How can teachers use talk to support students learning in science?

Research taster

Paying more attention to the uses and types of classroom talk in teacher planning seems to be important. It can help teachers create lessons that are more effective in enabling students to build their own understanding of core science concepts. Often, however, teachers' planning does not appear to match planned activities to specific kinds of talk. Planning that includes opportunities for teachers to use probing talk and talk aimed at supporting students' reasoning appears to be particularly useful in enhancing students' learning.

Your evidence

You might find it helpful to analyse the kinds of talk that takes place in your science lessons and what purposes talk is given. You could try classifying teacher contacts with pupils using categories such as: presentational, information, discussion/probing and supporting. Evidence might then be collected using a table like this.

Stage of lesson	
Task	
Type of teacher talk	
Purpose	
Time	

Once you have some pictures of the pattern of talk you will be able to analyse the types of talk against purpose and against the time for which you used them. What type of talk was most in evidence? What type of talk helped students to gain conceptual knowledge?

(Adapted from Reflective Activity 12-1c)

Moving forward

Would it be possible for you to plan your lessons so that discussion and supportive talk were related to specific learning activities? Would you be able to use these parts of the lesson to help students collaboratively construct their learning so that it did not become necessary to use presentational talk excessively to impart the main content?

Find out more

To find out more about the use of talk in teaching and learning you may find the following useful:

Reports of the Towards Evidence-Based Practice in Science Education (2000-2003) project. They are accessible at: <u>http://www.tlrp.org/proj/phase1/phase1bsept.html</u>

The Research Informed Practice Site digest: *Talk, talk, talk: Teaching and learning in whole class discourse* Debra Myhill (2006) University of Exeter Research Papers in Education, 21 (1) pp. 19-41

