

Policy Overview Committee – an update of Secondary Mathematics - Summer Term 2009

This paper provides an update following the 2005 Review.

Key Stage 3:

Results (%) over time for Hillingdon & national trends

	National Trends for Level 5+	Hillingdon trends
2003	71	72
2004	73	74
2005	74	74
2006	77	76
2007	76	76
2008	77	78

	National Trends for Level 6+	Hillingdon trends
2003	49	47
2004	52	50
2005	53	49
2006	57	54
2007	56	55
2008	57	58

Results indicate that for Key Stage 3, there has been a gradual increase since 2003 at L5+ and a significant one at L6+. Results at both Levels are now in line with National averages.

Note that since the demise of SATs at KS3 in 2009, results at the end of this key stage will no longer be externally tested and may not be reported in this way.

Key Stage 4:

Results over time for Hillingdon & local/national trends

	National Trends for A*-C	Hillingdon trends for A*-C
2003	48%	44%
2004	49%	45%
2005	52%	48%
2006	53%	53%
2007	55%	56%
2008	65%	64%

Maths results at Key Stage 4 indicate a considerable increase since 2003. Results are in line with National Averages.

STRENGTHS - updates

The considerable, varied experience and expertise provided by the Hillingdon mathematics school improvement team continues;

- Mathematics Master Classes for more able students in Year 9 and the KS3 Maths Challenge competitions are still being run. All secondary schools (plus three independent schools) are involved. Master class sessions are mainly run by Hillingdon maths teachers or whole departments. The Royal Institution also provide staff to run additional sessions to ensure a full range of experience. Student evaluations of these sessions is universally favourable, being judged very supportive and positive;
- New Secondary curriculum and framework has helped to alter the focus towards specific skills based learning. For example, mathematical process and application are the foci in year 7 in 2008/2009;
- **Enhanced provision:** At Key Stage 4 as well as maths GCSE, some schools offer GCSE statistics to give students the opportunity to gain an extra GCSE L2 grade. This course has also been offered as part of the Year 9 options to be followed in Key Stage 4. In some schools, more able students are offered additional maths rather the statistics. ALAN and Functional Skills (maths) are beginning to be offered for Key Stage 4, in some cases continuing work done in Year 9.

At post 16, a selection of modules are on offer that make up the maths Qualification. Core, mechanics and statistics are the three most popular, but the combinations vary between schools. Individual schools deliver a the specific modules which best meet both student need and the staff expertise. Additional modules are offered out of normal school time and are designed to partially enhance independent learning skills Finally, plans are being made to establish a Further Maths Network to provide greater support;

- **Recruitment and retention:** Most maths departments currently stable and fully staffed. Vacancies are generally filled quickly drawing from reasonable fields. Only one secondary school has a acting head of department. The Hillingdon Maths Cluster managed by the Secondary Maths adviser is providing maths teachers with the opportunity to develop their skills, try new ideas and become better practitioners using effective tools. One of its main purposes is to up-skill these teachers and aid their career progression. It also provides a strong networking system which encourages the sharing of good practice across the Local Authority. There remains however an issue about the availability of effective supply staff to cover absence.
- The LA Maths adviser has been offering/supporting a CPD network (by invitation) to allow main scale teachers the opportunity to try out new ideas & technologies. This has also been supported by the NCETM and has proven to be very successful for all teachers & their students. For 2008/09, two Hillingdon teachers have taken on the lead for this network & it involves up to 15 teachers from 7 of Hillingdon secondary schools

WHAT NEEDS TO BE IMPROVED/DEVELOPED – updates

- Some departments have curriculum support for admin but others do not. The level of support is very variable within schools and seems to be determined by other factors within school structures;
- Some schools are beginning to look at support from university undergraduates for Year 11 students. This is known to have happened this year in at least two schools. This initiative is too recent to measure clear impact;
- A significant focus on 14-19 has taken place over the past two years with Functional Skills (maths, English & ICT) being key elements of the new Diplomas being offered. Functional maths allows students to see where their maths skills will be needed in the work place. Six Hillingdon schools are involved in planning the maths pilot which is due to start preparation for the start date of September 2010. Functional skills should build on from the changes to the Key Stage 3 curriculum which resulted in a focus on mathematical process & application. All schools are aware of these changes and are revising their maths schemes of work.