



ASE Project: Promoting the Global Dimension in Science



Guidance →

Curriculum and Standards



Developing the global dimension in the school curriculum

Audience
Headteachers, senior managers, governors, local education authorities, teachers and early years practitioners

Primary and Secondary Schools
Status Recommended
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SCIENCE: THE GLOBAL DIMENSION
KEY STAGES 3 & 4

Qualifications and Curriculum Authority

The global dimension in action
A curriculum planning guide for schools



Graham Jackson



1.1 Scientific thinking

- a Using scientific ideas and models to explain phenomena and developing them creatively to generate and test theories.
- b Critically analysing and evaluating evidence from observations and experiments.

1.2 Applications and implications of science

- a Exploring how the creative application of scientific ideas can bring about technological developments and consequent changes in the way people think and behave.
- b Examining the ethical and moral implications of using and applying science.

1.3 Cultural understanding

- a Recognising that modern science has its roots in many different societies and cultures, and draws on a variety of valid approaches to scientific practice.

1.4 Collaboration

- a Sharing developments and common understanding across disciplines and boundaries.



Curriculum opportunities

During the key stage pupils should be offered the following opportunities that are integral to their learning and enhance their engagement with the concepts, processes and content of the subject.

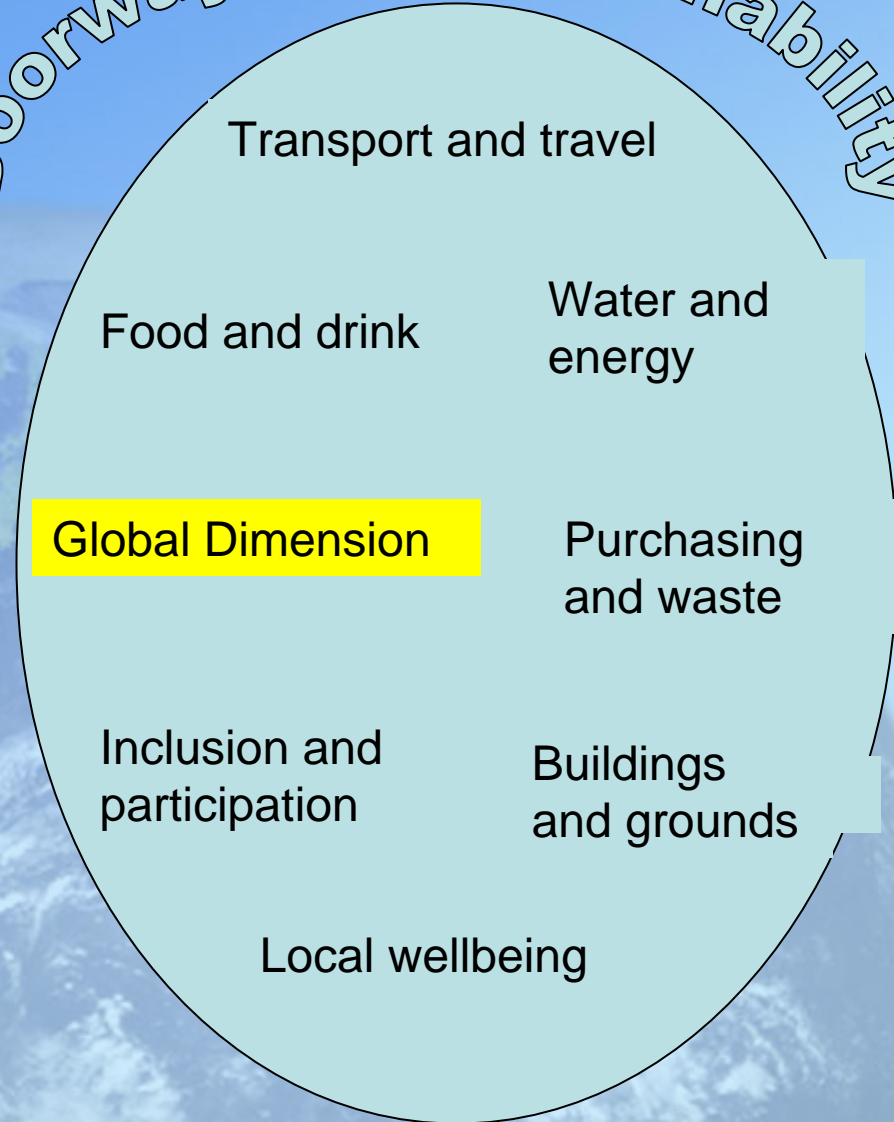
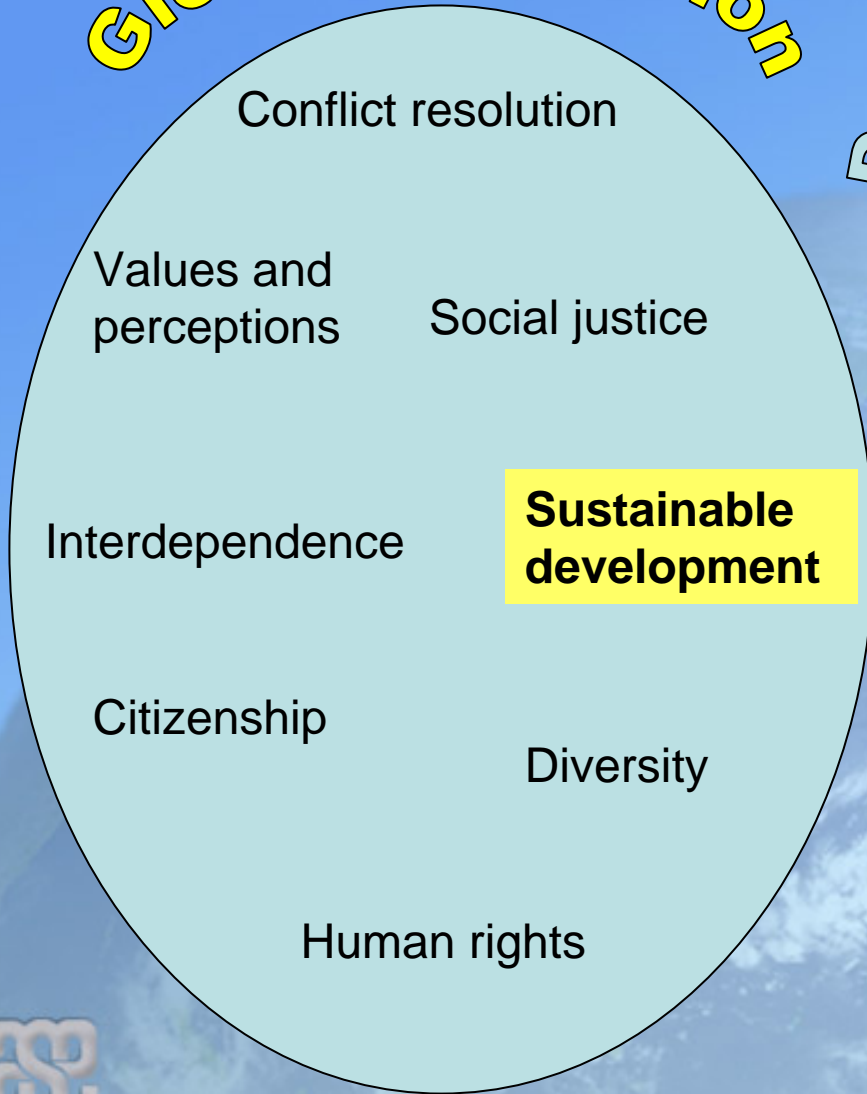
The curriculum should provide opportunities for pupils to:

- a) research, experiment, discuss and develop arguments
- b) pursue an independent enquiry into an aspect of science of personal interest
- c) use real-life examples as a basis for finding out about science
- d) study science in local, national and global contexts, and appreciate the connections between these
- e) experience science outside the school environment, including in the workplace, where possible
- f) use creativity and innovation in science, and appreciate their importance in enterprise
- g) recognise the importance of sustainability in scientific and technological developments
- h) explore contemporary and historical scientific developments and how they have been communicated



Global Dimension

Doorways to sustainability





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The ASE Project within ITE

- Speaking to science tutors at National Strategy Meeting**
- Speaking to mentor teachers in schools**
- Speaking to ITT Students**

An assessment of knowledge and understanding of, and attitudes to the global dimension in science



ITT Students:

- York and Worcester: Secondary PGCE

-Cumbria and Winchester: Primary PGCE/BA

Mentors

-from York and Oxford

Secondary PGCE science course tutors



Further detailed analysis to be done

Comparing results within and between groups

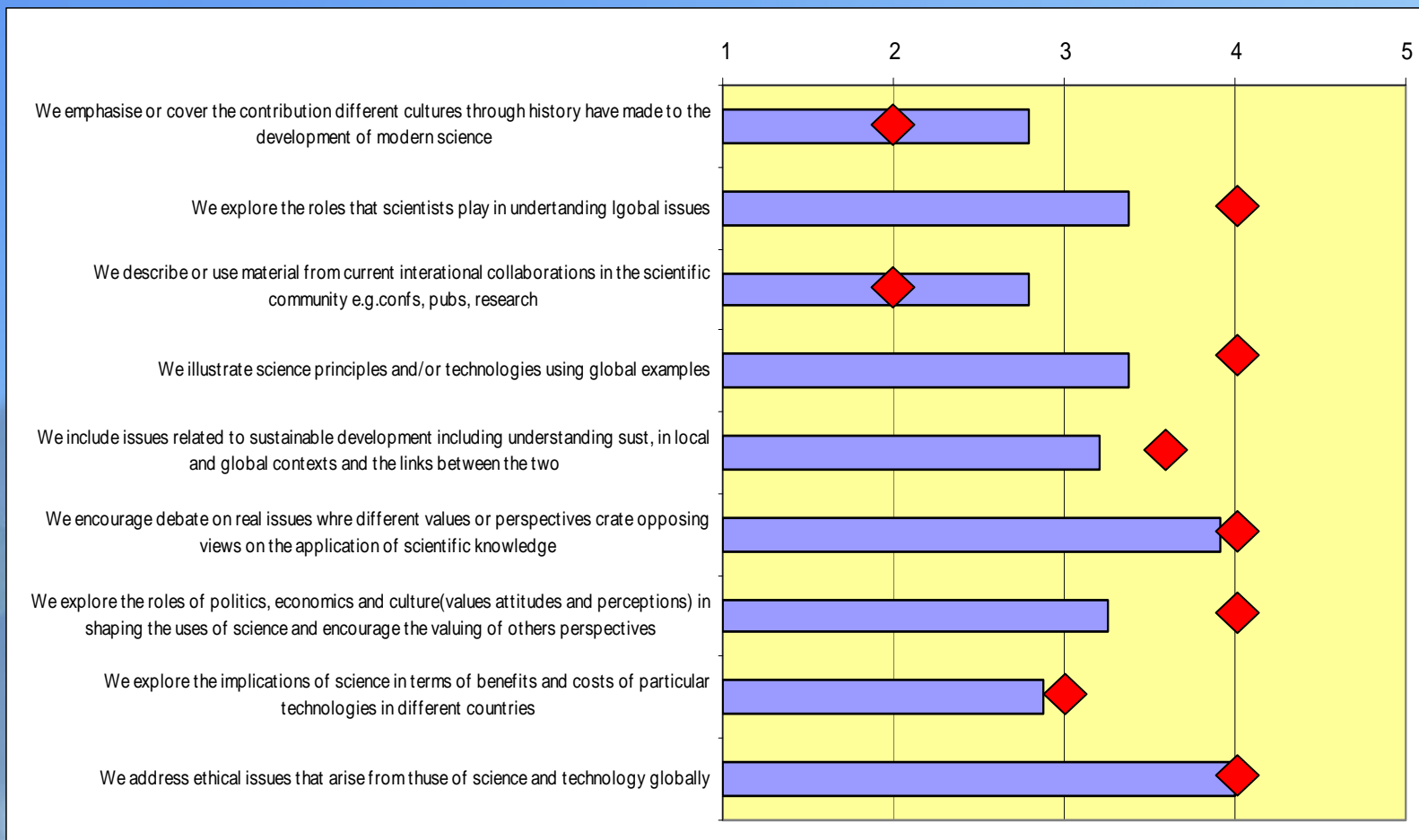


How did each group respond to the questionnaire?



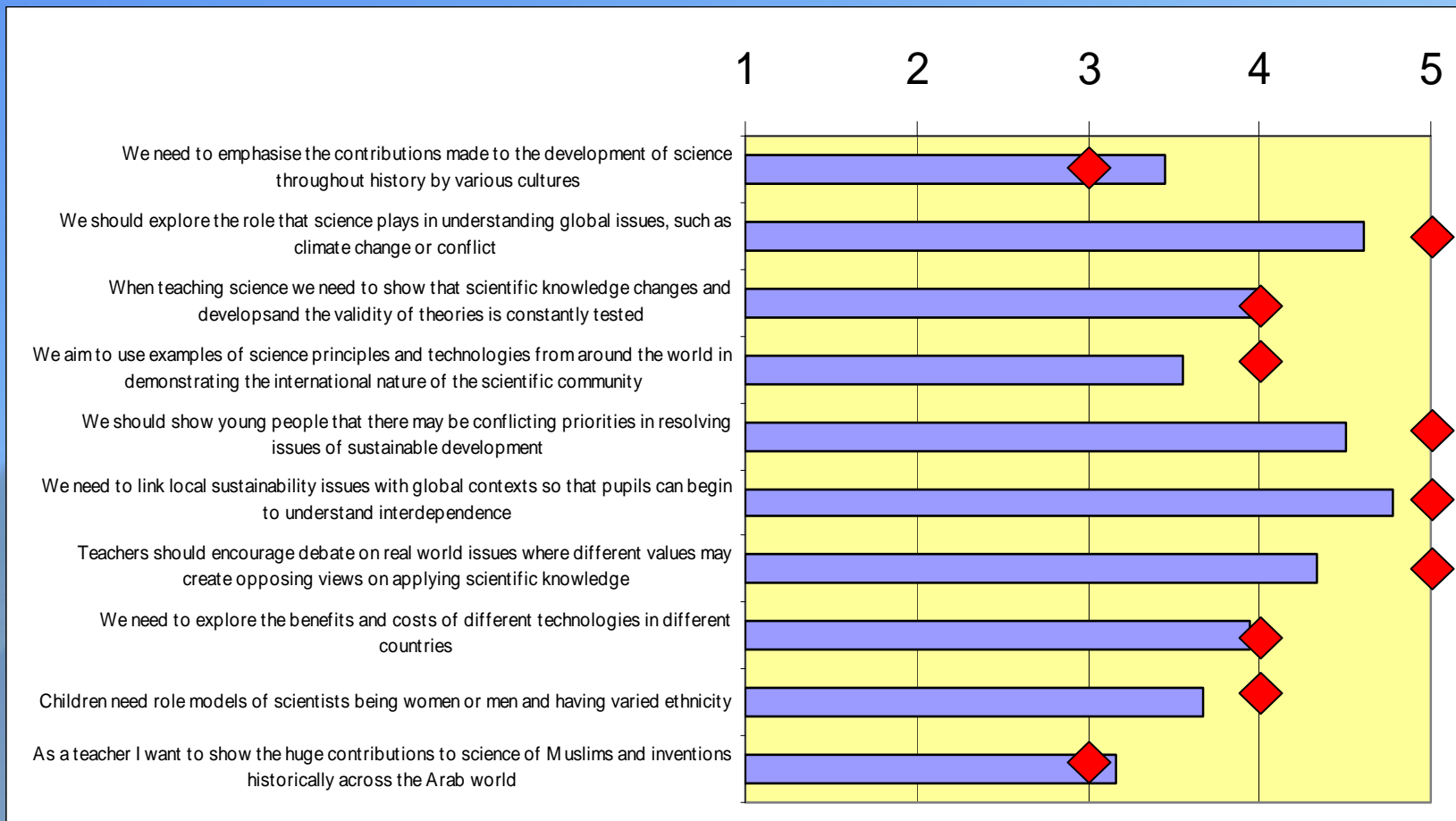


Mean Results of questions to ITT Tutors at National Science Strategy Group





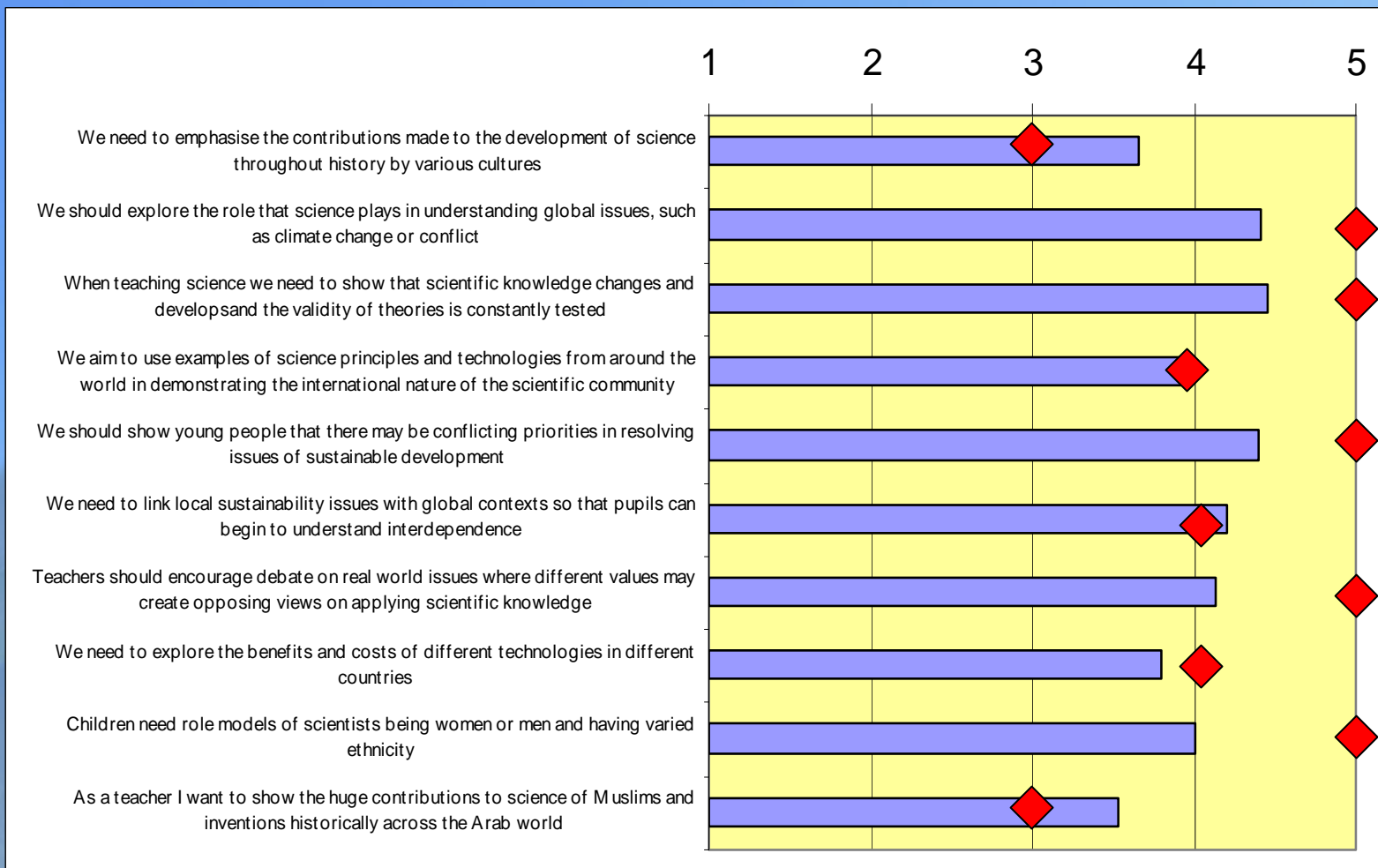
Mean Results of questions to Primary ITT Students at Winchester University



Modal value (most common response) 



Mean Results of questions to Primary ITT Students at Cumbria University

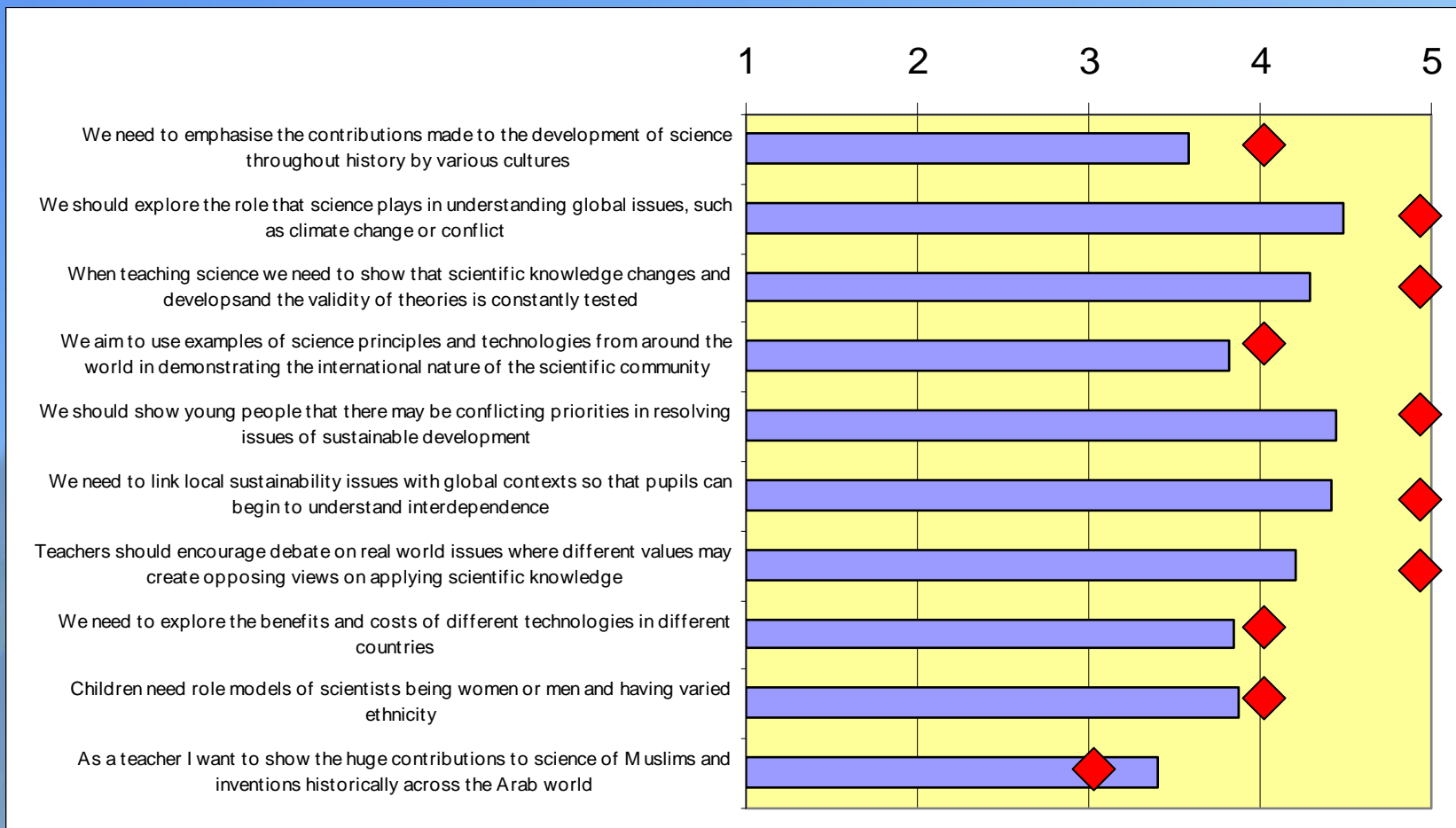


Modal value (most common response)





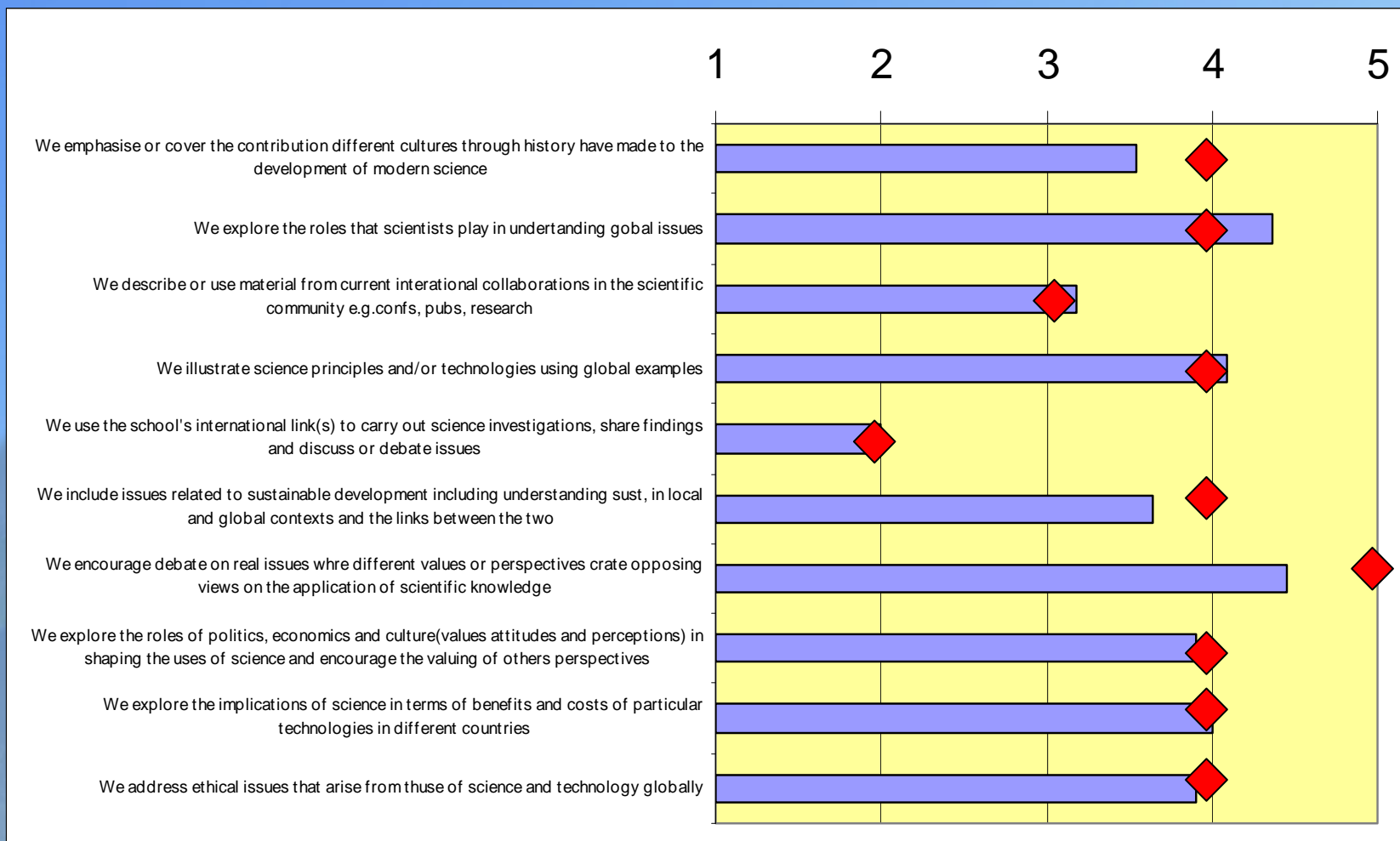
Mean Results of questions to Primary ITT Students combined



Modal value (most common response) 



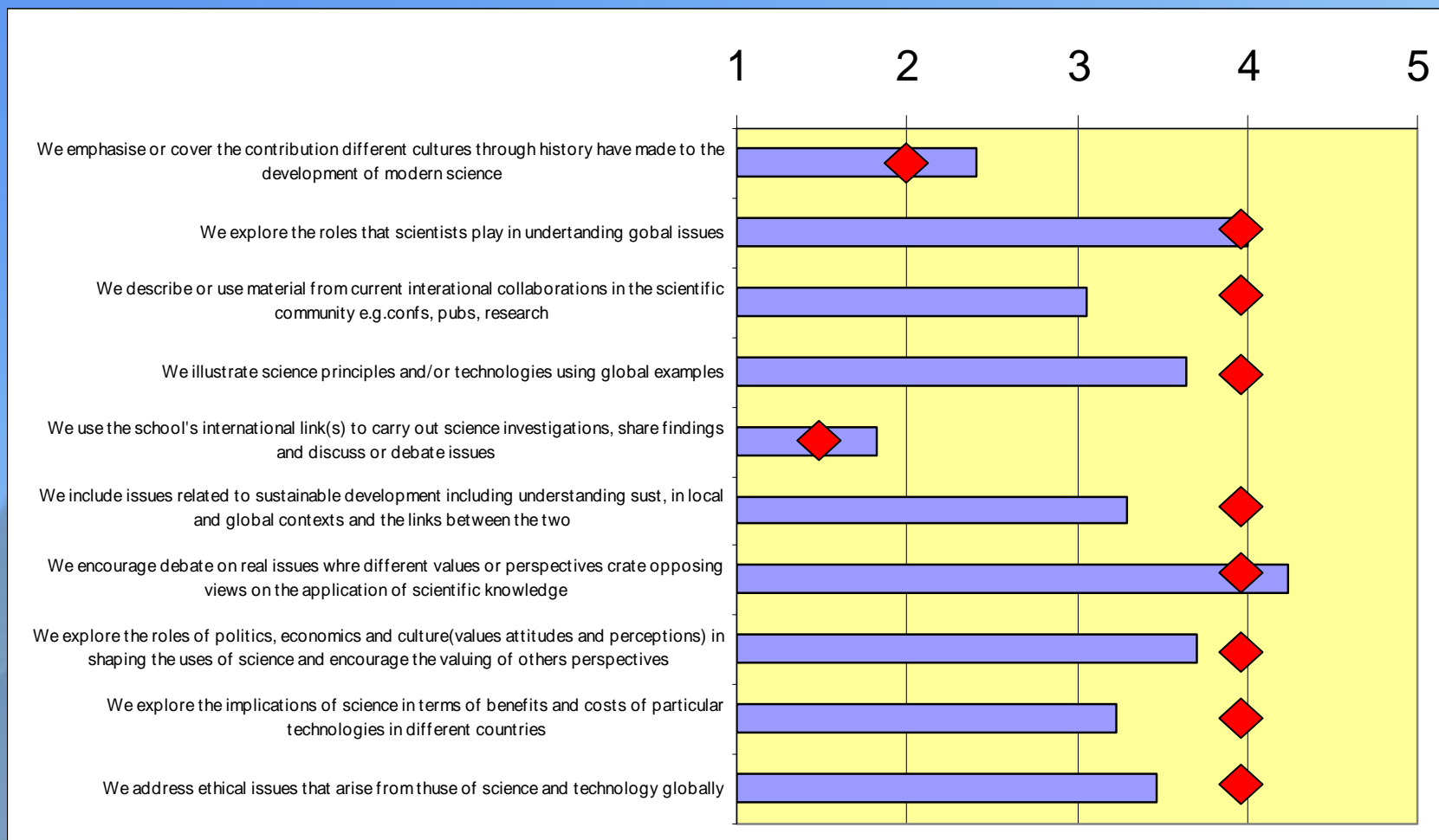
Mean Results of questions to Mentor Teachers at York University



Modal value (most common response) 



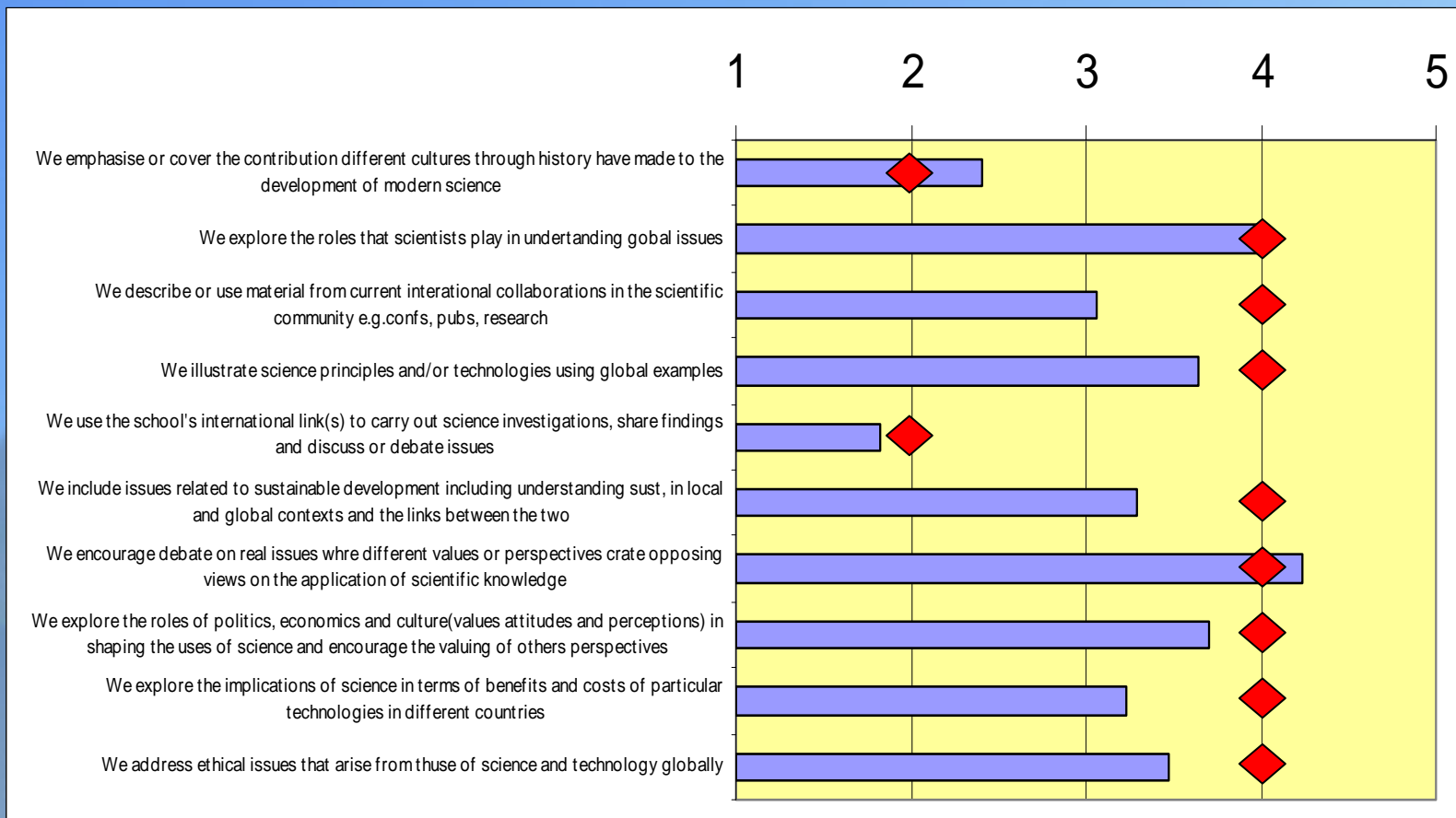
Mean Results of questions to Mentor Teachers at Oxford University



Modal value (most common response) 



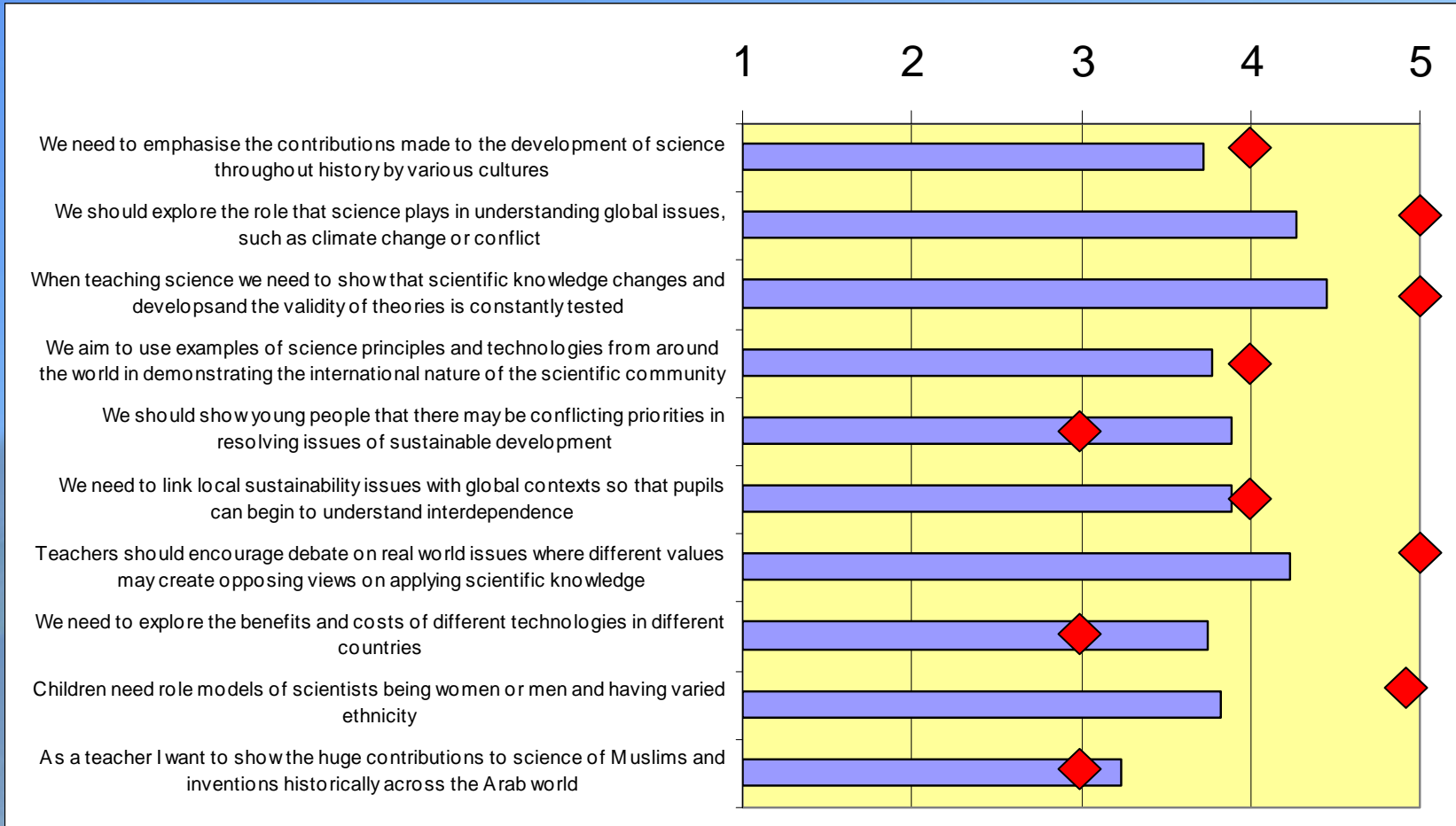
Mean Results of questions to Mentor Teachers at Oxford and York Universities combined



Modal value (most common response) 



Mean Results of questions to Secondary PGCE Science Students at York University

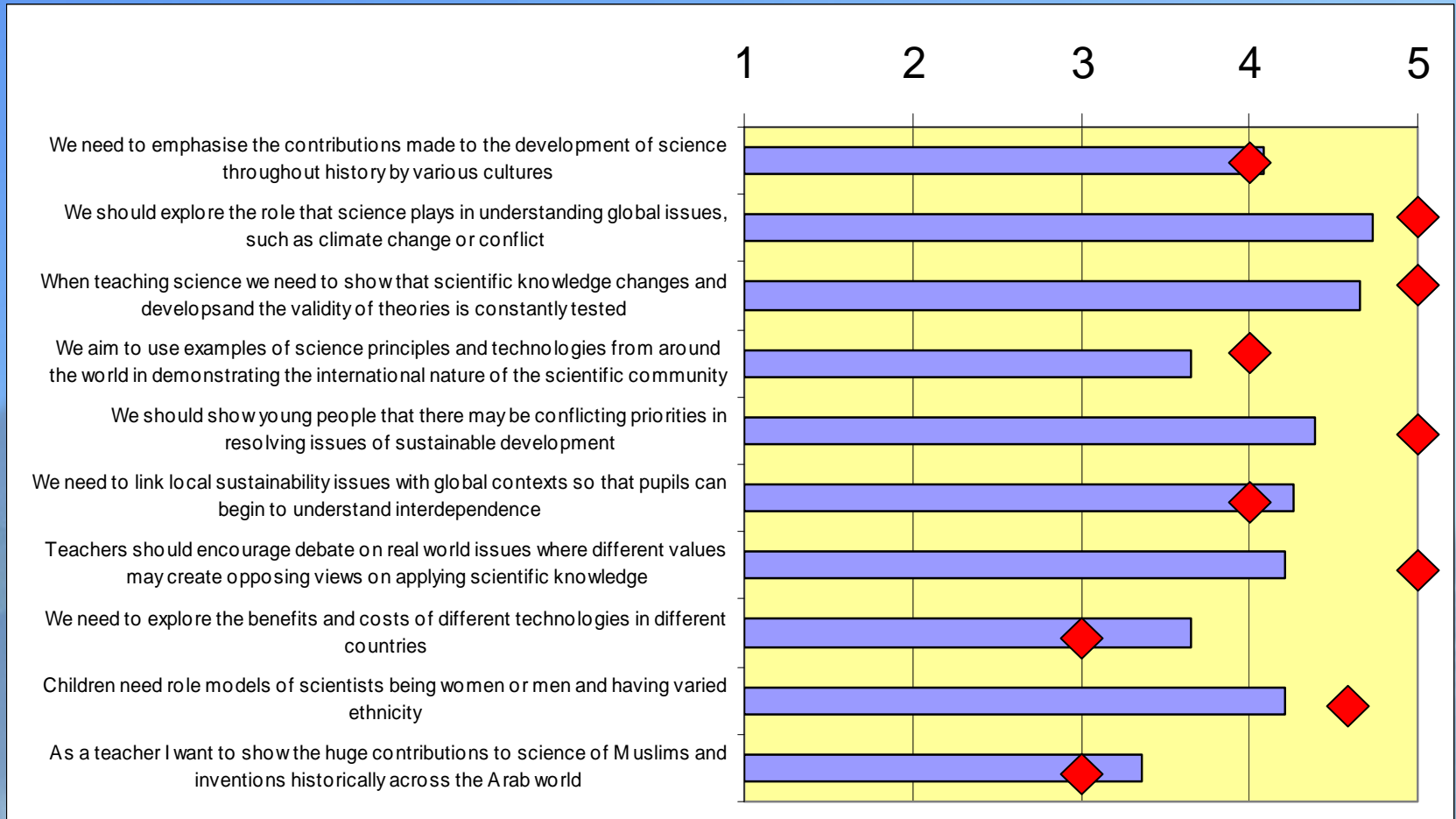


Modal value (most common response)





Mean Results of questions to Secondary PGCE Science Students at Worcester University

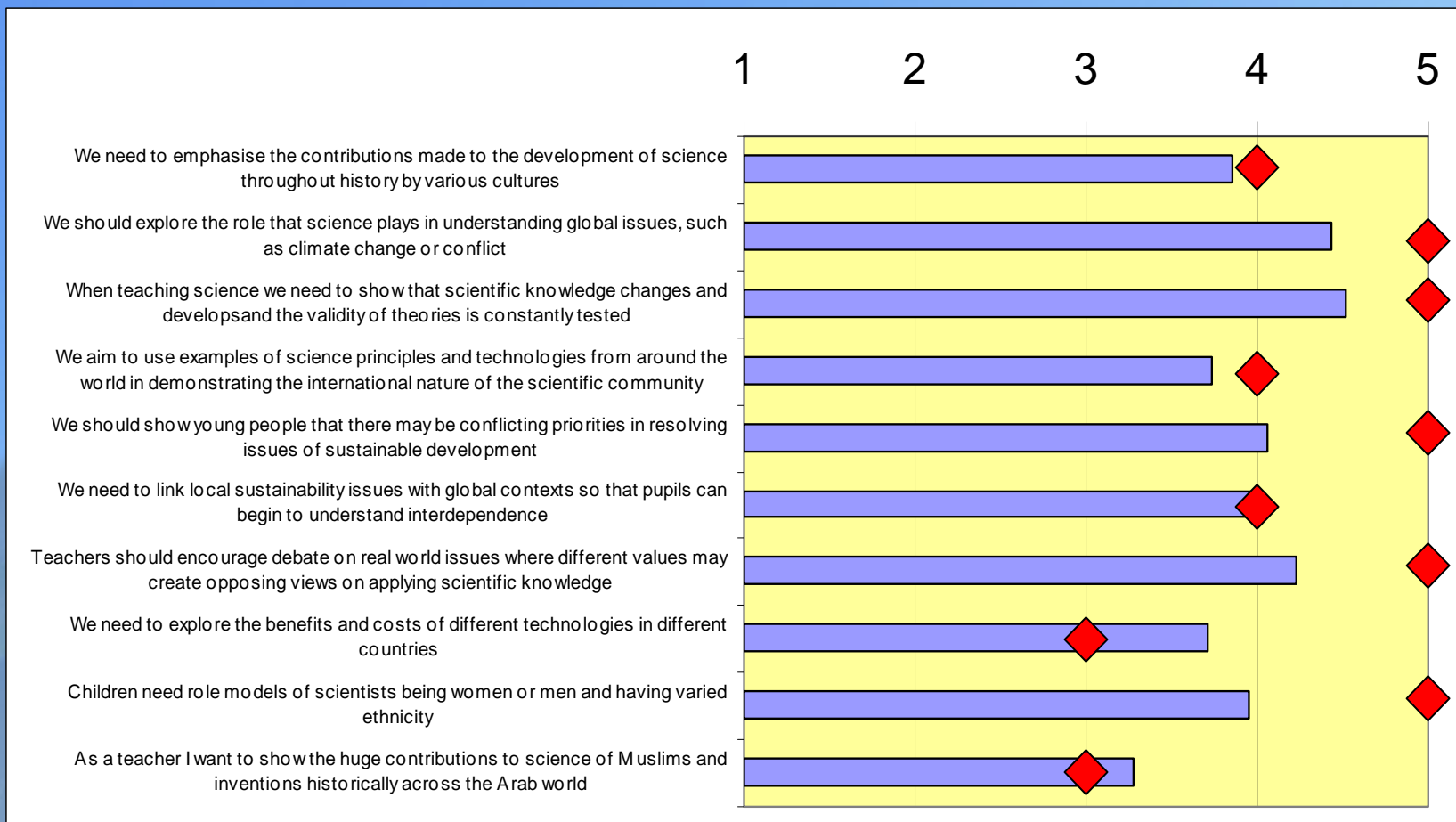


Modal value (most common response)





Mean Results of questions to Secondary PGCE Science Students combined



Modal value (most common response) 

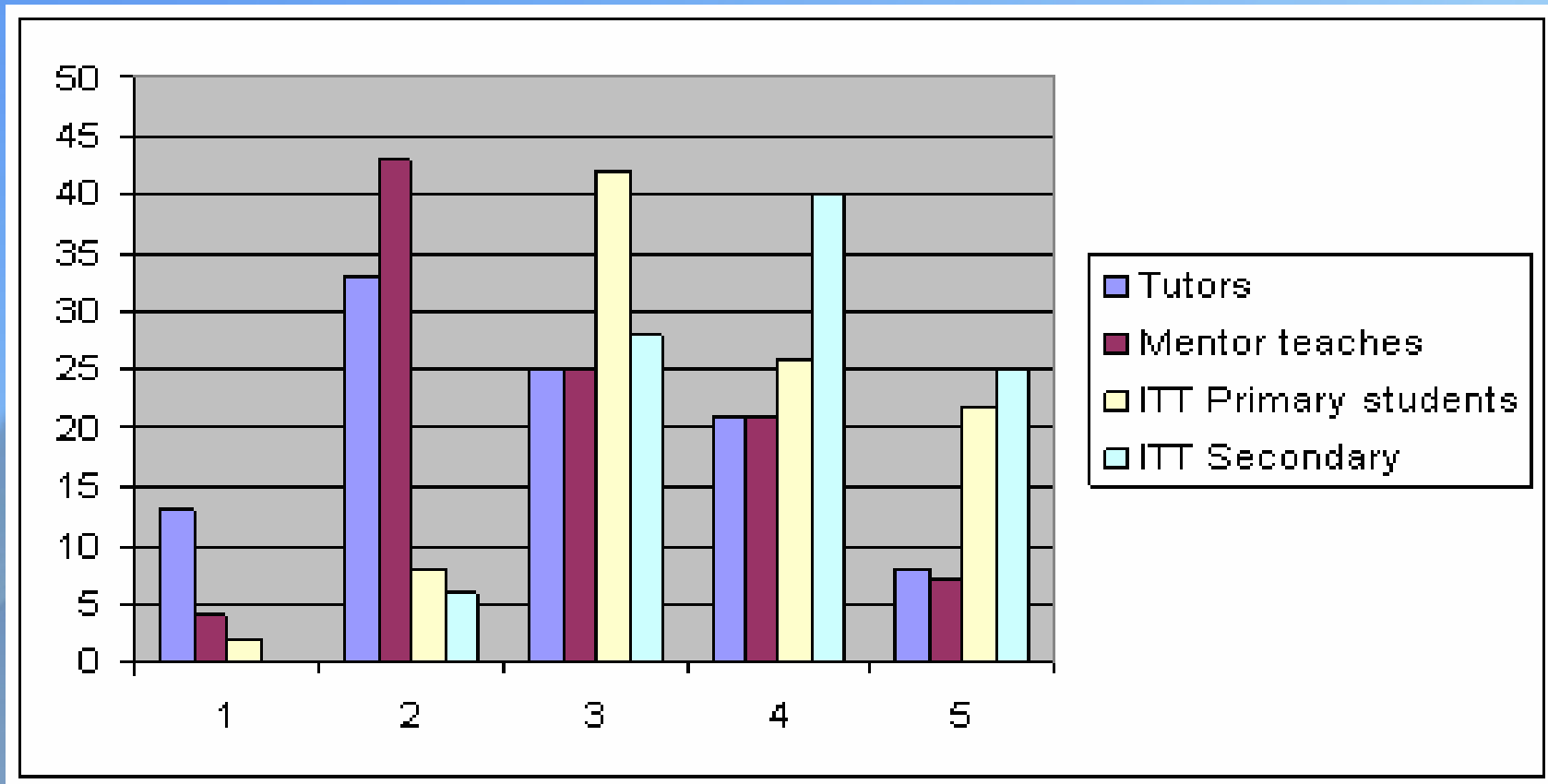




How did the results compare between groups?

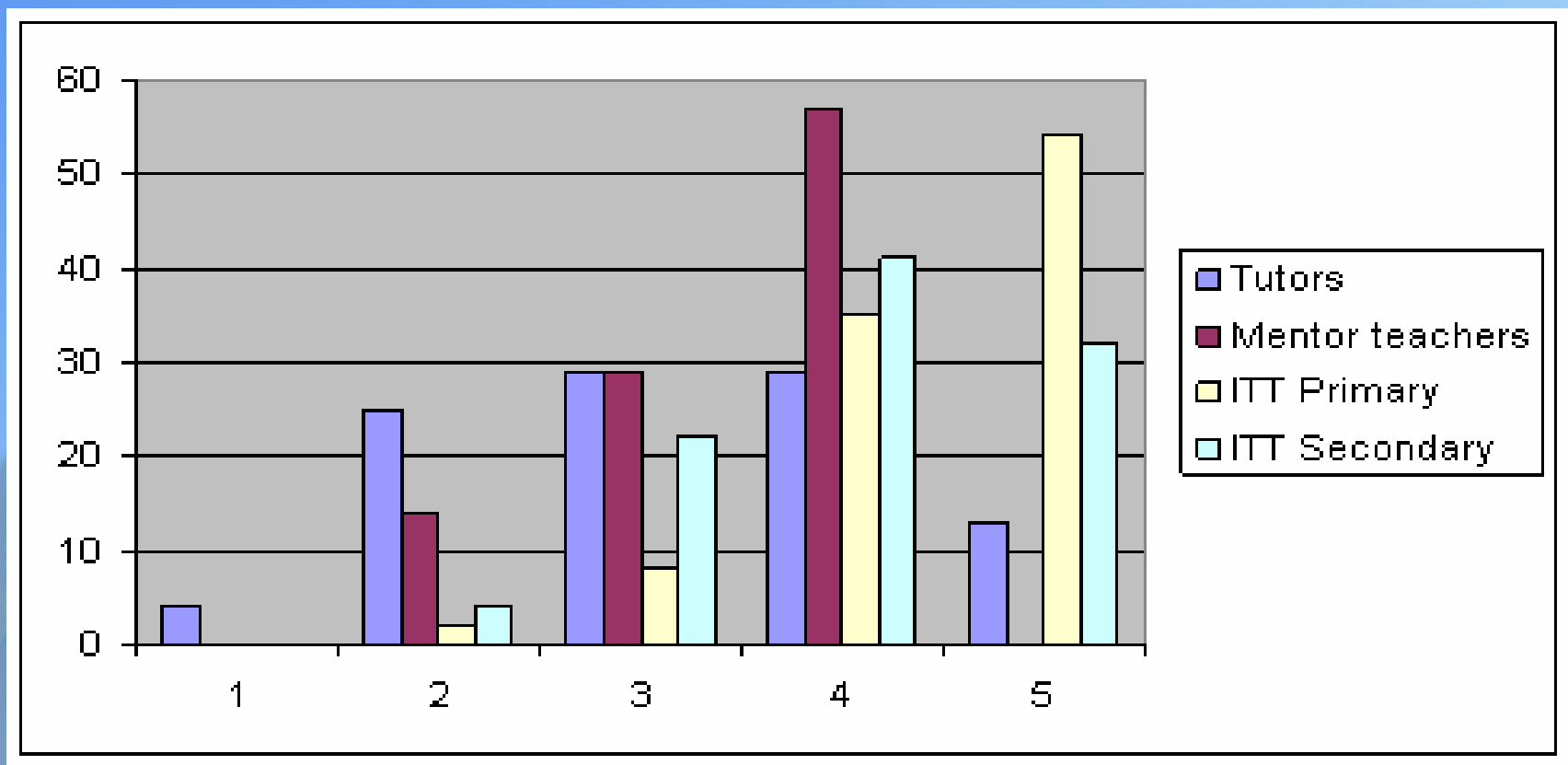


Question relating to the contributions of different cultures to scientific knowledge



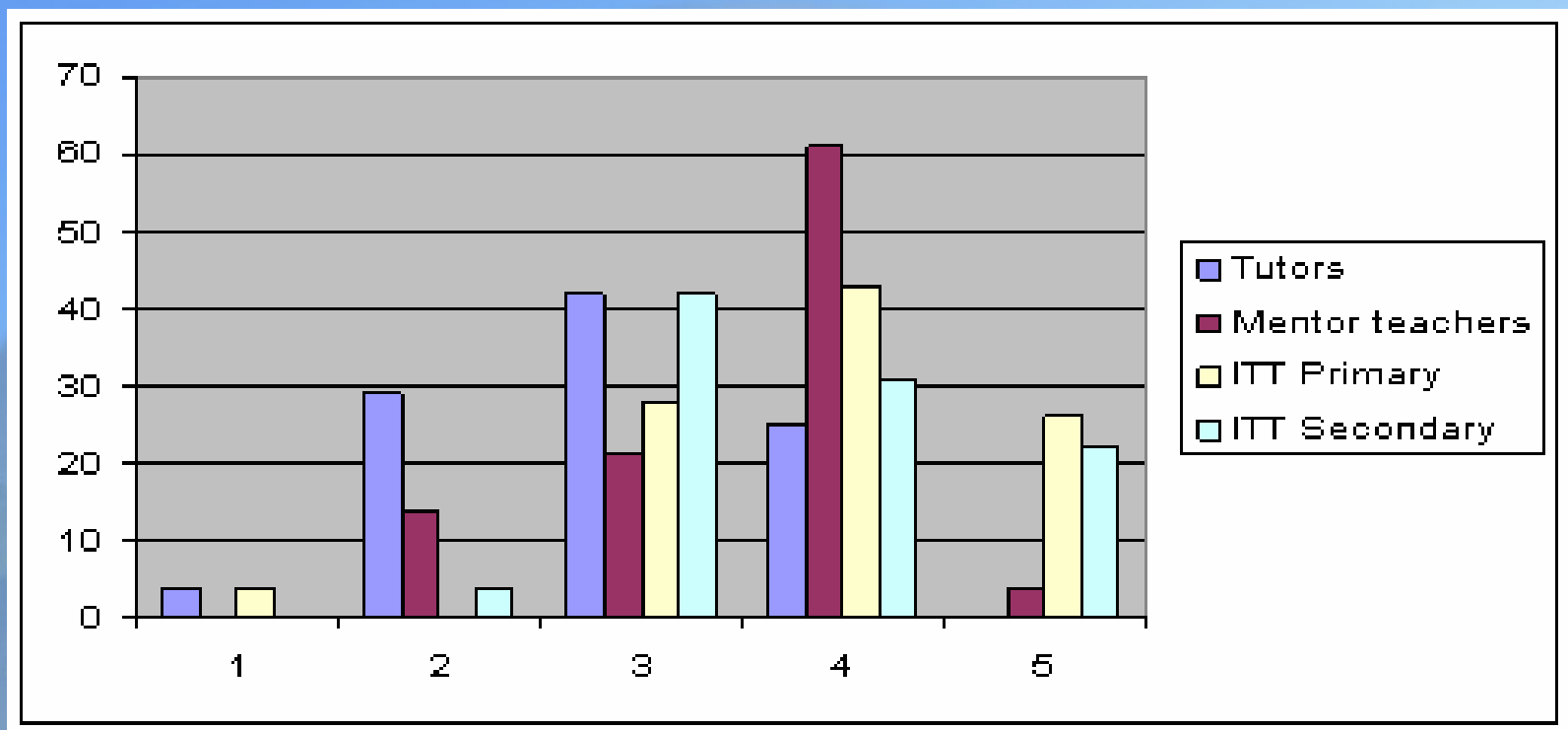


Question relating to sustainability and interdependence



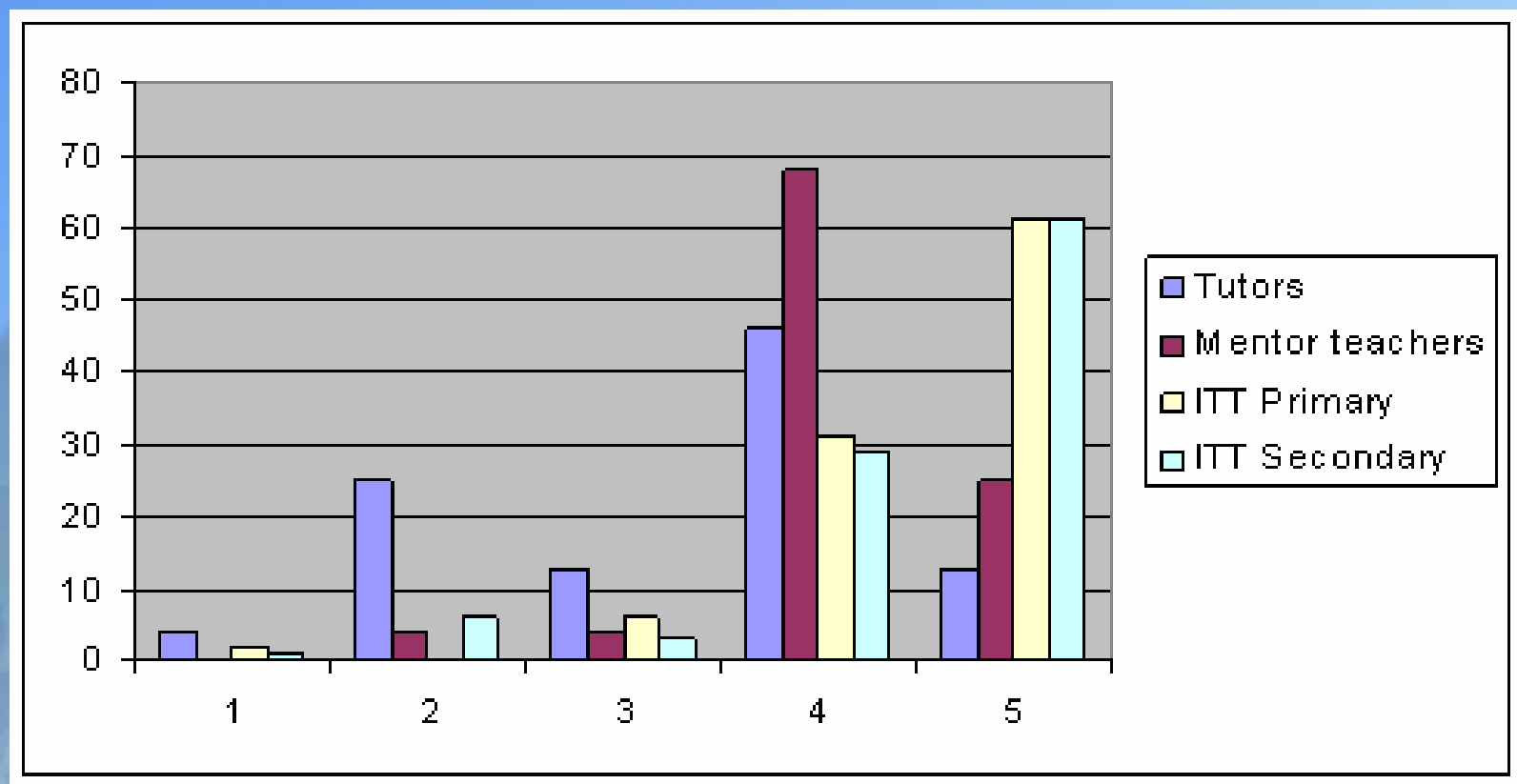


Question relating to costs and benefits of science and technology developments





Question relating to role of science in understanding global issues





Question relating to values and perceptions being important in science

