

# RESEARCH UPDATE: Science Education and Gender

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Girls are not as turned off by science as is commonly believed but they are much more concerned than boys about the ethical issues surrounding the subject, according to a new study from the Nestlé Social Research Programme.

Girls who are enthusiastic about a career related to science are the most critical of it. They are most concerned about ethical issues and are most sceptical of claims that science can solve human problems like poverty and unhappiness.



## ABOUT THE RESEARCH THE FINDINGS

A sample of 1,058 young people aged 11 – 21 were interviewed between 22 April and 21 May 2004.

MORI interviewers made an appointment with schools/colleges to conduct the sampling visit and select pupils to participate in the research.

The survey was administered by means of self-completion sessions conducted in the participating schools/colleges. The MORI interviewer arranged a convenient time and date for the self-completion session.

The MORI interviewer was present during the self-completion session to explain the survey to pupils selected to the sample, to reassure them about the confidentiality of the survey, to assist them in completing the questionnaire by clarifying question wording and routing instructions, and to collect completed questionnaires.

In all classroom sessions, teachers were requested to remain present throughout to assist with discipline and other issues, but not to participate in the conduct of the survey itself. As a thank you, all schools and colleges participating were sent a donation of £100.

600 pupils completed a paper based self completion questionnaire across 25 schools/colleges.

159 university students and 299 of those aged 16 – 21 no longer in full time education completed an online self completion questionnaire.

Boys who are interested in a job related to science, in all age groups, present the picture one might expect:

- They are interested in science and see it as beneficial
- They are interested in technology and particularly in space and in hardware
- They endorse a 'scientific way of knowing' and believe that science can solve human problems
- They believe that new inventions change our lives
- They are less interested in ethical issues.

Findings characteristic of girls who wish for a career in science present a strong contrast

- They express the strongest interest in acquiring further knowledge in science, and the least interest in learning about new developments in technology
- They are least interested in space issues and science fiction
- They score highest on the "Green" value set, and lowest on the "Science-oriented" value set
- They are most sceptical that science can solve basic human problems, or that scientific ways of thinking can be applied effectively to a wide range of problems
- They are most concerned that scientific advances are going too far and too fast to be controlled
- Girls in full time education like problems with several possible answers, rather than clear right and wrong answers.

These findings come from a national study, 'Science in my future', of 704 young people aged 11 - 21 years, conducted by the Nestlé Social Research Programme, with fieldwork undertaken by MORI. The author is Prof. Helen Haste

For a full copy of the research, see <http://www.spreckley.co.uk/nestle/pr01.htm>