

How can we turn students' everyday observations into science investigations?

Research taster

When students are presented with data from somebody else's experiments they often lose interest. They are usually more willing to engage in the analysis of data when the task is based on a real-life situation and when the data are their own. How do you go about creating such authentic learning situations?

Your evidence

Gaining evidence about what your students notice in the world around them could be helpful in identifying experiences for investigation.

You could develop a simple diary sheet like the one below and ask each child to complete it, for example, for one day at the weekend. Because some children may be unsure of the types of things to record you might want to discuss some examples with them.

What did you observe?

- At breakfast time?
- In the garden?
- When making a cup of tea?
- During making a meal?
- When washing clothes?
- When drying clothes?

Moving forward

You could use this information as a basis for real-life investigations in the classroom. For example, could you have your students observe how quickly wet clothes dry under different conditions of temperature? Another possibility might be to investigate water loss from soil at different temperatures and to relate this to problems faced by farmers.

Find out more

To find out more about the teaching and learning of the processes of science you may find the following useful:

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

Osborne, J., Ratcliffe, M., Bartholemew, H. (2003) Teaching pupils ideas- about science: case studies from the classroom. Paper Presented at the Seventh International History, Philosophy & Science Teaching Conference, July 30-Aug 3, 2003