 Education
Vocational education	Year 11	Post-compulsory education
Vocational guidance	Secondary school	Post-school opportunities
Career(s)	Secondary school pupils/students	Post-school choice
Career(s) adviser	High school	Destination planning
Information advice and guidance	High school students	Secondary school leavers
Guidance	7th Grade	School leavers
Vocational preparation	8th Grade	Leaving school
Careers service	9th Grade	School to work transition
Career(s) teacher	10th Grade	Training
Personal adviser(s)	Compulsory Education	Employment
Work-related learning	Secondary school curriculum	Work
Connexions	CEG Curriculum	Youth Training Schemes
Transition education	Secondary education	Further education
Educational counselling	14- to16-year-olds	Youth transition into the labour market
Guidance counselling	Ages 14–16	Sixth-form college
Work experience	14–16 Education	Tertiary colleges
Progress file	16-year-olds	Technical colleges
The Real Game	S3 and S4	High-school graduates
Be Real	Curriculum 14–16	Transition
PSE		Options at age 16
Transition planning		A-Levels
Career(s) interview		Employment opportunities
Career awareness		Employability
Career maturity		Employment potential
Vocational aptitude		Youth employment
Career exploration		Apprenticeship(s)

Computer-aided/assisted guidance		Work
CEG		Adolescent transition
Career counselling		Career aspirations
Increased flexibility		Career choices
Connexions Direct		Career decisions
PSHE		Career planning
DOTS		Directions
Careers co-ordinator		Foundation degrees
Alternative curriculum		Training initiatives
Accreditation		Vocational training
Life skills		Pathways
		Educational and training pathways
		Modern apprenticeship
		Employability skills
		14–19
		Routes/Option choices at 16
		FE
		FE Colleges
		FMA
		AMA
		GNVQ
		A/AS-Level
		ASDAN
		AVCEs
		Work-based learning
		Disapplication
		E to E (Entry to employment)
		EMA (Educational maintenance allowance/s)

Appendix 2.2a: Further information on databases

Database information

The following information was taken from respective websites on 20 September 2004

EBSCO   http://www.ebsco.com/

EBSCO stands for Elton B. Stephens Company. EBSCO Subscription Services, EBSCO Publishing and EBSCO Book Services form the EBSCO Information Services group. EBSCO is a worldwide leader in providing information access and management solutions through print and electronic journal subscription services, research database development and production, online access to more than 100 databases and thousands of e-journals, and e-commerce book procurement.

EBSCO has specialised products and services for academic, medical, Government, public and school libraries as well as for corporations and other organisations. EBSCO maintains a comprehensive database of more than 282,000 serial titles and upholds active relationships with more than 60,000 publishers worldwide. EBSCO has been serving the library and business communities for almost 60 years.

BEI   http://www.bei.ac.uk/bei.htm

The British Education Index (BEI) is designed to aid the identification of appropriate literature by people investigating aspects of education or training.

The BEI provides details about the contents of various literature sources: over 300 education and training journals published in the British Isles, similar report and conference literature, and texts in the Education-*line* collection.

The range of subjects covered is as broad as the interests of researchers and writers active in the field. Particular strengths include aspects of educational policy and administration, evaluation and assessment, technology and special educational needs.

The Index is maintained within Leeds University Library by a small team responsible for all aspects of index production including, crucially, the description of the subject content of literature by use of a consistent vocabulary (the British Education Thesaurus) designed specifically for this purpose. This attention to detail distinguishes the Index from similar discovery tools. The Index is available as a subscription print journal, on CD-ROM and over the internet.

ERIC   http://searcheric.org

The Education Resources Information Center (ERIC), sponsored by the Institute of Education Sciences (IES) of the US Department of Education, produces the world's premier database of journal and non-journal education literature. The new ERIC online system, released September 2004, provides the public with a centralised ERIC website for searching the ERIC bibliographic database of more than 1.1 million citations going back to 1966. Effective from 1 October, more than 107,000 full-text non-journal documents (issued 1993-2004), previously available through fee-based services only, will be available at no cost.

1 September 2004 marks the introduction of the new ERIC website. The new site provides

users with increased search capabilities utilising simple, streamlined retrieval methods to access the existing ERIC bibliographic database (1966–2004). In addition, the website provides users with the capability to save and rerun searches using the My ERIC personalisation feature.

In October 2004, ERIC introduced free full-text non-journal ERIC resources. These materials include more than 105,000 full-text documents authorised for electronic ERIC distribution during the period 1993 to July 2004.

In December 2004, ERIC added new bibliographic records and full-text journal and non-journal resources published in 2004. Newly indexed materials that are not available free-of-charge will be made accessible through database links to commercial sources. ERIC will continue to add features and enhancements to the system in the coming months.

Appendix 2.3: Journals handsearched

All journals were handsearched from 1988-2004. Where journals were first published after 1988 they were searched form their earliest editions to 2004.

Journal publication
Aspects of Education
Australian Journal of Career Development
British Educational Research Journal
British Journal of Education and Work
British Journal of Guidance and Counselling
Career Development Quarterly
Children and Society
Computers and Education
Education and Training Parliament Monitor
Education and Vocational Guidance
Education Review
Educational Leadership and Learning
Educational Research
Educational Studies
ELT Journal
Forum
IAEVG
International Journal for Education and Vocational Guidance
International Journal of Qualitative Studies in Education
Journal of Adolescence
Journal of Adolescent and Adult Literacy
Journal of Career Assessment and Development
Journal of Career Development
Journal of Counseling and Development
Journal of Curriculum Studies
Journal of Education and Work
Journal of Management Development
Journal of Occupational and Organizational Psychology
Liberal Education and Vocational Preparation
Lifelong Learning: Newsletter
Management in Education
NACGT Newsletter
Newscheck
Personnel Today
Research into Higher Education
Research Papers in Education
Research Papers in Education
Sociology of Education Abstracts
Times Educational Supplement
Young People Now

Appendix 2.4: EPPI-Centre Core keyword sheet Version 0.9.7

A.1 Identification of report (or reports)	A.1.1 Citation A.1.2 Contact A.1.3 Handsearch A.1.4 Unknown A.1.5 Electronic database
A.2 Status	A.2.1 Published A.2.2 In press A.2.3 Unpublished
A.3 Linked reports	A.3.1 Not Linked A.3.2 Linked
A.4 Language (Please specify.)	A.4.1 Details
A.5 In which country/countries was the study carried out?	A.5.1 Details
A.6 What is/are the topic focus/foci of the study?	A.6.1 Assessment A.6.2 Classroom management A.6.3 Curriculum A.6.4 Equal opportunities A.6.5 Methodology A.6.6 Organisation and management A.6.7 Policy A.6.8 Teacher careers A.6.9 Teaching and learning A.6.10 Other topic focus
A.7 Curriculum	A.7.1 Art A.7.2 Business Studies A.7.3 Citizenship A.7.4 Cross-curricular A.7.5 Design & Technology A.7.6 Environment A.7.7 General A.7.8 Geography A.7.9 Hidden A.7.10 History A.7.11 ICT A.7.12 Literacy – first language A.7.13 Literacy further languages A.7.14 Literature A.7.15 Maths A.7.16 Music A.7.17 PSE A.7.18 Phys. Ed. A.7.19 Religious Ed. A.7.20 Science A.7.21 Vocational A.7.22 Other curriculum A.7.23 The material does not focus on curriculum issues.
A.8 Programme name (Please specify.)	A.8.1 Details

A.9 What is/are the population focus/foci of the study?	A.9.1 Learners A.9.2 Senior management A.9.3 Teaching staff A.9.4 Non-teaching staff A.9.5 Other education practitioners A.9.6 Government A.9.7 Local education authority officers A.9.8 Parents A.9.9 Governors A.9.10 Other population focus
A.10 Age of learners (years)	A.10.1 0–4 A.10.2 5–10 A.10.3 11–16 A.10.4 17–20 A.10.5 21 and over
A.11 Sex of learners	A.11.1 Female only A.11.2 Male only A.11.3 Mixed sex
A.12 What is/are the educational setting(s) of the study?	A.12.1 Community centre A.12.2 Correctional institution A.12.3 Government department A.12.4 Higher education institution A.12.5 Home A.12.6 Independent school A.12.7 Local education authority A.12.8 Nursery school A.12.9 Post-compulsory education institution A.12.10 Primary school A.12.11 Pupil referral unit A.12.12 Residential school A.12.13 Secondary school A.12.14 Special needs school A.12.15 Workplace A.12.16 Other educational setting
A.13 Which type(s) of study does this report describe?	A.13.1 Description A.13.2 Exploration of relationships A.13.3 Evaluation: naturally occurring A.13.4 Evaluation: researcher-manipulated A.13.5 Methodology A.13.6 Review: Systematic review A.13.7 Review: Other review

Appendix 2.5: Review-specific keyword sheet

A.1 Delivery of CEG	A.1.1 Parents
	A.1.2 Education-business links *Includes employers and professionals*
	A.1.3 Other school teaching staff
	A.1.4 Careers co-ordinator
	A.1.5 Careers adviser
	A.1.6 Post-16 providers *Includes training and modern apprenticeship providers*
	A.1.7 Personal adviser/Connexions staff member
	A.1.8 Careers teacher
	A.1.9 Other school staff
	A.1.10 Tutor/form teacher
	A.1.11 Other/Not stated/Unclear *Please state*
A.2 Types of CEG intervention	A.2.1 Careers/guidance/counselling interview
	A.2.2 Summer activities
	A.2.3 Information giving *Includes talks, information packs and booklets, and Government-issued information*
	A.2.4 Education business activity *Includes industry days, work experience*
	A.2.5 Record of achievement/progress file session
	A.2.6 Job-search skills/transition skills session *includes application, CV and interview skills*
	A.2.7 Opportunity-awareness session
	A.2.8 Simulated material/activity *Includes Real Game, Be Real*
	A.2.9 Careers education session (general provision of CEG in schools)
	A.2.10 Computer-assisted/aided guidance
	A.2.11 Other/Not stated/Unclear

A.3 Modes of delivery	A.3.1 One-to-one (face-to-face) session
	A.3.2 Other one-to-one sessions (i.e. remote) *Includes telephone or internet*
	A.3.3 Small-group (up to 8) interactive sessions
	A.3.4 Class-size sessions (interactive)
	A.3.5 Class-size sessions (non-interactive)
	A.3.6 Year-group provision
	A.3.7 Key Stage grouped sessions
	A.3.8 Whole-school provision
	A.3.9 External provision *Includes college/employer visits*
	A.3.10 Other/Not stated/Unclear *Please state*
A.4 Place of delivery	A.4.1 School
	A.4.2 Connexions/Careers Centre
	A.4.3 Careers library/Career resource area
	A.4.4 Young person's home
	A.4.5 Youth centre
	A.4.6 Pupil referral centres
	A.4.7 Young offenders institutes
	A.4.8 Employer premises
	A.4.9 Post-16 education/training providers' premises
	A.4.10 Other/Not Stated/Unclear *Please state*
A.5 Guidance recipients	A.5.1 Key Stage 4 students
	A.5.2 Students aged 11–16
	A.5.3 Students aged 11–19
	A.5.4 Specific groups *particular ethnic, sexed, socio demographic groups*
A.6 Points at which outcomes measured	A.6.1 Key Stage 4
	A.6.2 At point of leaving school
	A.6.3 At 16–19
	A.6.4 After specific intervention

A.7 Key Influences on decisions	A.7.1 Parents
	A.7.2 Peers
	A.7.3 Teachers
	A.7.4 Careers advisers
	A.7.5 Personal advisers/Connexions staff
	A.7.6 Youth worker
	A.7.7 Educational welfare officer
	A.7.8 Media
	A.7.9 Youth Offending Team
	A.7.10 Probation officer
	A.7.11 School staff (other than teachers)
	A.7.12 Employer
	A.7.13 Social service staff
	A.7.14 Opportunity provider staff *Such as college or training provider staff member*
	A.7.15 Other/Not stated/Unclear *Please specify*
A.8 Focus of study (measuring what?)	A.8.1 The effectiveness/impact of general CEG provision on transition
	A.8.2 The effectiveness/impact of specific CEG interventions on transition
	A.8.3 The effectiveness/impact of CEG interventions on the transition of a specific targeted group
	A.8.4 Other
A.9 Focuses on what outcomes?	A.9.1 Achievement *Includes achievement of GCSEs, GNVQs and other qualifications such as ASDAN and basic skills*
	A.9.2 Progression/destination *Includes progression into further education, sixth form, employment with or without training, Government training schemes, modern apprenticeship, voluntary work or NEET (not in education, employment or training)*
	A.9.3 Attitude *Includes positive attitudes towards learning, aspirations, capability, life skills, motivation*
	A.9.4 Other
A.10 Overall conclusions/findings of study (i.e. the relationship between CEG and transition)	A.10.1 Aids to successful transition
	A.10.2 Leads to unsuccessful transition
	A.10.3 No impact or relationship between CEG and transition
	A.10.4 Other factors have more of an impact on transition than CEG
	A.10.5 Aids heightened understanding, achievement, attitudes
	A.10.6 Other

Appendix 3.1: Details of studies included in the systematic map

Study	Country	Study type	Study topic focus	Outcomes measured	Participants' characteristics
Fixman (1996)	United States of America	Evaluation: researcher-manipulated	Other topic focus The College and Careers Project was designed as a vehicle to keep at-risk students in the Philadelphia public high schools on the road to college, and to help them link their college and career planning. Students took part in college preparatory and career awareness activities; special activities were conducted for participants' parents in order to help them become stronger advocates and supports for their children in their college and career preparation. Students also participated in five-week internships (work experience placements) and visited college campuses.	Progression/destination Destination of students who would be less likely to go into college and work	Age: 11–16 and 17–20 Mixed sex
Foskett *et al.* (2003)	England: across nine LEAs	Exploration of relationships	Curriculum The curriculum content and organisation within the school and its influence on attitudes to post-16 options Organisation and management The influence of school organisation on choice at 16: local educational organisational structures, the style of leadership in the school, the teaching methods used, the organisation of the curriculum, the ethos of the school. Other topic focus The role of the school in shaping the perceptions, and hence choices of post-16 pathways amongst young people in school. Focuses on the influence of the nature and quality of CEG available to and accessed by pupils on the attitudes to post-16 options and the implications for CEG development.	Progression/destination Influences on students choices/pathways post-16 Attitude Attitudes of pupils and parents and teaching staff towards post-16 choices	Age: 11–16 Mixed sex

Study	Country	Study type	Study topic focus	Outcomes measured	Participants' characteristics
Hagell and Shaw (1996)	England	Description	Other topic focus The study explores the choices, attitudes and experiences of young people as they negotiate the transition from compulsory education into the labour market or further education.	Progression/destination Initial destination within a few months of leaving school Attitude Attitudes to school in general and beliefs about education Other Academic and vocational qualifications, reasons for absence from school and the quality of careers guidance received	Age: 11–16 Mixed sex
Hodkinson and Sparkes (1993)	England	Exploration of relationships	Other topic focus Although students came from schools, this study does not really appear to have a teaching and learning or curricular focus. Rather it explores the relationship between careers guidance action plans and the ways in which young people make decisions.	Other Not applicable as the study is not evaluative	Age: 11–16 and 17–20 Mixed sex: 59 boys and 56 girls

Study	Country	Study type	Study topic focus	Outcomes measured	Participants' characteristics
Howieson and Semple (1996)	Scotland (six schools across four regions)	Evaluation: naturally occurring	Organisation and management The study examines how guidance is delivered, managed and organised in six different schools. Pupil, parent and staff perceptions are considered in relation to this. Other topic focus The research set out to examine the guidance needs of pupils and their parents, the organisation of guidance provision and the effectiveness of this provision in meeting their needs. While the research as a whole covered all aspects of guidance, personal, curricular and vocational, a specific aim was to review the management of careers service work in the schools and also links with local employers.	Other The study explores how guidance is delivered in an illustrative selection of Scottish secondary schools. Outcomes are not explicitly measured, although respondents do refer to their experiences of CEG within guidance.	Age: 11–16 and 17–20 Mixed sex
Hutchinson *et al.* (2001)	UK	Evaluation: naturally occurring	Other topic focus The study focuses on the impact of Pilot summer activities for 16 year-olds on: (1) easing the transition from school (2)improving the personal and social skills of young people who took part	Progression/destination Influence of the programme on post school plans – whether participation had caused a change in plan Attitude Personal characteristics including: self-esteem self-confidence team working skills leadership skills broadening horizons	Age: 11–16 and 17–20 Mixed sex

Study	Country	Study Type	Study topic focus	Outcomes measured	Participants' characteristics
Keys *et al.* (1998)	England	Exploration of relationships	Other topic focus The purpose of this study was to explore the factors that affect young people's decisions about post-16 education.	Progression/destination The study was concerned with young people who had chosen to continue in fulltime education after the age of 16.	Age: 17–20 Mixed sex
Kim and Kim (2001)	South Korea	Evaluation: researcher-manipulated	Curriculum Teaching and learning It appears to be a specific CEG intervention taking place in the classroom.	Other Vocational identity: measuring the clarity and stability of an individual's vocational goals, interests, personality and talents. Occupational information: assessing an individual's lack of vocational training or information Barriers: measuring environmental and personal barriers to attaining a chosen occupational goal	Age: 11–16 and 17–20 Mixed sex
Krumboltz *et al.* (2000)	United States of America	Evaluation: researcher-manipulated Randomised controlled trial (RCT)	Other topic focus The impact of an interactive computer job simulation on the ability of the learner to realistically assess occupations tasks	Other The study explored the impact of the VJE on students' career perceptions, explorations and aspirations Self-efficacy in dealing with the advertising industry was also considered.	Age: 11–16 and 17–20 Mixed sex

Study	Country	Study type	Study topic focus	Outcomes measured	Participants' characteristics
Lloyd (2002)	England (Lewisham – South London)	Evaluation: researcher-manipulated	Curriculum Primary aim of the programme was to develop a programme that would add to what was currently available in school curriculum. Teaching and learning Other topic focus The study aims to demonstrate and therefore focuses on how tailormade courses targeted at young men at risk of underachievement can improve both their motivation and their understanding of work and the needs of the labour market.	Attitude Outcomes included: – an increase in understanding and knowledge – ability to identify career path and increased focus – increased self-confidence – ability to identify barriers	Age: 11-16 yrs Male only
Marko and Savickas (1998)	United States of America (North Eastern Ohio)	Evaluation: researcher-manipulated	Other topic focus Study tests the effects of a time perspective intervention designed to increase an individual's orientation to the future. The intervention should, it is argued, in addition to increasing future orientation, foster career development.	Attitude The study was concerned with investigating the impact of a very specific intervention the 'Time Perspective Modification Intervention' on the study group in relation to a range of measures identified through instruments such as long-term personal direction scale achievability of future goals scale career maturity inventory occupational plans questionnaire	Age 11–16 and 17–20 Mixed sex

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

101

Study	Country	Study Type	Study topic focus	Outcomes measured	Participants' characteristics
Maychell *et al.* (1998)	England	Exploration of relationships	Other topic focus The purpose of this study was to explore the factors that affect young people's decisions about post-16 education examining the difference that emerged between the 'leavers' and the 'stayers'.	Progression/destination The destinations of Year 11 and Year 8 pupils, who were asked to indicate if they thought they would stay on in fulltime education or leave Attitude Attitudes towards school and education in general contributed towards the decision to stay on or leave school	Age 11–16 and 17–20 Mixed sex
Morris *et al.* (1999)	UK including England	Exploration of relationships	Curriculum Teaching and learning Other topic focus Transition to post-school opportunities	Progression/destination Attitude Also attitudes to lifelong learning	Age:11–16 and 17–20 Mixed sex
Munro and Elsom (2000)	UK including England	Exploration of relationships	Curriculum Science and Careers Education and Guidance Policy Other topic focus Schools and local careers companies and their relationship in particular in relation to service level agreements and promoting working relationships between careers departments and science departments	Progression/destination Destination - whether or not the students destination is in a science discipline or not	Age: 11–16 Mixed sex

Study	Country	Study type	Study topic focus	Outcomes measured	Participants' characteristics
O'Brien *et al.* (2000)	USA	Evaluation: researcher-manipulated	Other topic focus The impact of including a career exploration programme within an 'Upward Bound' summer initiative covering maths, lab science, foreign language and literature. The pre-existing Upward Bound initiative aims to encourage under-prepared, economically disadvantaged high school students to maximise their full academic potential.	Attitude Other Participants were assessed on the career confidence scale. This covers five domains: (1) self-appraisal (2) occupational information (3) goal selection (4) future planning (5) problem-solving	Age:11–16 and 17–20 Mixed sex
Pitcher and Green (1999)	England	Evaluation: naturally occurring	Curriculum Teaching and learning The study is evaluative in that it looks at and gains perspectives about general CEG and information dissemination in secondary schools.	Progression/destination The choices which Year 11 pupils make about post-16 opportunity	Age: 11–16 Mixed sex
Rolfe (2000)	England	Evaluation: naturally occurring	Curriculum Teaching and learning Other topic focus Careers education and guidance (specifically raising awareness about labour market information)	Attitude Other Increased opportunity awareness and increased awareness of importance of qualifications	Age 11–16 Mixed sex .

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

103

Study	Country	Study Type	Study topic focus	Outcomes measured	Participants' characteristics
Russell and Wardman (1998)	England	Evaluation: naturally occurring	Other topic focus The focus of the study is on the effectiveness of careers information available to those in Key Stage 4 in relation to their post-compulsory options.	Progression/destination Decision-making of Year 11 pupils on the destination/progression route they are going to make Attitude Attitudes towards post-16 options, towards careers information in general, towards specific types of careers material	Age: 11–16 Mixed sex
Schlossberg *et al.* (2001)	United States of America, (South East Florida,)	Evaluation: researcher-manipulated Randomised controlled trial (RCT)	Curriculum Teaching and learning Other topic focus The purpose of the study was to use an experimental design to investigate the impact of a counsellor-led comprehensive, developmental guidance unit approach among ninth grade students.	Attitude Other Students' expressed behaviour, school attitudes, and level of informational awareness about high school and the world of work were assessed through parallel student self-reports and teacher reports for significant differences between the ninth-graders who were given a counsellor led developmental guidance unit and those who were not.	Age: 11–16 Mixed sex
Semple *et al.* (2002)	Scotland	Evaluation: naturally occurring	Curriculum Teaching and learning	Progression/destination Attitude Young people's developing and/or changing career ideas and aspirations over a period of three years as they prepared to leave school and enter post-school education training or work	Age: 11–16 Mixed sex

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

104

Study	Country	Study type	Study topic focus	Outcomes measured	Participants' characteristics
SWA Consulting Ltd. (1998)	England	Exploration of relationships	Curriculum Teaching and learning Learning outcomes achieved in relation to CEG provision generally Other topic focus: The focus is on CEG provision.	Achievement Attitude Other 'Soft' learning outcomes from CEG in terms of information-gathering skills, opportunity awareness, self-awareness, decision-making, transition confidence and decidedness	Age: 11–16 Mixed sex
Taylor (1992)	England - 10 schools in one LEA	Evaluation: naturally occurring This report (1) describes CEG provision, (2) explores the factors that influence attitudes and choices, (3) evaluates participants' perceptions of careers related activities.	Curriculum Looks at timetabled curriculum provision for CEG in Year 11 and situations where CEG is linked with PSE Teaching and learning Considers provision of CEG outside of schools Other topic focus The study focuses on post-16 options and young people's awareness, attitudes, intentions and influences on their choice.	Progression/destination Destination and reasons, alternatives and the knowledge, and understanding about the short- and long-term choices Attitude Awareness, attitudes, intentions and influences on young people's post-16 choices	Age: 11–16 Mixed sex
Wardman and Stevens (1998)	England	Exploration of relationships	Curriculum Teaching and learning Other topic focus Early post-16 course switching	Progression/destination The study measures the factors associated with early post-16 course switching, including the CEG experienced.	Age: 11–16 and 17–20 Mixed sex

Study	Country	Study type	Study topic focus	Outcomes measured	Participants' characteristics
Wentworth *et al.* (1998)	United States of America	Exploration of relationships	Curriculum All secondary schools in the state have adopted the programme. Teaching and learning	Progression/destination The relationship between the Student Education and Occupational Planning (SOEP) programme and the uptake of mathematics and science courses in high school, and also the relationship between parental attitude and support and the take up of these subjects	Age: 11–16 and 17–20 Mixed sex

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

106

Appendix 4.1: Comparison of studies in the systematic map and in-depth review

Study type

Table 4.1 compares the study types of the studies in the systematic map with those in the in-depth review. In both, more studies were concerned with an exploration of relationships than any other type of study. However, the *proportion* of studies that were concerned with an exploration of relationships is much higher for the studies in the in-depth review (70%) than for the studies in the systematic map (37.5%).

Table 4.1: Comparison of study types in the systematic map and in-depth review (N = 24 in systematic map, N = 10 in in-depth review)*

Study type	Studies in systematic map	Studies in in-depth review
Description	1	0
Exploration of relationships	9	7
Evaluation: naturally occurring	7	2
Evaluation: researcher-manipulated	7	1

*Codes are mutually exclusive.

Type of CEG activity

As can be seen from Table 4.2, which sets out the various types of CEG activity covered in each of the studies in the systematic map and in the in-depth review, the activities that were most commonly covered by the studies in both are careers guidance interviews, information-giving, general CEG sessions and education-business activities. The latter includes such activities as presentations by people in work, visits to employers' premises and work experience.

Table 4.2: Comparison of type of CEG activity covered in the systematic map and in-depth review (N = 24 in systematic map, N = 10 in in-depth review)*

Career education and guidance activity	Studies in systematic map	Studies in in-depth review
Career/guidance/counselling interview	15	8
Computer-assisted/aided guidance	9	3
Education-business activity	14	7
Simulated material/activity	5	2
Record of achievement/progress file session	4	2
Job-search skills/transition-skills session	7	2
Opportunity-awareness session	7	4
Information-giving	14	8
Summer activities	3	0
Career education session (general provision of CEG in schools)	13	7
Other/Not stated/Unclear	19	7

* Categories are not mutually exclusive.

CEG deliverers

As can be seen in Table 4.3, many of the studies in both the systematic map and the in-depth review considered CEG delivered by careers advisers (50% of the studies in the systematic map; 80% of the studies in the in-depth review). Careers co-ordinators and careers teachers are also mentioned in a number of studies (10 in the systematic map (all UK studies); five in the in-depth review), as were parents (11 in the systematic map; 4 in the in-depth review). All but two (Fixman, 1996; Wentworth *et al.*, 1998) of the studies in the systematic map that mention parents as a source of CEG are UK studies.

Table 4.3: Comparison of CEG deliverers in the systematic map and in-depth review (N = 24 in systematic map, N = 10 in in-depth review)*

CEG deliverers	Studies in systematic map	Studies in in-depth review
Careers co-ordinator	4	1
Careers teacher	6	4
Careers adviser	12	8
Personal adviser/Connexions staff member	1	0
Post-16 provider	3	1
Education/business links staff	7	3
Tutor/form teacher	8	2
Other school teaching staff	7	4
Other school staff	3	0
Parents	11	4
Other/Not stated/Unclear	20	9

* Categories are not mutually exclusive.

Modes of delivery

Table 4.4 below shows the modes of delivery considered in the studies in the systematic map and in the in-depth review. One-to-one sessions were most commonly covered by studies in both of these, being covered in 15 of the 24 studies in the systematic map and eight of those in the in-depth review. The second most commonly considered mode of delivery in both cases is external provision. This includes visiting speakers; visits to careers centres; summer/outdoor activities; visits to employers; work experience; and post-16 provider open days.

Table 4.4: Comparison of modes of delivery of CEG in the systematic map and in-depth review (N = 24 in systematic map, N = 10 in in-depth review)*

Modes of delivery of CEG	Studies in systematic map	Studies in in-depth review
One-to-one (face-to-face) sessions	15	8
Small-group (up to 8) interactive sessions	6	4
Class-size groups (interactive)	9	3
Class-size sessions (non-interactive)	2	0
Year-group provision	1	1
External provision	10	6
Other/Not stated/Unclear	16	6

* Categories are not mutually exclusive.

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

108

Point at which outcomes are measured
Table 4.5 shows the point at which outcomes were measured by the studies in the systematic map and in the in-depth review.

Table 4.5: Comparison of the point at which outcomes were measured in the systematic map and in-depth review (N = 24 in systematic map, N = 10 in in-depth review)*

Point at which outcomes measured	Studies in systematic map	Studies in in-depth review
Key Stage 4	7	3
At point of leaving school	2	2
At 16–19	9	4
After specific intervention	9	2

*Categories are not mutually exclusive.

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

109

Appendix 4.2: Details of study participants in the studies in the in-depth review

Study	Number of participants	Educational setting	Socio-economic status	Ethnicity	Special educational needs
Hodkinson and Sparkes (1993)	6 schools, 5 with sixth forms 115 pupils: 59 male and 56 female 10 careers officers and 8 careers teachers	Secondary schools School sixth forms	Not stated/unclear	Not stated/Unclear	One pupil, a sixth former, was statemented for special educational needs.
Keys *et al.* (1998)	Phase 1: survey 367 students in 21 school sixth forms 140 students in 9 sixth-form colleges 925 students in 21 FE colleges Phase 2: interviews 12 students in school sixth forms (across three institutions) 14 students in sixth-form colleges (in three institutions) 16 students in FE colleges (in four institutions)	School sixth forms Sixth form colleges FE colleges	*FE College* 28% Prof/managerial 32% Skilled manual 29% Partly skilled manual/unskilled 11% No response *School sixth form* 42% Prof/managerial 30% Skilled manual 19% Partly skilled manual/unskilled 9% No response *Sixth form college* 51% Prof/managerial 28% Skilled manual 17%Partly skilled manual/unskilled; 6% No response	*FE College* 76% white, 11% Asian, 7% black 6% other/no response *School sixth form* 77% white, 14% Asian, 2% black, 7% other/no response *Sixth form college* 78% white, 12% Asian, 3% black; 7% other/no response	Not stated
Lloyd (2002)	51 in total 33 in 3 pilot programmes 18 in 2 further programmes	Secondary schools 3 Lewisham secondary schools	Not stated/unclear	Only given for the two final programmes 6 African-Caribbean or African; 1 Asian; 7 white European	Not stated

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

110

Study	Number of participants	Educational setting	Socio-economic status	Ethnicity	Special educational needs
Maychell *et al.* (1998)	Sample 2000 821 Year 11 questionnaires and 863 Year 8 questionnaires were returned.	Secondary schools	(i) Prof/managerial (ii) Skilled manual (iii) Partly skilled manual/unskilled (iv) Other/not known *Y11 planning to leave* (i) 18% (ii) 30% (iii) 29% (iv) 23% *Y11 planning to stay in education* (i) 34% (ii) 34% (iii) 19% (iv) 14% *Y8 planning to leave* (i) 17% (ii) 34% skilled (iii) 31% (iv) 19% *Y8 planning to stay in education* (i) 34% (ii) 35% (iii) 22% (iv) 9%	*FE college* 76% white, 11% Asian, 7% black, 6% other/no response *School sixth form* 77% white, 14% Asian, 2% black, 7% other/no response *Sixth-form college* 78% white, 12% Asian, 3% black, 7% other/no response	Not stated
Morris *et al.* (1999)	Sample 3,184 1,624 responded to the questionnaire in the first strand. Of these, 938 responded to a second questionnaire.	Post-compulsory education institution Secondary school Workplace	Not stated	Not stated	Not stated

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

111

Study	Number of participants	Educational setting	Socio-economic status	Ethnicity	Special educational needs
Munro and Elsom (2000)	Five focus groups each of 4 or 5 careers advisers at stage 1 Questionnaires sent to 292 careers advisers 6 schools used for focus groups of science and non-science students Others interviewed at each school included headteacher, curriculum deputy, year 11 head, year 9 head, head of science, group of science teachers, careers teacher/ co-ordinator, careers adviser/ISCO rep and other staff	Independent school Residential school Secondary school	Not stated	Not stated	Not stated
Rolfe (2000)	Unclear for the process evaluation For the impact evaluation: North West: 91 Year 9 pupils West Midlands: 36 pupils, all with SEN South West: 38 pupils North West: Careers co-ordinators in each school and form tutors who had delivered the LMI materials; unclear how many tutors West Midlands: Careers co-ordinator, tutors and managers; numbers of tutors and managers not given South West: Careers co-ordinator in one school, head of pastoral care, the careers assistant, the deputy head and careers adviser (from Lifetime Careers)	Post-compulsory education institutions Secondary schools Special needs schools	Not stated	Not stated	36 young people in West Midlands were all in special education.

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

Study	Number of participants	Educational setting	Socio-economic status	Ethnicity	Special educational needs
Russell and Wardman (1998)	11 schools, 462 face to face interviews	Secondary schools: The pupils were in year 11 of secondary school. With the exception of one school (which was grant maintained), all were county-maintained comprehensive.	79% of the education and 66% of the labour market quota lived in homes that were owned/mortgaged. 19% and 26% lived in council properties. 1% of the education quota lived in a privately rented property and 5% of the labour market quota.	*Education cohort* 92% white; 1% black; 6% Asian; one answered other; one failed to answer *Labour market cohort* 95% white: 4% Asian; three participants were black; one did not state	Detail of the SEN percentages in the schools taking part in the study are given but no detail is given regarding the individual respondents.
SWA Consulting Ltd (1998)	1000 pupils took part in some individual elements of the project. 603 pupils comprised the full data sample for which the researchers have a complete data set	Secondary schools	40% professional: 58% other occupations: 2% not employed (for the 603 data set)	97% white 3% non-white (for the 603 data set)	Not stated. Sample said to be of mixed ability: 'high', 'low' and 'average' academic ability
Wardman and Stevens (1998)	Stage 1: 44 interviews Data from 40 of these interviews were used in the report. Stage 2: 208 interviews	Post-compulsory education institutions Sixth-form college School sixth form FE college Training provider Workplace YT providers	Not stated/unclear: However, the four career service areas were approached on the basis that they could provide fieldwork in sampling points that reflected a range of rural and urban environments, different socio-economic characteristics and types of labour markets, including different levels of employment or unemployment.	Not stated	Not stated

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

113

Appendix 4.3: Aims and results of studies included in in-depth review

Study	Aim	Key results
Hodkinson and Sparkes (1993)	The aims are not explicitly stated; however, it is implicit from the background to the study and the theory mentioned that the aim was (i) to explore the relationship between a specific careers guidance action plan and young people's decision-making and (ii) to identify any tensions between the ways in which young people claimed to make decisions and the assumptions careers guidance action planning programmes make about how these decisions are reached.	The analysis suggested tensions and discordances between the decision-making processes of the pupils as reported to the researchers and those implicit in the formal careers guidance action plan (CGAP) procedures adopted by this pilot scheme. While the majority of pupils interviewed made rational career decisions, they were rational in what the researchers call a restrictedly pragmatic way, while the CGAP process and procedures were based on a conflicting notion of technical rationality. **Key differences between the types of rationality** *Restricted pragmatic rationality of students* Decisions based on partial information which is localised, being based on the familiar and known. – The decision-making is context-related and cannot be separated from the family background, culture and life histories of the pupils. – The decisions are opportunistic being based on fortuitous contacts and experience – The timing of the decisions in sporadic, in that decisions are made when pupils feel able to do so and are reactions to opportunities as they are encountered. – Decisions are often only partially rational, being also influenced by feelings and emotions. *Technical rationality of the CGAP process* The model is based on a view of decision-making that is at odds with the pragmatically rational process described above. It presupposes that young people should reach decisions in a systematic way, moving logically from a consideration of their own strengths and achievements through to a decision about what they want to do and then on to explore how to achieve that aim, including identifying training needs. (Matching self and occupation) Such decision-making assumes: The information available to pupils is total and cosmopolitan, rather than localised. The decision is assumed to be context-free in that pupils are expected to consider all opportunities, regardless of their own life histories and background. Rather than being opportunistic, the CGAP procedure assumes that pupils reach an eventual decision as they move gradually down the guidance conveyor belt, stage by chronological stage. The system implicitly assumes that pupils not only pass through the three CGAP stages in order, but do so within a time pattern determined by external constraints. The study identifies that this does not happen. School timetables and other constraints mean that not all pupils go through all three stages and certain pupils (those who want to leave) are prioritised.

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

114

Study	Aim	Key results
Keys *et al.* (1998)	This report presents the findings from a one-year study of the factors that affect young people's decisions about post-16 education. It focuses specifically on young people who had chosen to continue in fulltime education after the age of 16. This project had three main aims: 1. To identify the factors that influence young people's decisions about staying on or leaving fulltime education beyond the statutory minimum leaving age 2. To explore, in particular, the factors that affect young people's decisions when choosing courses and locations for post-16 full time education 3. To identify aspects of good practice in the provision of advice to young people on careers and post-16 education and training	Overall, this study found that young people's reasons for wishing to continue with their fulltime education were positive. The three most frequently cited reasons were: – the need to obtain qualifications to get a job – the wish to carry on studying – the need to obtain qualifications for university entrance Only a minority of students (fewer than 10%) taking part in the study said that they had chosen to remain in education because no jobs were available. However, there were interesting differences in FE students' and school sixth-form students' reasons for wishing to obtain further qualifications. FE students were more likely to give 'to get a job' as a reason for obtaining further qualifications, whereas students in school sixth forms were more likely to cite university entrance requirements. **Choice of course** The main reasons given by students for selecting their particular courses were: – interest in the subject – the needs of their future careers – a desire for further qualifications – university entrance requirements **Advice and information on careers and post-16 courses** Those who had received their first careers guidance interview in Year 11 were most likely to say that they would have liked to have received the information earlier. A range of sources was used to obtain the advice and information on careers and post-16 options. While roughly similar proportions of students in both types of institution had been given advice by careers teachers and advisers, students in FE colleges were less likely than those in schools sixth forms to recall having been given advice from their parents or subject teachers. When asked to identify the most helpful sources of careers advice, it was notable that students were more likely to cite people than written information, presentations by speakers from other organisations and visits. People mentioned included careers advisers; parents/relatives; careers teachers and other teachers. More than 40% of students said they would have liked more help in making decisions. Most of these students made more than one suggestion for the type of help they wanted, implying that very real improvements could be made simply by increasing the availability of information and guidance to young people considering their post-16 educational choices. Discussions with young people about the kind of information and advice they wanted highlighted the importance of speaking to people with personal experience of a particular career, or course or institutions. Given the diversity of post-16 options available to young people, it is crucial that they are given the most comprehensive range of information possible to enable them to make an informed choice about their future.

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

115

Study	Aim	Key results
Lloyd (2002)	This report demonstrates how tailor-made courses targeted at young men at risk of underachievement can improve both their motivation and their understanding of work and the needs of the labour market. The aim of the programme was to inform young men about the workplace (using very practical methods and materials) and help them to re-focus on what they can get from school before they leave. These programmes have been delivered within the school curriculum, but they would be equally appropriate within youth offending, pupil referral and other more informal settings. The primary aim of the 'Into Work' programme was therefore to develop a programme that would add to what was currently available, with sessions and activities that would be relevant and of interest to young men currently underachieving within the school setting and that would develop their work related skills and knowledge.	**Participant views of the course** Young men involved in both the programmes delivered in phase 2 were asked to complete a pre- and post-course questionnaire. Of the 18 that started the course, 14 completed (and passed) the evaluation process. Of the young men, six were African-Caribbean or African, one was Asian, and seven were white European. Findings and conclusions of the young men's evaluation of the course were as follows. **How the course changed the young men's views of the workplace and their careers** Comments fell into four distinct but related areas: 1 An increase in their understanding and knowledge: • 'to understand the workplace a lot more' • 'about how a college works' • 'what to expect at college' 2 Helped them identify a career path and helped them focus: • 'help me see what I wanna be when I leave school' • 'help me remember the qualifications that I will need' • 'it made me go for the right thing' 3 Increased their confidence (especially of places and of people's expectations): • 'made me realise how much I had to offer' • 'gave me more confidence in approaching other people' • 'taught me not to be afraid to get some help' • 'I know what to say so I don't get scared in an interview' • 'it's easier to fill out application forms now' • 'I can talk properly on the phone' 4 Identified barriers that will need to be overcome: • 'helped me realise it is not easy to get a job' • 'planning is vital' • 'employers expect a lot when interviewing'; • 'I have to work harder' • 'I now know what skills I need' • 'made me realise I have to work harder' • 'it (the workplace) is not as easy as it seems' • 'there is a lot of work involved no matter what you do' The study includes a set of guidelines for schools and a list of the skills needed by practitioners. These include: • skills in working with young men • organisation and planning skills • a knowledge base

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

116

Study	Aim	Key results
Maychell *et al.* (1998)	The research project had three main aims: 1. To identify factors that influence young people's decisions about staying on or leaving fulltime education beyond the statutory minimum leaving age 2.To focus, in particular, on the reasons why certain groups within the youth population decide to leave fulltime education at the age of 16 3. To identify aspects of good practice in the provision of advice to young people on careers and post-16 education and training	**The results of the study are presented in two ways** Three chapters set out the data from the questionnaires used with Year 8 and Year 11 pupils in phase 2 and from the interviews with 33 Year 11 pupils in phase 2 and a final chapter sets out the conclusions that the authors have drawn from their results **The three chapters setting out the data from the questionnaires from phase 2 and from the Y11 interviews in phase 3 of the research cover**: 1. Data about the young people who decide to leave education, compared with the same information about those who decide to stay on, including gender differences, differences in parental occupation and expected academic achievement , comparisons between pupils career plans, including what they plan to do when leaving school and their chosen job/careers 2. Careers advice and guidance: explores the link between careers advice and guidance and pupils' decisions about staying on or leaving fulltime education at 16 3. Pupils' attitudes to education: focuses on the relationship between pupils' attitudes to education and their decision to leave at 16; it shows differences between those who intend to leave and those who intend to stay in education. **The report goes on to set out its conclusions from the results, including the following:** Several people were consulted as a source of careers advice and discussion. Most pupils had spoken to their parents/guardians about their career plans, and parental advice and guidance were felt to be more important by pupils planning to leave education than those intending to carry on. The next most common point of careers information was the school careers teacher; however, the person perceived by pupils to be the most useful was the visiting careers adviser, even though most pupils had limited access to this person, who would not usually have been based in their school, and would not necessarily have an insight into their academic background or aspirations prior to their discussion. The research shows that young people intending to leave at 16 were in the minority, but within this group, boys were a higher proportion of pupils wanting to leave. Social class is strongly related to post-16 choice. Expected academic attainment is a strong indicator of whether or not pupils will continue in education. The research shows the most common reason for wanting to leave school and not continue with full time education was the desire to start earning money. In addition to perceived monetary gains, school factors were also important contributors to desire to leave at 16.The research suggests that more careers advice and guidance is needed to help Year 11 pupils make decisions about their post-16 choices. Six out of 10 Year 11 pupils would have liked more help in making a decision and seven out of ten Year 8 pupils would have liked to know more about their future choices. Most leavers were looking for a fulltime job with training opportunities. The study identified an 'information gap', noting that the survey highlighted that pupils would like more information about career choices at a younger age, but also more specific information to guide them once their decision to stay on or leave had already been made.

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

117

Study	Aim	Key Results
Morris *et al.* (1999)	The study examines the impact that careers education and guidance provision has had on young people's transitions at 16. It aims to identify: – changes in young people's careers related experiences and skills between year 9 and year 11 – relationships between careers related skills and satisfactory transitions – young people's attitudes towards the choices they had made – relationships between careers related skills and positive attitudes to lifelong learning and guidance	The range of careers education and guidance activities to which young people had access and in which they remember taking part increased between Year 9 and Year 11. This included a far higher proportion recording: – discussions with a careers adviser – access to careers-related information – a wide range of work-related activities Young people who engaged in such activities tended to have higher levels of careers-related skills. For example, individual discussions appeared to be key in the development of overall opportunity awareness, career-exploration skills and decision-making skills; computer-aided guidance instrumental in the development of opportunity awareness; and professional careers-related input contributed significantly to opportunity awareness and career exploration skills. Careers-related skills are more likely to be evident when young people are given the opportunity to develop them at an early stage. Such skills are affected by the way in which CEG is organised. A key factor in transition at 16 was the level of young people's career exploration skills. Other important skills for transition included: the ability to consider strengths and weaknesses when making career choices; and high levels of factual knowledge. Young people's satisfaction with their transitions relates strongly to their self-awareness and their ability to use this understanding of themselves when making their career choices. Two-thirds of the young people said they would like to have further help and guidance in choosing what to do next. Young people with the clearest ideas about progression were most likely to be: – young people with high levels of attainment – those with high levels of self-awareness and opportunity awareness

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

118

Study	Aim	Key results
Munro and Elsom (2000)	To investigate the influences of science teachers and careers advisers on pupils' decisions in Year 11 about science subjects and science and technology careers. How do these influences come about and to what extent do science departments and careers departments in schools work together to improve the quality of pupils' decision-making?	Science teachers appeared to influence pupils in their choices about further courses through the pupils' experience of science in the classroom and through extra-curricular activities initiated by the science departments. Science teachers were also influential through providing information about the content of post-16 courses in science, and through discussing with individual pupils and their parents how the pupil might cope with more advanced study. These teachers did not see themselves as influential or wishing to be involved in career choice, but they may have underestimated the extent of the influence they exerted through informal interactions with pupils. In general, the teachers seemed ambivalent about their role in promoting the flexibility of options or the transferable skills acquired by taking mathematics and science courses and qualifications. Most science teachers in the case-study schools believed firmly in a 'broad and balanced curriculum' pre-16, and saw double-award science as making this possible. They felt restrained by their fellow teachers, and in some cases by deliberate school policy, from over-selling their subjects. Because science is a core subject in the National Curriculum, they felt little need to prompt it in Year 9. **About careers education and guidance** Careers advisers reported that, by the time of their Year 11 interview, many pupils had 'switched off' science and were not receptive to discussing science-related careers. Some awareness was gained from science classes, from the careers education programme, and through family and friends but it was very patchy. Because of health and safety regulations applying to factories, workshops and laboratories, or on account of other insurance demands, pupils under-16, who were interested in science and engineering, often had to do work experience in other settings. The work of school careers co-ordinators, form tutors and others involved in delivering careers education often seemed to be greatly influenced (if not driven) by the understandable administrative demands of the school option-choice system and timetable. For many pupils, their individual careers interview came after they had decided they did not want to continue with some, or all, of the science subjects. This limited the potential influence of the careers adviser on choice of science subjects and science careers. It raises the question of whether careers advisers' time could be better used in supporting activities lower down the school, designed to enhance pupils' awareness of the links between science and employment, and to counteract the limiting effect of simplistic stereotyping. Due to constraints on time available for visiting, reading and research, careers advisers seemed to rely on their experience with other pupils, and the resources in the school careers library, for the detailed information they needed. However, the responses also highlighted the lack of systematic training and updating in occupational information now available to careers advisers. **Other influences** The other influences external to school most frequently mentioned were parents and family; image of science subjects; image of jobs in science and engineering; gender and the media.

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

119

Study	Aim	Key results
Rolfe (2000)	To evaluate four pilot projects aimed at improving young people's responsiveness to the labour market. The DfEE anticipated four key outcomes from the projects: 1. increased interest and awareness of LMI and how it can be used 2. customised materials for the various target groups to improve individuals' choice and decision-making and/or to improve the relevance and responsiveness of provision 3. improved decision-making 4. better understanding among providers and influencers of why LMI is important	**The researchers found the following:** The four projects produced a range of high-quality LMI materials for use with a number of target groups. The materials met a number of needs for LMI among teachers, careers advisers and other 'mediators' of careers information to young people; however, it was identified that training is needed by teachers in the use of LMI. In assessing the projects' success in achieving the four key outcomes anticipated by the DfEE, it is clear that they made considerable progress in three of these. However, the key outcome, 'improved decision-making' which was addressed through the 'impact' stage, was more problematic. This was partly because of limited use of the materials. Young people had generally been taught how to access information, but in some cases had not practised these skills. Young people appeared to make a distinction between learning about careers in class, including using LMI, and accessing information about jobs and careers. The research suggests that an important link between knowledge and skills is left unmade. This could mean that the impact of LMI materials remains purely academic. Future LMI materials might therefore be linked to the exploration of factual information: for example, in project work about careers of particular interest to pupils. **Young people want:** a variety of activities, such as role play and surveys, and not reliance on the use of more passive responses, such as ticking boxes. There were also demands for a variety of format for delivery: to go on visits to workplaces and to have the opportunity to talk to people about their jobs. Some concepts and messages were not well understood. For example, the demise of 'jobs for life' and the need for flexibility in careers was misunderstood by some young people, who interpreted this trend as resulting from changes in employees' preferences. Some young people wanted to know fairly basic information about entry requirements for particular jobs. **Future lessons for the introduction of LMI products** The main limitation of the projects was the extent of use of the materials, which was a result of the short timescale of the projects. The limitations of the projects could have been overcome if the timescale had been longer and they had more funding for dissemination. Any additional funding for schools to develop LMI could be channelled through the Careers Service for distribution to schools. The Careers Service could also help to promote wider use of LMI by a range of potential user organisations because of its links with a cross-section of partners and clients, including parents, teachers, training providers and employers. It is important that careers advisers and teachers, including careers co-ordinators, are convinced of the benefits of LMI if it is to be used in careers education and guidance or elsewhere in the curriculum. In terms of age groups for use of LMI, many teachers and careers advisers identified a need for greater awareness of the labour market at a much earlier stage, including during primary school education. The DfEE might consider ways of funding careers services to conduct some work on LMI in Key Stage 2 in primary schools.

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

120

Study	Aim	Key results
Russell and Wardman (1998)	To assess the effectiveness of careers information currently available to young people, both those planning to stay in education and those planning to enter the labour market. It aimed to enable the DfES to provide better targeted and more appropriate careers materials to people in the last years of compulsory education.	Members of the education group are more likely to have made an earlier decision about their post-16 options than their labour market peers. The majority of the education cohort had decided what they would like to do by the end of Year 10. Among the labour market cohort, most did not decide until Year 11. This has implications for the timing of the distribution of careers literature. **Attitudes towards careers information in general** A clear majority in each cohort said they found the careers literature they received easy to follow. The bulk of respondents in each cohort said they were satisfied with the type and amount of careers material they received. Of those who disagreed, a key complaint was that the documents lacked sufficient detail (e.g. on specific careers, YT, etc.). Other important criticisms include lack of help with decision-making and information overload. **Attitudes towards specific careers material** The best known document is the one dealing with the most general issue: five in six members of the education cohort, along with seven in ten of the labour market group, said they had seen a Post-16 Options publication. **Readership** Few documents had been extensively read by either cohort. With the exception of the Post-16 options document, only a minority had read most, or all, of any publication they had seen. **Use** Neither cohort had made extensive use of the documents. This was especially true of the labour market group. The publications put to greatest use by the education cohort were the two prospectuses, FE and Sixth Form. The FE prospectus also emerged as one of the best-used documents by the labour market group. The Training Opportunities Information had been similarly well used by this cohort. On the whole, young people were more likely to have discussed the various materials with their parents than with their careers teachers or advisers. Most documents were described as at least well designed by both groups. **Non-written careers information** The majority of young people in each cohort said they were exposed to non-written forms of careers information. Access to this kind of material appears to have been slightly greater among the education group (three in four) than among the labour market group (two in three). This may indicate targeting by schools, or the choices of young people. Video information appears to have been the most common form of non-written careers material. The Labour Market group stands out as more likely than the Education cohort to report having seen a careers video and to be positive about its content. Information on the range of options available and practical information, such as how to behave in an interview, are the most common topics featured in the videos. Drama workshops, though less common, appear have been found more engaging by both groups. The Education cohort is more likely than the Labour Market group to describe the drama as useful. Other fairly widespread non-written forms of information are talks from outsiders and visits to colleges/work sites.

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

121

Study	Aim	Key results
SWA Consulting Ltd. (1998)	The study sought to gather data on, and analyse, the relationships between, on the one hand the quantity and quality of CEG received by Year 11 pupils (the inputs), and on the other the skills and knowledge of the pupils (the outcomes). This data was then to be analysed in order to provide evidence for the influence of CEG upon relevant skill and knowledge outcomes by the end of Year 11 and the change in the level of those outcomes over the course of Year 11.	**Progress achieved** The CEG inputs associated with progress achieved during Year 11 are primarily those related to the school, rather than the careers service. In general, the influence of CEG was seen in the skills rather than knowledge dimension of outcomes and in transition confidence. Improvements were most evident for pupils in schools where CEG was effectively integrated with the wider curriculum and where CEG tended to have a high profile. There were two positive associations: first, those having more group sessions in Year 11 made greater progress in applying information about post-16 opportunities; and second, those having more than one action plan, perhaps because they had changed their views, made greater progress in applying decision-making skills. Progress tends to be greatest for pupils in schools with lower overall staying on rates and in more deprived areas (as measured by eligibility for free school meals). **End-of-year outcomes** The main positive associations tend to show that (a) different combinations of CEG inputs are of importance to the different learning outcomes, but (b) the quality or quantity of guidance interviews or small group sessions influence a number of learning outcomes. Although the associations with CEG inputs are not overwhelmingly strong, this is not unexpected. The consistent pattern that seems to emerge is of the importance of a good quality guidance interview to many aspects of learning outcome. In summary, it can be seen that academic attainment and certain school level characteristics lead to differences in outcomes that are not unexpected. The findings suggest that CEG has greatest influence upon pupils of moderate/higher ability in schools with lower or average achievement, typically without their own sixth forms. Careers provision may have more impact on these pupils because of the necessity of leaving the school and perhaps because they may consider the greatest range of options beyond 16.

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

122

Study	Aim	Key results
Wardman and Stevens (1998)	This is an exploratory study with two broad aims. These are to investigate: 1. the factors associated with young people making early changes to their initial post-16 choice 2. the extent to which CEG and institutional support can reduce the likelihood of inappropriate decisions or changes	**CEG in secondary school** Provision varied quite markedly across schools; for some in this study, careers education was delivered in a timetabled slot shared with other curriculum areas; for others, schools had attached greater importance to careers performance. The quality and availability of careers teachers varied. Despite this variable perception of quality, there is clear evidence that those who had received components of careers education were more likely to have reached a decision in Year 11 about what they were going to do and to regard themselves as having both been prepared for the transition at 16, and to have decided what they were going to do. The data suggest that there is a relationship (not necessarily causal) between the amount of careers education received and the degree of self-assessed preparation and decision-making attained. At face value, it suggests that input from the careers teacher in particular helped to prepare young people for decision making in Year 11. It also appears that most course switchers did have access to some form of careers education and that the framework for helping young people to make decisions about careers appeared to be in place for the majority. Nearly all had seen a careers adviser at some point in either Year 10 or 11. There is some evidence that young people who disliked school were more likely than others not to have had an interview. Unlike careers education, careers guidance appears to have had little effect on preparedness for, or decidedness about, their post-16 destination. There is some indication that the quality or value of careers guidance from the careers services was not always seen positively. The data showed that young people could make two mutually contradictory criticisms of the careers service: either they complained of being pushed in directions in which they did not want to go, or they complained of a lack of direction. This suggests that for young people, who are forming their careers plans, the perception of how good guidance is, may be contingent upon whether they made substantive progress towards reaching a conclusion, or resolving a dilemma. **Preparing to switch from post-16 courses** Switchers were asked who, if anyone, they had spoken to about wanting to leave their course. Again, family and teachers/tutors were the most common source of support. It appears that young people who found themselves on the wrong course and wanted to change either did not want to seek out careers advice, or did not manage to access it. Of those who were poorly prepared, three in five said they wanted more advice, but two in five did not. Among these who said they would have welcomed more advice and help, some mentioned more guidance about alternative courses (rising to half of the GNVQ group, but falling to a quarter of YT switchers). General help with finding out what other options are available was also mentioned along with assistance in contacting someone who could help. **Main influences on post-16 decision** Respondents were most likely to attribute the decision they made principally to their own judgement. Slightly more of the group that described themselves as prepared than not prepared in Year 11 said that it was their own decision. The next main influence is parents. Despite a generally favourable rating from young people, careers advisers and careers teachers are notably not considered main influences by many, although they assume greater importance for the YT group.

A systematic literature review of research (1988–2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities

123