The Specialist Schools Programme

In the four years since Graham Corbyn (who at the time was the National Specialism Co-ordinator) wrote an article for the MSOR Connections newsletter outlining the progress of Mathematics and Computing Colleges (MCCs) [1], specialist schools have continued to be an important part of the Government’s plans to raise standards in secondary education. The Specialist Schools Programme (SSP) helps schools, in partnership with private sector sponsors and supported by additional Government funding, to establish distinctive identities through their chosen specialisms and achieve their targets to raise standards.

Specialist schools also undertake to become active partners in developing a learning society comprising local schools, community groups and other partners such as universities, businesses and industry. These partnerships are continuing to mature and more schools have begun to take on an international dimension to their community plans. For example, some schools have organised student exchanges and work placements in overseas schools. Others are supporting overseas schools by developing their websites and providing information and communication technology (ICT) equipment and training.

Schools are designated with a specialism for an initial phase of three years after which time they have to reapply to the Department for Children, Schools and Families (DCSF) for further funding based on the findings of their most recent OfSTED inspection. At this point, schools meeting the DCSF’s ‘high performing’ criteria are invited to take on a second specialism chosen from: mathematics and computing, science, modern foreign language (MFL), vocational education, Leading Edge or RATL (Raising Achievement Transforming Learning). Becoming a High Performing Specialist School (HPSS) enables schools to play a central reform role within the system by sharing their expertise and resources with a wider audience for the benefit of all young people in their locality. There are now some schools that have completed several phases of specialism and increasingly enjoying more flexibility and freedom.

Mathematics and Computing Colleges

The number of Specialist Schools has continued to increase over recent years with 2695 schools in England being designated as specialist schools which means that almost 90% of all schools have specialist status. Currently, there are 360 schools designated as MCCs (i.e.13% of all specialist schools) – this figure includes 49 High Performing Specialist Schools (HPSSs) who have mathematics and computing as a
second specialism and 25 schools who have mathematics and computing as part of a combination of specialisms. MCCs are expected to raise standards and increase the engagement of pupils of all abilities not only in the lead subjects of mathematics and computing or ICT, but across the school. This is to be achieved by developing innovative approaches to the teaching and learning of mathematics and sharing good practice across the curriculum which also includes the effective and appropriate use of ICT. While all schools have similar aims, MCCs are seen to be at the forefront of the ‘by schools, for schools’ ethos of the Specialist Schools and Academies Trust (SSAT) and are expected to acts as hubs of leading practice within their local communities. This ethos is reinforced through the area network meetings, conferences, seminars and CPD events that are arranged and co-ordinated by the SSAT.

In recent years, there has been an ongoing backdrop of change and revision impacting on pupils and education at all phases ranging from the revision of the national curriculum and associated frameworks to the development of functional mathematics and the new diplomas. The Government has also published the Every Child Matters agenda [2], The Children’s Plan: Building Brighter Futures [3], a Personalisation agenda [4] and a Science, Engineering, Technology and Mathematics (STEM) Programme Report (2006) [5].

Some of the challenges facing school level mathematics have remained the same but others are new. Hence the SSAT has been continuing the progress made, for example, with developing a network of Lead Practitioners™ while also beginning to develop support for the newer initiatives such as STEM.

The Mathematics team at the SSAT comprises three National Co-ordinators who aim to provide support for schools by working in partnership with a Mathematics and Computing Expert Panel, a Head Teacher Steering Group, regional networks for both MCCs and those schools who have mathematics as a lead subject in their specialism – i.e. Science, Engineering and Technology Colleges. The team also provides development opportunities for classroom teachers, subject leaders and Directors of Specialism through both regional and national events that feature input from leading practice schools and teachers. Further opportunities for CPD are offered through the Lead Practitioner™ Network which has continued to grow since 2004.

The SSAT Lead Practitioner™ Network

For 2008/09, the number of SSAT Lead Practitioners™ (LPs) supporting Mathematics has expanded to 16. LPs are practising classroom teachers who have been chosen for their strengths in supporting identified priorities and now also offer different models of engagement for teachers. For example, this year, priorities include the development of subject leadership, the effective use of ICT and the development of rich learning tasks. LPs provide seminars and learning visits for teachers on a regional basis as well as offering sessions at the national specialism conference. Through these LP engagements, case studies have been generated which are further disseminated to schools through our Update publications, conference workshops and on the specialism website.

“The 2006 STEM report highlighted the need for schools, higher education (HE) and Government to urgently tackle the factors leading to a shortfall of graduates in the areas of science, technology, engineering and mathematics (STEM) if a future economic crisis for this country were to be averted.”

National Specialism Conference

The annual two-day specialism conference is now in its fifth year and this year it took place in Bristol on the 25th-26th June 2008 [6]; it is open to all affiliated schools whatever their specialism. This event acts as a showcase of leading practice on a national scale and is a further example of the SSAT providing networking and collaborative opportunities for schools based on leading practice.

The title of this year’s conference was:

‘STEM, Routes and Shoots: Mathematics and Computing in the Real World’

Both the keynote speakers and the range of workshops addressed the current themes and issues prevalent not only in mathematics and computing education but in education in general. For example, there were workshop sessions ranging from the use of podcasting to enhance learning and engagement to issues surrounding the early examination entry or ‘acceleration’ of pupils. The conferences are aimed at classroom teachers, subject leaders and directors of specialism whose role is to drive the development of the specialism within their schools and communities.

Developing the STEM agenda

The 2006 STEM report [5] highlighted the need for schools, higher education (HE) and Government to urgently tackle the factors leading to a shortfall of graduates in the areas of science, technology, engineering and mathematics (STEM) if a future economic crisis for this country were to be averted.
SSAT national co-ordinators for science, technology, engineering and mathematics and computing specialisms are working increasingly closely to offer co-ordinated support and guidance to schools.

In conjunction with Sheffield Hallam University, the SSAT has recently funded the development of a STEM Leadership Qualification which will be launched by EDEXCEL in June for take-up this coming September (2008). This will enable pupils to gain confidence in and recognition for the leadership skills developed while engaging in STEM activities both with their peers and other adults.

“The SSAT undertakes to support specialist schools by sharing leading practice and providing network opportunities that endeavour to strengthen practice through the ‘by schools, for schools’ approach.”

Personalisation

The Government personalisation agenda has provided a further challenge to schools and many have developed their own solutions. The SSAT has funded the Trust Virtual Learning Environment (VLE) using Moodle which has been developed by a group of teachers working with National Co-ordinators in a variety of curriculum areas over the past year. This will be unveiled at the specialism conference and will be of use not only to schools who have gone down the ‘Moodle’ path but also to those who have developed their own VLE and those who are just at the focusing stage. Further development of this is planned for the coming year.

Finally…

All schools are involved in adapting to the key revisions and changes outlined above as well as moving forward with their own agendas and programmes of development. The SSAT undertakes to support specialist schools by sharing leading practice and providing network opportunities that endeavour to strengthen practice through the ‘by schools, for schools’ approach. The leading practice from all specialisms is showcased nationally at the annual SSAT Autumn Conference and a new feature in 2007 was to provide DVDs for schools highlighting leading practice in all aspects of specialism for each subject area.

If you would like further details of any of the developments outlined above, I can be contacted on: vivien.sloan@ssatrust.org.uk.

References


Personal Note

I have been in post as National Specialism Co-ordinator: Mathematics and Computing at the Specialist Schools and Academies Trust since September 2007. Prior to this I had worked for six years as a Teaching and Learning Consultant (Mathematics) for Nottinghamshire LA which followed teaching in a wide variety of Secondary schools both in this country and abroad since 1973.

Editorial comment:

For more information on the Specialist Schools and Academies Trust (SSAT), please visit: http://www.ssatrust.org.uk/.

We would like to thank Vivien Sloan for writing this article, as a follow up article to the Graham Corbyn article, published in MSOR Connections Feb 2004 [1], which is available at: http://mathstore.ac.uk/headocs/41specialistschools.pdf