



## Conclusions

The survey findings indicated that two-thirds of the Year 9 students had some degree of interest in SET careers. This suggests that there is a large group of young people who would welcome more information about the wide range of opportunities in that area, and help them decide which, if any, is the right one for them. The profiles created from questionnaire responses indicate which young people are likely to fall within this target group.

Other students may have shown a lack of interest because they have misunderstandings about SET careers. Although they may be a more difficult group to attract, it is important that they too are given accurate information which will dispel misunderstanding and may help some to realise that SET is a worthwhile option for them.

Students generally appeared to lack knowledge about the variety and range of SET careers, and understanding about what they might involve. They did not realise that engineering, for example, involves skills and knowledge that they already had or would like to acquire, and that its study can lead to an interesting and fulfilling career. This also applies to career opportunities for scientists and technologists.

Survey findings indicated that the majority of young people are thinking about future careers when they make their option choices in Year 9. Nearly 80 per cent claimed that they already had an interest in working in a specific area, and they considered that their option choices were appropriate for that area. The survey also indicated that websites were a well used source of career information; the majority of respondents found them to be useful or very useful.

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## Research Summary

National Foundation for Educational Research

# Factors Influencing Year 9 Career Choices



The Engineering and Technology Board (etb), a national partnership between business, industry, the engineering profession and education that aims to promote science, engineering and technology (SET), is engaged in developing a wide range of careers information.

The etb would like to acknowledge the support of the  
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## Introduction

The etb commissioned the National Foundation for Educational Research (NFER) to carry out a study to determine how Year 9 students (and indirectly their adult influencers) could be better supported with advice and background information relating to career opportunities in the science engineering and technology (SET) sector. The study aimed to provide statistically significant research findings relating to Year 9 students' subject choices, especially their attitude towards science and the arts and the extent of their involvement in seeking and accessing career information. The project also sought to determine the relative impact of three key variables, gender, level of attainment and social background.



## Methodology

NFER statisticians calculated that an achieved sample of 1,000 students would be needed in order to provide statistically robust data. The breadth of sample required for robust statistical analysis was to be ensured by surveying only one tutor group in each of 40/50 schools. Requesting tutor groups, rather than subject classes, would help to ensure that the student sample would represent all abilities. A sample of schools was drawn up and contacted, of which 53 agreed to participate. Returns were received from 42 schools, which provided an achieved sample of 1011 student questionnaires.

## Key Findings

### Subject choices

With a few exceptions for particular reasons, all students take the key subjects of English, mathematics and science at GCSE. Other subjects may be classified as compulsory by schools, and some subjects can be chosen by the individual student, usually within prescribed limits.

- + Nearly all of the students recognised the importance of English, mathematics and science.
- + Mathematics and science were regarded as more challenging than English. Science was the least likely to be classified as an easy subject.
- + More than a third of students 'really wanted' to study English, mathematics and science, and the number who really wanted to study ICT was even higher.
- + Among young people likely to be higher achievers, at least 40 per cent really wanted to study each subject, and science was the most popular, with 44 per cent.
- + Science and mathematics were more popular with boys than girls.
- + Science was much less likely than mathematics or English to be considered necessary for a good job.



### Career plans

- + Two-thirds of the students (the majority boys), expressed interest in careers in at least one area of SET. Technology was more popular than science or engineering.
- + Students expressing an interest in SET tended to be higher achievers who wanted to stay on in education to HE level and who were attracted to work that was practical but also office-oriented.
- + Students interested in science and technology tended to be from higher socio-economic backgrounds, but this was not true of engineering.
- + However, students lacked understanding about SET careers. A large majority saw engineering in terms of working with machinery in a factory, and only just over a third realised that it involved designing things.
- + Science attracted young people who were interested in careers which involved caring for people; this may reflect the fact that over 80 per cent saw scientists as helping to save lives.

