

The PISA report : Statement by The Mathematical Association

The findings of the PISA Report on attainment in mathematics show the United Kingdom in a poor light. The UK is in 26th place out of 65. Scotland appears to have done marginally better than England, with Wales and Northern Ireland marginally worse, but the differences do not seem statistically significant. PISA is complex, its methodology is contested, and it does not tell us what kind of school mathematics pupils should be studying. Yet its results are sufficiently consistent to justify taking them seriously. Politicians are arguing as to who is to blame. However the basic message is that **we have not done well and must do much better.**

Those who perform exceptionally well in such studies show what it is possible to achieve. Such high levels of achievement in mathematics cannot be based on rote learning. We need to consider how such countries structure their school mathematics and support their teachers. The performance of their weakest pupils shows that there need not be a long tail. Nevertheless it would be wrong to suggest that we can (or should) emulate the details of what happens in very different cultures. In particular, there is no way we could (or would wish to) copy their use of after-school study. So we need to see what lessons there are to be learned that might allow more of our youngsters to emerge as well-rounded individuals while realising their full academic potential.

Major changes are taking place in education in the UK. For example, the *Curriculum for Excellence* is being rolled out in Scotland. The implementation has not been without its problems, as reflected by the recent announcement by the Scottish Government that schools can continue to present students for the existing Highers for one more year than originally planned. The Westminster Government has also changed its stance recently, in this case regarding the issue of early and repeated entry at GCSE. The Mathematical Association welcomed that change, having argued strongly against such entries and the related concept of acceleration.

The Mathematical Association has many concerns over the new National Curriculum. These have been articulated both by policy statements from the Association as a whole and by individual members. The most important requirement is a cadre of well-qualified and well supported teachers.

[The policy statements can be found at <http://www.m-a.org.uk/jsp/index.jsp?lnk=700> .]

The Mathematical Association has had useful meetings with the Department for Education at which some of these concerns have been addressed. The Mathematical Association remains keen to engage in constructive debate with Government over the way forward.

Mathematics is the language of the modern world. A high level of competency in mathematics is essential for the future prosperity of the country. The PISA findings should serve as a wake-up call that all is not well.