

Learning skills and the development of learning capabilities

What do we want to know?

Which teaching approaches that aim to develop pupils' learning capabilities show evidence of improved learning of pupils?

Who wants to know and why?

The key aim of this review was to support current policy initiatives: specifically to support the development of personalised learning by identifying teaching and learning strategies which actively engage and challenge learners, which develop their ability to focus on their learning skills and their capability to take ownership of their own progress. A second aim was to identify evidence from research which helps teachers to understand not just what works in terms of specific teaching approaches in specific contexts but why different approaches are successful. This can support teachers in making informed choices about what is likely to be effective in their own context.

What did we find?

There is a tension between approaches to learning skills which emphasise content - in terms of mastery of specific skills - and process - in terms of locating skills within an overall understanding of learning approaches. So that, in the short term the most effective means to improve performance where the assessment focuses on content knowledge is likely to be direct instruction. In the longer term, or where assessment focuses on conceptual understanding, metacognitive or strategic approaches are likely to be more effective.

Effective approaches are those which explicitly develop awareness of learning strategies and techniques, particularly when these are targeted at the metacognitive level. The characteristics of these approaches identified by the review include:

- Structured tasks which focus on specific and explicit strategies in the subject context;
- Capacity in lessons for more effective exchanges between the learner and the teacher concerning the purpose of the activity;
- Small group interactions promoting articulation about the use of learning strategies;

- Mechanisms built into learning tasks to promote checking for mutual understanding of learning goals by peers and with the teacher;
- Enhanced opportunities for the learner to receive diagnostic feedback linked directly to the content of the task.

We can also identify some necessary conditions for these approaches to be successful:

- The teacher needs to have good understanding of the subject, of different approaches to learning and be sensitive to the demands of different types of learners;
- Teachers should have a repertoire of practical tools and strategies to guide the learner and enhance opportunities for feedback about learning;
- Both teachers and learners should have an orientation towards learning characterised by a willingness to engage in dialogue and negotiation regarding the intent and purpose of a particular teaching and learning activity;
- The focus of learning should be on how to succeed through effort rather than ability and through the selection of appropriate strategies by the learner.

How did we get these results?

From the electronic databases and full-text collections we identified 1,379 citations. A total of 146 reports were obtained of which 80 studies were selected for inclusion in the review. The in-depth review focused on a subgroup of 10 studies.

What are the implications?

The results suggest that the development of learning skills and capabilities should be embedded in the curriculum, as well as being taught explicitly to pupils, with supportive discussion of the effectiveness of strategies and approaches in different contexts. Opportunities to achieve this should be identified in the early stages of schooling as well as for older pupils.

We need to develop and evaluate strategies to support teachers in implementing approaches which facilitate the development of these skills in their classrooms, particularly over the longer term or on a large scale.

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 January 2007.

The EPPI-Centre's reference numbers for these reports of this review are 1501R (Report) and 1501T (Technical Report). The full citations are:

FULL REPORT

Higgins S, Baumfield V, Hall E (2007) Learning skills and the development of learning capabilities. Report. In: *Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

TECHNICAL REPORT

Higgins S, Baumfield V, Hall E (2007) Learning skills and the development of learning capabilities. Technical Report. In: *Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

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