A systematic review of interactions in pedagogical approaches with reported outcomes for the academic and social inclusion of pupils with special educational needs

How to cite:

© 2006 The Authors

Version: Version of Record

Link(s) to article on publisher’s website:

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data policy on reuse of materials please consult the policies page.
Special educational needs (SEN)

A systematic review of interactions in pedagogical approaches with reported outcomes for the academic and social inclusion of pupils with special educational needs

Who wants to know?

At the heart of all teaching are interactions with students. Professionals, policy-makers, parents and pupils will all benefit from an understanding of how staff can maximise the effectiveness of these interactions.

What did we find?

• Positive teacher attitudes towards the inclusion of children with special educational needs (SEN) are reflected in the quality of their interactions with all pupils and to pupils’ self concept.

• Teachers who see themselves responsible for the learning of all promote higher order interactions and engage in prolonged interactions with pupils with SEN, while teachers who see others (e.g. support staff) as primarily responsible engage in non-academic and low level nature interactions.

• Interactions with successful academic and social outcomes are characterised by questions and statements that involve higher order thinking, reasoning, and personal perspective. The teachers who enable students to achieve these outcomes spend most of the available time in these high-quality on-task interactions as opposed to the low-quality off-task interactions.

• High quality interactions are those in which teachers offer learners the opportunity to problem-solve, to discuss and describe their ideas, and to make connections with their own experiences and prior understandings, while those teacher interactions that are less successful focus on procedural matters, behaviours and general classroom management.

• Pupils with SEN participate more fully when encouraged to identify their thoughts and assisted to document them, particularly through one-to-one discussion with the teacher. Teachers should elicit prior knowledge and understanding, and use questions and answers to assess the nature of pupil’s thinking rather than as a check on whether they can provide the answer the teacher wants.

• Successful interactions are commonly based in learners’ experiences, being meaningful to learners in the here and now of their lives, involving direct experiences and realistic problems, offering multiple opportunities to engage with the learning situation and others within it.

How did we get these results?

The review question was:

What is the nature of the interactions in pedagogical approaches with reported outcomes for the academic and social inclusion of pupils with SEN?

The review considered 2,812 papers before synthesising the results of 7 studies published since 1994.

What are the implications?

Teachers need to recognise that all pupils are their direct responsibility. They need to draw out pupils understandings, encouraging further questioning and links between new and prior knowledge. These interactions are more likely to be effective if they are situated within activities that are hands-on, personally relevant and offer a range of opportunities to engage with the concepts, and with others’ understandings of those concepts.

Who wants to know?

At the heart of all teaching are interactions with students. Professionals, policy-makers, parents and pupils will all benefit from an understanding of how staff can maximise the effectiveness of these interactions.

What did we find?

• Positive teacher attitudes towards the inclusion of children with special educational needs (SEN) are reflected in the quality of their interactions with all pupils and to pupils’ self concept.

• Teachers who see themselves responsible for the learning of all promote higher order interactions and engage in prolonged interactions with pupils with SEN, while teachers who see others (e.g. support staff) as primarily responsible engage in non-academic and low level nature interactions.

• Interactions with successful academic and social outcomes are characterised by questions and statements that involve higher order thinking, reasoning, and personal perspective. The teachers who enable students to achieve these outcomes spend most of the available time in these high-quality on-task interactions as opposed to the low-quality off-task interactions.

• High quality interactions are those in which teachers offer learners the opportunity to problem-solve, to discuss and describe their ideas, and to make connections with their own experiences and prior understandings, while those teacher interactions that are less successful focus on procedural matters, behaviours and general classroom management.

• Pupils with SEN participate more fully when encouraged to identify their thoughts and assisted to document them, particularly through one-to-one discussion with the teacher. Teachers should elicit prior knowledge and understanding, and use questions and answers to assess the nature of pupil’s thinking rather than as a check on whether they can provide the answer the teacher wants.

• Successful interactions are commonly based in learners’ experiences, being meaningful to learners in the here and now of their lives, involving direct experiences and realistic problems, offering multiple opportunities to engage with the learning situation and others within it.

How did we get these results?

The review question was:

What is the nature of the interactions in pedagogical approaches with reported outcomes for the academic and social inclusion of pupils with SEN?

The review considered 2,812 papers before synthesising the results of 7 studies published since 1994.

What are the implications?

Teachers need to recognise that all pupils are their direct responsibility. They need to draw out pupils understandings, encouraging further questioning and links between new and prior knowledge. These interactions are more likely to be effective if they are situated within activities that are hands-on, personally relevant and offer a range of opportunities to engage with the concepts, and with others’ understandings of those concepts.
The results of this systematic review are available in three formats:

- **SUMMARY**
  - Explains the purpose of the review and the main messages from the research evidence.

- **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/


The EPPI-Centre’s reference number for the report of this review is 1411. The full citations is:


This document is available in a range of accessible formats including large print. Please contact the Institute of Education for assistance:

Tel: +44 (0)20 7947 9556   email: info@ioe.ac.uk