Dialogic Teaching
in Science Classrooms

This research project is about how talk with a teacher can help students to develop their understanding of science and take a scientific perspective on the natural world.

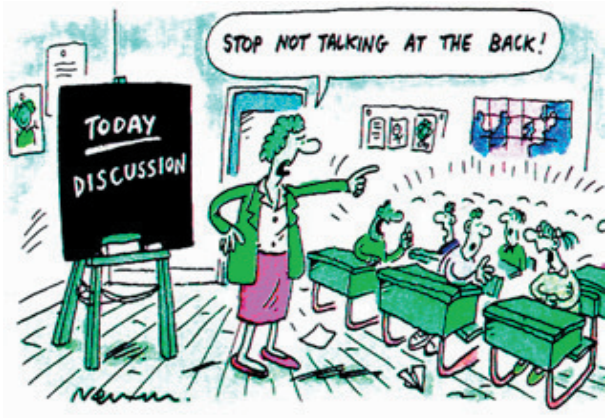
What is Dialogic Teaching?

"Dialogic Teaching" means using talk most effectively for carrying out teaching and learning.

Dialogic teaching involves ongoing talk between teacher and students, not just teacher-presentation.

Through dialogue, teachers can elicit students' everyday, 'common sense' perspectives, engage with their developing ideas and help them overcome mis-understandings.

When students are given opportunities to contribute to classroom dialogue in extended and varied ways, they can explore the limits of their own understanding. At the same time they practice new ways of using language as a tool for constructing knowledge.



By engaging students in dialogue, teachers can:

- explain ideas
- clarify the point and purpose of activities
- 'model' scientifc ways of using language
- help students grasp new, scientific ways of describing phenomena.

Why this research project?

Our understanding of how educationally effective classroom dialogue is generated and sustained is limited.

Moreover, relatively little is known about how dialogue can be used to best effect in science education.

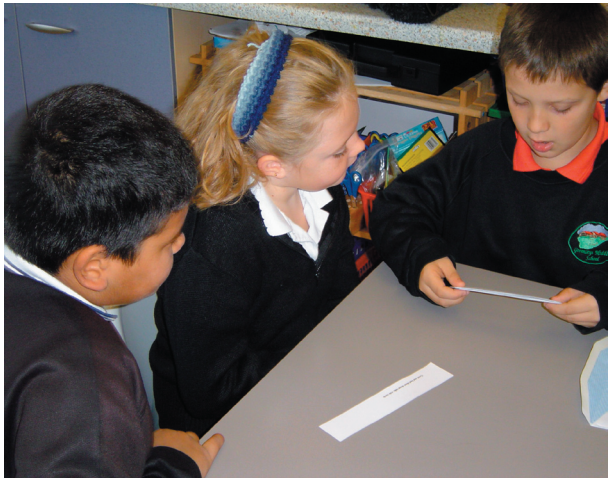
In this project we will explore how dialogue, as an alternative to teacher-presentation, contributes to learning in primary and secondary science classrooms.

What are the aims of the research?

One of our main aims is to work closely with teachers to *identify* and *evaluate* the kinds of teaching strategies which encourage and maintain dialogues with students.

A second interest is to compare the strategies used by *upper primary* and *lower secondary* teachers (as rather different traditions inform their practice). This should provide a clearer and more inclusive account of dialogic teaching in science education, and help teachers create and use it to best effect.

We will work with teachers to make the findings of the research available to both primary and secondary teachers of science through innovative professional development programmes.



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What data will be gathered?

- Video-recorded science lessons in upper primary and lower secondary classrooms
- Interviews with teachers and students
- Students' written work
- Teacher assessments of students' work

How long will the project be?

The project is of *two years* duration, from March 2005.

Who will be involved?

The research teams are based at the Open University in Milton Keynes and the University of Leeds. Primary and Secondary schools in both Milton Keynes and Calderdale will be participating in the project.

More information?

Visit www.dialogicteaching.org.uk

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