



PROTOCOL

October 2005

**Research evidence of the
impact on students of self-
and peer-assessment**

Review conducted by the Assessment Review Group

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

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CONFLICTS OF INTEREST

There are no conflicts of interest for any members of the Review Group.

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1. BACKGROUND

1.1 Aims and rationale for current review

Aims

Several studies in the review by Black and Wiliam (Black and Wiliam, 1998a, 1998b; Assessment Reform Group, 1999) report gains in achievement of students who have been involved in self-assessment, but there is no existing systematic review of this field. The aim of the review is to fill this gap by addressing, through a systematic review, the research evidence of the impact on students of self- and peer-assessment. Evidence of how any impact depends on particular circumstances will be sought so that, where trustworthy evidence is found, implications for policy and practice can be identified.

Rationale

Arguments in favour of involving learners in the assessment of their own learning relate to theories of learning, the recognition of the importance of motivation for learning, and the value of non-cognitive outcomes such as are needed to prepare students for lifelong learning. Modern theories of learning emphasise the active role of learners in constructing meaning from their experiences in order to develop understanding, and the active participation of learners in the processes of learning.

Central to any notion of personalised learning or a learner-centred culture is that the learners themselves need to want to learn, and to become aware of themselves as learners and able to take responsibility for their own learning trajectories whether in or out of school, and over a lifespan. Without a serious focus on students' ownership of their own learning processes, there is always the danger that the focus will be on curriculum delivery and teacher strategies which are less likely to stimulate the sorts of intrinsic motivation for learning which is so necessary for life in the 21st century. Indeed, Flutter and Rudduck (2004) argue that, in spite of decades of educational reform, pupils today might still agree with Blishen (1969) that learning in school amounts to being 'told what to do and how to do it':

Although young peoples' lives have clearly changed in many ways, schooling continues to be based upon conceptions of childhood that regard young people as dependent and incapable. (Blishen, 1969, p 33)

Changes in the goals of education, needed to match the changes in society and to prepare future citizens for continued learning throughout life, cannot be achieved by direct teaching, for example, of flexibility and new study skills. Students learn these things through reflection and metacognitive development (Hattie *et al.*, 1996, cited in Black and Wiliam, 1998b). It requires a relationship between teachers and students in which students are helped to take responsibility for their learning and a view of learning which places learners at the centre of the process. It follows that the more learners know about, and participate in, decisions about the goals of their own learning, about where they have reached in relation

to those goals and what further needs to be done to pursue them, the more they can direct their own learning efforts effectively. The potential role of self-assessment in achieving goals of education regarded as essential in preparing students to adapt to the accelerating changes in types of occupation and ways of living make it a key feature of educational practice.

1.2 Definitional and conceptual issues

The goals of learning

Assessment in the context of education involves deciding, collecting and making judgements about evidence related to the goals of the learning being assessed. This review takes a broad view of the goals of learning, one that is reflected in the outcomes identified in *Every Child Matters* (DfES, 2003; DfES, 2005):

- Be healthy
- Stay safe
- Enjoy and achieve
- Make a positive contribution
- Achieve economic well-being

Student outcomes in the context of schooling include the knowledge, skills, understanding, values, attitudes and dispositions that are encompassed by the purposes of education and reflected in statutory frameworks. While all students have capacities for all of these outcomes, knowledge, skills and understanding are frequently the key focus of the subjects of the curriculum which lead to student attainment, recognised by summative testing and assessment, whereas values, attitudes and dispositions are often seen as the preserve of pastoral development and personal and social education. The assessment of the latter is more complex.

These twin purposes of attainment and personal development come together in other well-recognised desirable student outcomes. For example, to become an effective learner, there are particular values, attitudes and dispositions – such as curiosity, or meaning-making – which are elements of personal development necessary for success across the curriculum. Skills for enterprise – such as creativity and problem-solving – and the values, attitudes and dispositions necessary for active citizenship are other examples of ‘softer outcomes’ that are integral to sustained achievement.

Theoretically, it is possible for students to have low levels of attainment and high levels of personal development, or low levels of personal development and high levels of attainment. The most desirable combination of student outcomes would be high levels of both, where personal development and attainment are integrated.

Formative and summative assessment

How the processes of assessment are conducted varies with the purpose of the assessment and those involved in carrying it out. The purpose may be summative, to assess the learning achieved at a particular time, or formative, to provide feedback to help on-going learning.

Self-assessment, as the term suggests, means that students make judgements about their own achievement and learning processes, and decisions about action they need to take to make further progress in learning. In order to do this, they need to have a clear grasp of the goals of the learning and of the criteria to be applied in judging how well the goals have been attained. To take action, they also need commitment to achieving the goals.

Peer-assessment involves students in assessing each others' work, again through reflection on the goals and what it means to achieve them. Peer-assessment may take place in groups, where the aim may be as much the development of group processes as the promotion or judgement of individual learning. It may also take place in pairs. Peer-assessment has particular value in formative assessment since students ask of each other questions they may be inhibited from asking their teacher, and explain things to each other using familiar language.

In the case of *summative assessment*, the learners reflect on and judge how well their performance meets certain criteria relating to the goals of the work. This requires that they both understand and are committed to the standard of work indicated in the criteria. The difference from formative assessment is that this does not lead to further learning, often because it takes place at the end of a piece or unit of work.

However, in self-assessment, the distinction between formative and summative is often blurred since the feedback on performance is immediate; learners do not have to wait for someone else to tell them how well they have learned. But the extent to which it is used formatively will depend on the learners' understanding of, and commitment to, the goals and on their ability to identify and take action necessary to take the next step in their learning.

Both self- and peer-assessment in the context of formative assessment mean that learners must have an understanding of the goals of their work and of the criteria used in assessing. The process leads to the recognition by the learners of what further steps need to be taken to reach a particular goal, and to action on the part of the learners, possibly with the help of the teacher, to take these steps.

The terms self-evaluation and peer-evaluation are used in some literature. These are interchangeable with self- and peer-assessment, the terms used in this review.

Impact on students

The impact on students of the process of self- and peer-assessment needs to be distinguished from the student outcomes that are assessed, for they are not always identical. In some cases, they may be the same, as when, for instance, self-assessment of development of certain skills leads to improvement of those skills. Often, however, the intention of involving students in assessment of their own work is to have an impact beyond the progress towards subject-specific goals, and to develop broader abilities of learning how to learn, motivation to continue learning, responsibility for and ownership of learning, etc. When these are the explicit goals of learning then the outcomes of learning and the impact are the same. At the same time, there is the possibility of unwanted impacts that may conflict with the goals of the learning.

1.3 Policy and practice background

A focus on learners and learning is now a central theme of policy and practice in education. While there are still substantial requirements on schools to achieve higher standards, as measured by national assessment criteria, the concept of 'personalised learning' has emerged as a major focus for schools in England. This concept is still being formed and defined in practice, but the DfES identifies it as an overarching idea with the following five key components: assessment for learning; effective learning and teaching; curriculum entitlement and choice; school as a learning organisation; and 'beyond the classroom' (Pollard and James, 2004).

The government's National Strategies, the National College for School Leadership, the Teacher Training Agency (TTA) and the Qualifications and Curriculum Authority (QCA) are moving these themes forwards, but perhaps the most influential to date had been 'assessment for learning', or formative assessment which has a strong research pedigree (Black and Wiliam, 1998a; Assessment Reform Group, 1999; Assessment Reform Group, 2002). The policy shifts attention from the content of what is to be learned to the process of learning itself and thus draws attention to the person who is the learner and to teaching strategies that promote learning. The aim of formative assessment is for the student to identify where they are in relation to the goals of learning and then to take the action necessary to work towards these goals. 'In this view, self-assessment is a sine qua non for effective learning' (Black and Wiliam, 1998a, p 26).

The third component of personalised learning is curriculum entitlement and choice. It is widely recognised that skills for life in the 21st century include the processing of knowledge, and knowledge transformation and creation, rather than the repetition of set pieces of knowledge and the accumulation of information. Student entitlement to a relevant and meaningful curriculum that is tailored to their own needs is a goal that also requires student ownership of their own learning and the capacity to make a choice.

Meaningful curricula are curricula that matter to the learner concerned. There are some high profile curriculum initiatives, such as the Royal Society of Arts 'Opening Minds' project, in which the starting point for the learning is a place, object or artefact which is of interest and which matters to the learner (Royal Society of Arts, 2005). This, and other similar initiatives, tends to provide integration across subjects and includes a focus on processes of learning such as creativity, critical thinking and problem-solving. Central to these initiatives is self-assessment of both the specialised knowledge content of the curriculum and the processes of learning.

Citizenship education also draws attention to learners themselves. There is evidence from an earlier systematic review into the impact of citizenship education on the provision of schooling and on learning and achievement, that student choice and voice are key elements of pedagogy appropriate for citizenship education. Engaging with values, becoming helpfully involved in the community and becoming politically literate all foreground the learner as a person and their capacity to take responsibility for their own learning and development.

These issues often present problems in practice, especially in secondary schools where the realities of timetabling encourage twin tracks for personal development

and attainment, and where the practices of assessment for learning are expected to co-exist within an accountability system based on high-stakes testing, school inspection and performance management. Pollard and James (2004) suggests that one of the challenges to the policy of personalised learning is whether it is authentic: is the focus really on learners or is it on top-down teaching strategies designed to deliver pre-designated outcomes? Understanding how school systems and teachers can empower students to take responsibility for their own learning processes and pathways is thus a key concern.

Such attention to the learner as a person requires joined up thinking by key agencies in education and beyond. Both attend to the wellbeing and growth of the learner as a person in a community. The Children Act 2004 is designed to do this and its five themes represent a range of factors and outcomes that should be attended to if the learner as a whole person is to become someone who can take responsibility for themselves as lifelong learners.

Putting the person of the learner centre stage – at least ideally – makes self-assessment a critical issue for both policy and practice because self-assessment builds upon student self-awareness, student ownership of their own learning process and student responsibility for their own learning. This review, focusing as it does on student self- and peer-assessment will build on what is known by exploring evidence about the impact of this process on student outcomes.

1.4 Research background

Empirical research into student self-assessment has been concerned either with comparison of students' own assessment with teachers' assessment, or the effects of introducing self-assessment on students. This review is not concerned with the former but only with impact on students' non-cognitive outcomes as well as academic achievement.

Inevitably, there is considerable interest in whether levels of performance are raised by self-assessment. McDonald and Boud (2003), in what they claimed was a unique study of the introduction of self-assessment across a range of subjects on a large scale, reported positive changes associated with training in self-assessment. In ten high schools in the West Indies, teachers were trained in self-assessment practices and introduced these to a group of students studying for external examinations in a range of subjects. Their performance was compared with that of a matched control group of students, who were not given training in self-assessment. The results showed a significant difference between overall mean scores of the two groups, in favour of those trained in self-assessment, with some variation in impact across subjects. The effect size was greatest for business studies and the humanities, and least for science subjects. Although there was no comparison between trial and control groups in terms of how the self-assessment influenced their work, the trial students responded positively to the self-assessment training and suggested that it helped them in preparing for the examination.

Black *et al.* (2003) discuss how differences among subject disciplines may affect how teaching and learning take place, and may account for the difference in impact of attempts to foster self-regulation through self- and peer-assessment. In their quantitative findings, they report larger effect sizes than McDonald and Boud

(2003). However, in the Black *et al.* (2003) the difference between trial and control classes extended beyond the practice of self- and peer-assessment, and included other components of formative assessment.

Black and Wiliam's (1998a) review of classroom assessment includes studies of the effect of training students with learning difficulties in self-monitoring. Students who received feedback through self-monitoring performed better than those who did not experience such feedback (Sawyer *et al.*, 1992); those with self-monitoring performed better than those with feedback only from the teacher (McCurdy and Shapiro, 1992). Other studies found positive changes due to introducing self-scoring of tests (Masqud and Pillai, 1991), and helping students to recognise how their self-assessment differed from the judgments of others (Merrett and Merrett, 1992).

Reporting non-cognitive impact depends in several studies on self-reported success or change. An exception is the work by Schunk (1996). In a study looking at both the effect of different goal orientation and of self-assessment, with fourth-grade students learning mathematics, outcome measures were a goal orientation inventory, a self-efficacy scale and a skill test of mathematics learned. A key finding in relation to self-assessment was that, whether or not it was present, was an overwhelming factor which swamped any difference in the manipulation of goal orientation. Only when self-evaluation was held constant was a difference associated with goal orientation evident. Self-evaluation was associated with solving more mathematical problems and higher levels of self-efficacy.

There is relevant research dealing with practices in self-regulation and student participation in learning, which include, but are not restricted to, experience of self- and peer assessment. Research into the dispositions, values and attitudes necessary for effective lifelong learning supports the active participation of learners in their own learning processes. Student self-assessment and choice in learning are central themes which support the ecology of learning (Deakin Crick *et al.*, 2005). A systematic review into citizenship provides evidence that student choice and participation in learning is a key element of pedagogy which supports active citizenship (Deakin Crick *et al.*, 2004; Deakin Crick *et al.*, 2005).

These ideas are echoed in the research-validated learner-centered psychological principles of the American Psychological Association which provides a knowledge base for understanding that learning and motivation are natural processes that occur when the conditions and context of learning are supportive of individual learner needs, capacities, experiences and interests. These include cognitive and metacognitive factors, motivational and affective factors, developmental and social factors, and individual difference factors (APA Task Force on Psychology in Education, 1993; APA Work Group of the Board of Educational Affairs, 1997).

Learner-centeredness is also related to the beliefs, characteristics, dispositions and practices of teachers, and it can be evaluated through the students' perceptions of their teachers' learner-centred practices. According to McCombs and Lauer (1997), when teachers derive their practices from a learner-centred perspective, they (a) include learners in decisions about how and what they learn and how that learning is assessed; (b) value each learner's unique perspectives; (c) respect and accommodate individual differences in learners' backgrounds, interests, abilities, and experiences; and (d) treat learners as co-creators and partners in the teaching and learning process .

1.5 Authors, funders and other users of the review

This review is the fifth EPPI-Review carried out by the Assessment and Learning Research Synthesis Group (ALRSG). Current members of the Review Group and overseas advisers are listed on page i. The review was proposed and conducted because of concern regarding the use of assessment in a way that supports learning and leads to the development of skills and personal qualities that are likely to lead to continued willingness to learn beyond formal education.

The review is based at the Graduate School of Education of the University of Bristol and the work is shared with the School of Education of the University of Sussex. The joint directors are Dr Ruth Deakin Crick at Bristol and Professor Judy Sebba at Sussex. The review is funded solely by the contract between the EPPI-Centre at the Institute of Education and the University of Bristol, on behalf of the ALRSG. The review will be carried out by the Review Group, listed on page i, with the guidance of the ALRSG and participation of its members, including teacher and adviser members, at various stages as noted in section 2.1.2.

1.6 Review questions

The overall question to be addressed in the review is as follows:

What is the evidence of the impact on students of self- and peer-assessment?

In order to achieve all the aims of the review the further questions to be addressed are as follows:

- How does any impact vary with the characteristics of the students and the approaches used in self- and/or peer-assessment?
- What conditions affect the impact of self- and peer-assessment?
- What are the implications for assessment policy and practice of these findings?

1.7 Scope of the review and outcomes

The review will consider evidence from studies of the impact of involving students aged from 4 to 19 in self- and peer-assessment. It will include studies conducted in all aspects of curricular provision, and assessment both for formative and summative purposes.

It is anticipated that there will be some studies in which the data reported are qualitative and may take the form of case studies. Others are likely to report statistical or judgemental evidence of impact on students. All these will be included and a map of the types, designs and topic focus of studies will be created as part of the review.

The outcomes will be as follows:

- The production of a map of studies reporting on the impact of involvement in self- and peer-assessment on student outcomes in cognitive, affective and conative domains
- The identification, through a process of consultation with users, of the implications of the findings for different user groups, including practitioners, policymakers, those involved in teacher education and professional development, employers, parents and students
- Publication of the full report and of short summaries for different user groups in the Research Evidence and Education Library (REEL)
- Identification of further research that is needed in this area

2. METHODS USED IN THE REVIEW

2.1 User-involvement

2.1.1 Approach and rationale

The users of this review include all involved with education. However, the review is concerned with matters relating to student self- and peer-assessment that influence decisions about policy. Thus the main focus is to inform policymakers concerned with assessment, both at national and local levels, and practitioners and their professional bodies. The direct involvement of users in the conduct of the review will be through membership of the Review Group. The ALRSG includes the following users: a deputy secondary school headteacher with responsibility for assessment, a local authority primary adviser, and a project director of the National College of School Leadership. Two members of the group are members of the Association for Achievement and Improvement through Assessment (AAIA); another leads the review of assessment in Wales, and another is director of the Learning to Learn project of the ESRC's Teaching and Learning Research programme. Eight members of the Review Group are members of the Assessment Reform Group and through this the Review Group has regular contact with the DfES staff in matters relating to assessment in schools.

2.1.2 Methods used

Members of the Review Group will be involved in the process of the review by providing advice at meetings of the group and, between meetings, by email. Their role will include providing information about studies through personal contacts, taking part in keywording and data extraction, and reflecting users' views in identifying implications of the findings.

2.2 Identifying and describing studies

2.2.1 Defining relevant studies: inclusion and exclusion criteria

Inclusion criteria

The search for and selection of studies will be guided by the following inclusion criteria:

Language of the report: Studies included will, in general, be written in English. If papers in other European languages are found, arrangements will be made for translation. However, databases and journals primarily in languages other than English will not be searched.

Types of assessment: Studies will be included which deal with the impact of some form of formative or summative assessment that involves students assessing their own work or that of their peers.

Study population and setting: Studies will be included which deal with self- and peer-assessment procedures used by students, aged 4 to 19, in school.

Study type and study design: Studies will be included if they report quantitative or qualitative evidence of changes in students, that can be ascribed to the self- or peer-assessment for formative or summative assessment purposes. Both naturally occurring and researcher-manipulated evaluation study types will be relevant. Designs may include comparison of the experience of comparable classes with different experiences of self- or peer -assessment or comparison of the same groups before and after the introduction of self- or peer-assessment. They may also include surveys of students' and teachers' perceptions of the impact of student self- or peer-assessment, and case studies reporting experiences and impacts of involving students in assessing their work.

Topic focus: Since student self- and peer-assessment can be applied wherever students are learning subjects, studies will be included from all curriculum areas and relating to the full range of learning processes, such as acquisition of skills and values, meta-cognition, as well as knowledge and understanding.

Studies meeting these criteria will be included in the descriptive map. If the number of such studies proves to be too large to take forward into the data-extraction stage, a narrower set of studies will be selected for in-depth review. The precise nature of these narrower criteria will be decided by the Review Group on the basis of the map.

Exclusion criteria

Studies meeting the above inclusion criteria will be excluded for the following reasons and labelled accordingly

- A: Not self- or peer-assessment – Exclude if students have no part in collecting and interpreting information about their performance.
- B: Not related to education in school – Exclude studies relating to college students; higher education; nursing education, other vocational.
- C: Not reporting impact on students of the process of self- or peer-assessment rather than just the outcome of the assessment
- D: Not research – Exclude if not empirical study of particular procedures of assessment by teachers; also exclude reports of procedure development or description without report of use; exclude handbooks, textbooks and reviews. These may be used to inform background context but will not be included in data extraction.

2.2.2 Identification of potential studies: search strategy

Studies will be identified from the following sources:

Bibliographic databases (ERIC, BEI, PsycLIT, Social Science Citation Index, BIDs)
 Specialist registers (research registers of NFER, SCRE, CRESST)
 Search of journal publishers' web pages and handsearching of key journals
 Citation searches of key authors/papers
 References in papers identified
 Reference lists of key authors/papers
 References on key web sites (AEA Europe, AAIA, NFER, QCA)
 Personal contacts

The search for bibliographic databases will be for a combination of the following terms

| Self-assessment and peer-assessment | Relevance to school | Impact on student (dependent variable) |
|--|----------------------------|---|
| Student self-assessment | School | Achievement |
| Student self-evaluation | Infant school | Attainment |
| Peer-assessment | Foundation stage | Learning outcomes |
| Peer-evaluation | Primary school | Study skills |
| Learner-centred | Elementary school | Motivation |
| Student involved | Secondary school | Learning style |
| | Community school | Responsibility |
| | Urban school | Self-directed learning |
| | Suburban school | Meta-cognition |
| | Private school | Learning power |
| | State school | Emotional literacy |
| | High school | Disposition |
| | Middle school | Values |
| | Pre-school | Attitudes |
| | Kindergarten | Personal development |

Searches of the sources will be limited so as to identify studies conducted in the time period 1980 to 2005. This starting date is selected so that studies in the early 1980s of Records of Achievement and Profiling, developed at that time will be included. The Review Group will set up a database system using EndNote for keeping track of, and for coding, studies found during the review. Some titles and abstracts will be imported from databases (two-stage screening) and others entered manually into the first of these databases as a result of handsearching (one-stage screening).

2.2.3 Screening studies: applying inclusion and exclusion criteria

Full reports will be sought for those studies which appear, from abstracts, to meet the criteria or where there is insufficient information to be sure. The included reports will be collected into a second database. The inclusion and exclusion criteria will be reapplied to the full reports, during the course of keywording, and those not meeting these criteria excluded.

2.2.4 Characterising included studies

The included studies will then be keyworded using EPPI-Centre (2002) *Core Keywording Strategy: Data Collection for a Register of Educational Research (Version 0.9.7)* (London: EPPI-Centre, Social Science Research Unit). All these keywords are pre-fixed A. Additional keywords (prefixed B), which are specific to the context of the review (e.g. relating to types of impact reported in particular contexts) will be added to those of the EPPI-Centre.

The review-specific key-words are as follows:

Review-specific keywords

B1 Subject context of assessment

English
Mathematics
Science
Design and technology
ICT?
History
Geography,
Art and design
Music
Physical education
Modern foreign language
Citizenship

B2 Process focus of the assessment

Acquisition of knowledge
Learning to learn
Metacognition
Acquisition of skills
Development of understanding
Team building – interpersonal skills
Values development
Other

B3 Types of assessment

Summative
Formative
Record of achievement
Profile
Portfolio
Personal report
Journal
Other

B4 Level of ownership of the assessment process

Low: No genuine ownership by the students
Medium: Students adopt the goals and criteria identified by the teacher.
High: Students have ownership of the goals and are committed to engaging in learning to achieve them.

B5 Type of study outcome (impact on students)

Achievement
Enjoyment (motivation, interest)
Engagement in learning (responsibility, commitment, self-direction)
Social engagement
Confidence to participate in learning community
Well being (emotional, mental, physical)
Other

All the keyworded studies will eventually be added to the larger EPPI-Centre database, REEL, accessed via the EPPI-Centre website.

2.2.5 Identifying and describing studies: quality-assurance process

Application of the inclusion and exclusion criteria and the keywording will be conducted on a proportion of studies by pairs of Review Group members and research assistants, working first independently and then comparing their decisions and coming to a consensus. The EPPI-Centre members of the Review Group will also carry out a quality-assurance role in applying inclusion and exclusion criteria and keywording for a sample of studies.

2.3 In-depth review

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

The descriptive map, based on the keywords, will be presented to the Review Group who will assist in identifying criteria for selection of those studies to be included in the in-depth review in the event that it is not appropriate or possible to extract data from all the mapped studies.

2.3.2 Detailed description of studies in the in-depth review

Studies identified for in-depth review will be analysed using the EPPI Centre's detailed data extraction software, EPPI Reviewer (*Review Guidelines for Extracting Data and Quality Assessing Primary Studies in Educational Research (Version 0.9.7)*). London: EPPI-Centre, Social Science Research Unit). Additional questions, which are specific to the context of the review, will be added to those of the EPPI-Centre

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

The EPPI weight of evidence criteria will be used to help in making explicit the process of apportioning weights to the evidence provided by selected studies. This will involve judgements about three aspects of each study (A, B, C)

- A: Soundness of methodology (informed by responses to questions about methodological coherence during the data extraction), based upon the reports of the studies only
- B: Appropriateness of the research design and analysis for answering the review question
- C: Relevance of the study focus (from the sample, measures, conceptual focus, context or other indicator of the focus of the study) for answering the review question

The judgments for these three aspects will then be combined into an overall weight of evidence (D), based on an explicit rationale.

2.3.4 Synthesis of evidence

The data from the studies which meet the quality criteria relating to appropriateness and methodology will then be synthesised. Although the precise basis for this cannot be fully specified at this stage, it is anticipated that the approaches to self- and peer-assessment found in the studies will enable them to be grouped according to the level of ownership and engagement provided to the students. Theoretically, the following three levels are likely:

- No genuine ownership by the students – the teacher imposes the goals and the assessment criteria, so that the assessment by students is mechanical and instrumental.
- Students adopt the goals identified by the teacher and accept the criteria which they use to help them work towards the specified goals.
- The students have ownership of the goals and are committed to engaging in learning to achieve them.

The outcomes of studies in each of these three groups will then be considered in terms of the extent to which they reflect the combinations of personal development and attainment outcomes. Where the evidence allows, this will be done with reference to the five themes of *Every Child Matters* (DfES, 2003; DfES, 2005).

2.3.5 In-depth review: quality-assurance process

Data extraction and assessment of the weight of evidence contributed to the review by the study will be conducted by pairs of Review Group members and research assistants, working first independently and then comparing their decisions and coming to a consensus. The EPPI-Centre members will also carry out a quality assurance role in the data-extraction process for a sample of studies.

2.3.6 Identification of implications

The findings of the review will be presented to and discussed by representatives of policymakers, practitioners, researchers and others involved in education, in order to identify and validate implications for policy and practice.

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Appendix 2.1: EPPI-Centre keyword sheet, including review-specific keywords

V0.9.7 Bibliographic details and/or unique identifier

| | | | |
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| <p>A1. Identification of report Citation Contact Handsearch Unknown Electronic database (Please specify.)</p> <p>A2. Status Published In press Unpublished</p> <p>A3. Linked reports <i>Is this report linked to one or more other reports in such a way that they also report the same study?</i></p> <p>Not linked Linked (Please provide bibliographical details and/or unique identifier.) </p> <p>A4. Language (Please specify.) </p> <p>A5. In which country/countries was the study carried out? (Please specify.) </p> | <p>A6. What is/are the topic focus/foci of the study? Assessment Classroom management Curriculum* Equal opportunities Methodology Organisation and management Policy Teacher careers Teaching and learning Other (Please specify.).....</p> <p>A7. Curriculum Art Business studies Citizenship Cross-curricular Design and technology Environment General Geography Hidden History ICT Literacy – first language Literacy further languages Literature Maths Music PSE Physical education Religious education Science Vocational Other (Please specify.).....</p> | <p>A8. Programme name (Please specify.) </p> <p>A9. What is/are the population focus/foci of the study? Learners Senior management Teaching staff Non-teaching staff Other education practitioners Government Local education authority officers Parents Governors Other (Please specify.)</p> <p>A10. Age of learners (years) 0–4 5–10 11–16 17–20 21 and over</p> <p>A11. Sex of learners Female only Male only Mixed sex</p> | <p>A12. What is/are the educational setting(s) of the study? Community centre Correctional institution Government department Higher education institution Home Independent school Local education authority Nursery school Post-compulsory education institution Primary school Pupil referral unit Residential school Secondary school Special needs school Workplace Other educational setting (Please specify.).....</p> <p>A13. Which type(s) of study does this report describe? A. Description B. Exploration of relationships C. Evaluation a. naturally-occurring b. researcher-manipulated D. Development of methodology E. Review a. Systematic review b. Other review</p> |
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