

# A systematic review of interventions aimed at improving the educational achievement of pupils identified as gifted and talented

## What do we want to know?

Which types of classroom-based interventions improve the educational achievement of pupils identified as gifted and talented?

## What was our focus?

The main aim of this review was to focus on studies that investigated effective outcomes from methods of classroom-based teaching and practice for gifted and talented pupils. This review was guided by the Classroom Quality Standards (Appendix 7.1); progressive and focused statements of quality provision for gifted and talented pupils, creating a self-assessment framework. The aim of this review was to inform future policy decisions and guide subsequent provision and research. Even though the review's primary concern was to inform English policy makers, worldwide studies were included if they were written in the English language. This allowed the review team to consider research findings from a wider pool.

The review included studies involving pupils in primary, middle, secondary and special needs schools, aged from 5 to 16. The review was carried out in two stages. The first stage analysed a wide pool of studies using a systematic review map; and the second stage took on a narrower focus and analysed the data using an in-depth narrative thematic approach.

## Who wants to know about this and why?

There is an expectation that all English schools and local authorities support the education of pupils identified as gifted and talented. In part, these requirements are a response to parents and schools requesting greater help in meeting the needs of these pupils. The validity and urgency of these concerns was confirmed by those government inspections which reported that sufficient challenge for gifted and talented pupils was uncommon in many mainstream schools (Hansard 1999, Freeman 1998).

## What did we find out?

- The review supports the use of personalised learning and differentiation. There was evidence in favour of the appropriate use of streaming, differentiated provision within mixed ability classes, and individualised programmes. However, effective provision within mixed ability classes presumes a positive classroom climate.
- The quality and character of group interactions was identified as a significant factor in the effectiveness of support for gifted and talented pupils. There was evidence that collaborative and group activities helped gifted and talented pupils perform better at some tasks. The role of the teacher was highlighted as especially important in promoting and maintaining positive group work.

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- Studies indicated that Enrichment programmes that help gifted and talented pupils develop self-regulation and higher order thinking skills had a positive effect on their achievement and engagement.
- Most forms of provision for gifted and talented pupils occur in social settings, and pupils' abilities to deal with such contexts are likely to be important factors in academic success and personal motivation. The teacher has an important role to play in generating and sustaining contexts for appropriate social interactions.

### What are the implications of this review?

- The review endorses the policy of focusing support for gifted and talented pupils in mainstream settings. The Classroom Quality Standards materials, which emphasise personalised, differentiated learning, are therefore generally well-placed to offer specific guidance.
- It is suggested that the Classroom Quality Standards take account of the review findings in future manifestations, especially emphasising the importance of class organisation, group interaction and enrichment strategies that develop skills such as self-regulation and higher order thinking.
- Teachers and schools should be cautious about over-generalising, and of treating gifted and talented pupils as a homogeneous group. It is vital to be sensitive to individual needs and the mediating effects of the teacher, the curriculum and the classroom context.
- Likewise, there is no one strategy or approach to social interaction that will work all of the time with all gifted and talented pupils.

- There is an urgent need for funded research focused on English and UK educational settings. In particular, studies are needed that explore the distinctive needs of individual gifted and talented pupils, their social interactions and their pedagogies.

### How did we get these results?

In total, 20,947 studies were identified for screening through systematic searches of 18 bibliographic databases of published literature, specialist websites and hand-searching sources. Of these, 101 studies were included for the mapping stage of the review. After the further revision of the review question and additional exclusion criteria, the remaining 15 studies were subjected to in-depth synthesis.

### Where can I find more information?

<http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=2400&language=en-US>

## Where to find further information

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The results of this systematic review are available in four formats:

### SUMMARY

Explains the purpose of the review and the main messages from the research evidence

### REPORT

Describes the background and the findings of the review(s) but without full technical details of the methods used

### TECHNICAL REPORT

Includes the background, main findings, and full technical details of the review

### DATABASES

Access to codings describing each research study included in the review

These can be downloaded or accessed at <http://eppi.ioe.ac.uk/reel/>

Reports published by the EPPI-Centre in September 2008.

The EPPI-Centre's reference numbers for the reports of this review are 1612T (Technical Report) and 1612R (Report). The full citations are:

#### TECHNICAL REPORT

This report should be cited as: Bailey R, Pearce G, Winstanley C, Sutherland M, Smith C, Stack N, Dickenson M (2008) A systematic review of interventions aimed at improving the educational achievement of pupils identified as gifted and talented. Technical report. In: *Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

#### REPORT

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