ACME’s Response to the DfES Subject Specialism Consultation

Introduction

The Advisory Committee on Mathematics Education (ACME) is an independent committee which acts as a single voice for the mathematical community, seeking to improve the quality of education in schools and colleges. It advises Government on issues such as the curriculum, assessment and the supply and training of mathematics teachers. ACME was established by the Joint Mathematical Council of the UK and the Royal Society, with the explicit support of all major mathematics organisations, and is funded by the Gatsby Charitable Foundation.

ACME welcomes the DfES’s Consultation Document on Subject Specialism and notes its resonance with the recent ACME report: Continuing Professional Development for teachers of mathematics (PR/01 December 2002) http://www.royalsoc.ac.uk/acme/CPD_report.htm. In accordance with the scope of this consultation, ACME’s responses focus on post-11 education. We will make comments and suggestions which are either generic or specific to mathematics.

How do you assess the adequacy of the current sources of subject specialism support?

Within mathematics there has been a shift in provision away from longer accredited courses towards short course provision, mainly centrally managed and delivered. Extended programmes leading to higher degrees have had little or no financial support and have to all intents and purposes been lost. The excellent Best Practice Research Scholarship (BPRS) programme and other funded CPD opportunities for subject specialism support have had a low profile and hence have been under-used by teachers. Similarly, the once-significant opportunities to undertake study at Masters level that allowed teachers to develop their subject specialism have also been lost. Very few ‘subject specific’ Masters programmes remain.

By contrast, the training for the implementation of the National Numeracy and KS3 Strategies has been well resourced, and generally well received, and has provided some useful professional development for most teachers of mathematics within schools. Additionally the Government has put in place an array of initiatives for supporting mathematics teachers. However, we are aware of an urgent need to take stock and interconnect all these recent developments, to build on this common start and to seek to identify what is effective for different groups of teachers. This will enable the planning of sustained portfolios of subject specialism support that will meet the diverse needs of teachers of mathematics.

How best can we further enhance subject specialism, and are there different approaches needed for different subjects?

There are two main ways one could move to enhance subject specialism:
1) Firstly, engender a cultural shift within the profession in which the expectation is that teachers engage with subject specific CPD throughout their working careers and keep up-to-date with developments in their subject. Of course this implies an entitlement to time and funds alongside a system of accountability and rewards. For example, Masters level study that is subject focused could be free from fees and rewarded through performance management and threshold payments. As noted above, the take-up of schemes such as BPRS, has not been as widespread as hoped. It is important to optimise take-up of any future opportunities to develop subject specialist expertise. The internet is one way to advertise such opportunities and a number of subject associations already provide excellent links to websites such as www.teachernet.gov.uk. Further links between government websites, subject associations and subject specialist opportunities in HEIs and elsewhere should be encouraged.

2) Secondly, the Government could encourage teacher membership of subject associations. Currently, other than in the areas of science and PE, only a small proportion of teachers belong to a subject association. There is a need to commission research into why people do or do not join subject associations. This information could be used to explore ways in which subject associations might play a fuller role in the support of subject specialism and the ways in which government could support this and capitalise on the potential opportunities. A simple way of indicating that membership of an association is part of a professional portfolio would be to include a question in a teacher’s Career Entry Profile. The publicity that arises from a Minister making a positive statement on a subject at a subject association conference is hard to beat.

Is there scope for the subject associations to work together more, for example, to share good practice or to develop guidance on ways in which one subject can be used to reinforce teaching and learning in another?

Certainly, having a multitude of organisations within a single subject area can be both confusing and lead to dissipation of effort and funds. As a contrasting example, the ASE provides an overarching coverage of a number of individual interests within science, which leads to a feeling of community and emphasises enthusiasm and commitment to the enhancement of the learning and teaching of science.

Despite diversity within mathematics, there are examples of productive cooperation between the subject associations, several of which have substantial teacher membership and many more of which share an interest in school mathematics. They work together through the Joint
Mathematical Council of the UK (JMC) and ACME in order to consider major issues and to share concerns, solutions and initiatives. Representatives of DfES, QCA, TTA and the Numeracy and KS3 Strategies are observers at JMC meetings, which allow for lively debate as well as regular communication between key organisations. In 2005, eight mathematical societies are planning to hold conferences on the same site, at the same time, to maximise opportunities for cross-fertilisation between the widest possible constituency of those concerned with the learning and teaching of mathematics.

There have also been examples of cooperation between associations across subject boundaries, to share good practice and to consider issues of mutual interest e.g. COSTA. However, these became moribund. ACME still believes that there are several activities which would benefit from such collaboration. These include:

- Communication with schools;
- Embedding of aspects of one subject within the teaching of another;
- Opportunities for multi-subject approaches to a theme or a real life problem;
- Sharing of good practice in models of CPD;
- Links between school, college, LEA and university based enthusiasts.

**Is there scope for subject based programmes to be more closely related to wider themes e.g. behaviour and attendance?**

Whilst all good subject based programmes will make links to wider themes such as behaviour, care must be taken not to dilute the subject focus by trying to address too many issues at once. The main objectives of such provision should be subject focused. Any general themes should be secondary to this objective.

**How can the needs of adults other than teachers for subject specialist support best be met?**

Subject associations could be encouraged to provide a membership category for professionals (other than teachers); and schools and colleges could be encouraged to take out individual or institutional membership for this group. Moreover, plans for CPD could include special sessions for this group.

**Would cross sector networking (for example, across schools, colleges and universities) bring benefits to front line teachers?**
ACME believes that this is a very strong model for subject enhancement and has made it a basic feature of its recommendations for a network of local centres and a National Academy in their report on CPD for teachers of mathematics.

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