

Report to: **Children's Services Scrutiny Committee**

Date: **19 September 2011**

By: **Director of Children's Services**

Title of report: **The report of the Scrutiny Review of Attainment in Mathematics at Key Stage 2**

Purpose of report: **To provide Scrutiny Committee Members with details of the updated actions in response to their recommendations as set out in the action plan previously circulated.**

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**RECOMMENDATIONS: The Committee is recommended to note the updated actions, in response to their recommendations and their implementation, as set out in the action plan attached as Appendix 1 to this report.**

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## **1. Financial Appraisal**

1.1 No additional local authority funding is available to support the proposed actions within the action plan attached to this report as **Appendix 1**; however existing consultancy activities and support for schools have been re-engineered to release capacity to implement the action plan.

1.2 Wherever possible low cost / no cost solutions have been sought.

1.3 To prioritise mathematics over other subject areas teaching and learning support was reduced in those other areas. To mitigate the impact of this all teaching and learning consultants have adopted a cross curricular approach and now promote more generic teaching and learning skills that secure high quality teaching. Members of the 11-19 team have added to the team's capacity by providing mathematics consultancy and training in primary schools.

1.4 Since the previous report to Scrutiny, the Standards and Learning Effectiveness Service (SLES) has been fully restructured, the new structure will be in place from 1<sup>st</sup> September 2011. Mathematics advice and guidance remains a priority for the service.

## **2. Supporting information**

2.1 The Scrutiny Review of Attainment in Mathematics at Key Stage 2 was welcomed by the Children's Services Department and since publication SLES managers and consultants have worked closely with schools to promote mathematics.

2.2 The updated action plan attached as **Appendix 1** responds to the recommendations made by the Scrutiny Committee.

2.3 Strategies to improve mathematics have shown very positive outcomes. Analysis of outcomes from the 2011 key stage 2 test results for the 48 schools involved in the quality mathematics programme 2 (QMP2) and the quality transition programme (QTP) is attached as **Appendix 2**

2.4 Following the success of QMP2 in 2010-11 funding has been secured for 40 schools to engage with QMP3 in 2011-12. These schools will be identified from data analysis to be carried out in September.

2.5 A further project to support the development of Early Years Foundation Stage

mathematics – the Quality Early Mathematics Programme (QEMP) – will be run in 2011-12 involving 20 schools identified in the Early Years moderation focus in Spring 2011 and through data analysis in September.

2.6 Funding has been secured to run a Creative Mathematics programme which enables the SLES to run a 5 day course for recently qualified teachers at a subsidised rate as well as bringing some additional capacity to the primary team.

2.7 Partners in the Schools Libraries and Museums Service (SLAMS) have been active in supporting this action plan. The mathematics booklists were well received in cluster groups and have resulted in an increase in demand for the books featured. Attendance at the cluster groups was a good opportunity for SLAMS staff as they received immediate feedback on our suggested books and saw other examples of successful texts brought along by the teachers. Assessing picture books for their potential use in a mathematical context was an interesting experience for librarians as this is not an approach that they had taken before. Undoubtedly the support from libraries will make a valuable contribution to changing pupil's attitudes to mathematics.

2.8 In response to the Bew Report into the end of Key Stage 2 testing and recommendations, East Sussex schools will be able to bid for money to run moderation clusters. Five of these clusters will be run across the LA, each comprising of 6-8 schools. Consultant time will be allocated to support the cluster.

2.9 The involvement of partners in activities has been very pleasing.

2.10 Provisional Key Stage 2 data shows that the percentage of pupils achieving Level 4+ for Maths in 2011 was 78.5%, which is an increase on both 2009 (76.2%) and 2010 (76.9%). This represents a trend of improvement over three years of +2.3%. The QMP2 programme, will continue up until December 2011, it has had a significant impact on attainment in the 48 participating schools as well as on the local authority outcomes. In 2011, out of 1570 pupils in Year 6 in the participating schools, 105 additional pupils attained level 4+ and 69 additional pupils attained level 5 than may have done so without the QMP. These outcomes have added 2.1% to the LA level 4+ data and 1.4% to the level 5 data. A breakdown of individual schools is in **Appendix 2**.

### **3 Conclusion and Reason for Recommendations**

3.1 The recommendations in the scrutiny review have proved very helpful and resultant actions have no doubt contributed to improvements in the attainment of children and in the profile of mathematics across East Sussex more widely. (Ref: QMP2 outcomes on 2.10).

3.2 Scrutiny members are recommended to note the positive response to their recommendations and also to review and approve the updated action plan.

MATT DUNKLEY  
Director of Children's Services

Contact Officer: Nina Siddall Head of Standards and Learning Effectiveness (0-11)  
Local Members: All

#### Background Documents:

The report of the Scrutiny Review of Attainment in Mathematics at Key Stage 2.



		<p>2 parents contacted the SLES to access the materials.</p> <ul style="list-style-type: none"> <li>• Establish a second Quality Mathematics Programme (QMP2) with the schools identified to be coached by selected schools from QMP1 cohort.</li> </ul> <p>August 2011 – support continues in 48 schools until December 2011. See data in Appendix 2.</p> <p>QMP1 “maintaining momentum” meeting in May 2011 to ensure all schools are keeping the profile of mathematics high.</p> <ul style="list-style-type: none"> <li>• Parent-link advisers conduct survey of callers to promote awareness of the county drive for improved status of mathematics. <ul style="list-style-type: none"> <li>○ Questions have been prepared (ready in waiting)</li> <li>○ <i>Resources now available to support parents with understanding more about mathematics at school.</i></li> <li>○ <i>Currently producing a list of websites.</i></li> </ul> </li> <li>• Focus group of teachers, parents and local businesses to devise low cost / no cost strategies to promote positive culture around mathematics.</li> </ul> <p>August 2011 – the continued relevance of needs discussion.</p> <ul style="list-style-type: none"> <li>• Business links explored to promote links with numeracy in the workplace. e.g. Hotels, ESCC</li> </ul> <p>August 2011 – as above, manager at Deans Place is interested in exploring further and will be followed up as soon as possible.</p> <p>The continued relevance of needs discussion.</p>	<p>September 2011 – July 2012</p> <p>Actual timescale – November 2010 to December 2011</p> <p>Rescheduled from September 2010 due to budget pressures. To be completed. Additional actions identified in italics.</p> <p>From September 2010 (4 meetings initially)</p> <p>Spring 2011</p>
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		<ul style="list-style-type: none"> <li>Investigate links with celebrities in East Sussex with mathematics in their job</li> </ul> <p>August 2011 – no celebrity identified as yet. (Members support with this task is welcomed) However the ‘coolness and street credibility’ of mathematics was demonstrated through dressing up at the mathematics fortnight. The continued relevance of needs discussion.</p> <ul style="list-style-type: none"> <li>Share mathematics conference evaluations and summary suggestions with all schools through the VSB</li> </ul> <p>August 2011 – a cross phase Mathematics Subject Leaders’ conference will take place in October 2011 building on the successful structure of the long standing primary conference.</p> <ul style="list-style-type: none"> <li>Leading Mathematics Teachers coaching programme for coasting schools</li> </ul> <p>August 2011 – Associate Teacher programme being established for 2011-12.</p>	<p>Summer 2010</p> <p>Summer 2010</p> <p>September 2010- July 2011</p>
2	<p>The Standards and Learning Effectiveness Service (0-11) to:</p> <p>a) explore the development of a training course for all newly qualified and recently qualified teachers working in primary schools in East Sussex to help them build their confidence in teaching mathematics; and</p>	<ul style="list-style-type: none"> <li>Design bespoke confidence- building mathematics training course for all newly qualified and recently qualified teachers working in primary schools in East Sussex.</li> </ul> <p>August 2011 – 1 further course will run in October – March 2011/12. This course will be subsidised by the Creative Mathematics budget.</p> <ul style="list-style-type: none"> <li>Use Leading Mathematics Teachers (LMT), QMP1 and Primary mathematics Specialist Teacher Programme (MAST) teachers to provide Mathematics - buddy support to newly qualified and recently qualified teachers. Consider web based or text based solution.</li> </ul> <p>August 2011 - All attendees on the above course are required to have school based mentors to support with gap tasks, identify outstanding practice and facilitate follow up work.</p>	<p>June 2010</p> <p>To run 3 times Terms 2-3 (2010 – 11) for 90 teachers</p> <p>From September 2010</p>

		<ul style="list-style-type: none"> <li>Promote Communication, Language &amp; Literacy Development (CLLD) teachers' understanding of mathematics through the language of mathematics in Early Years Foundation Stage (EYFS) and link with Children's Centres.</li> </ul> <p>August 2011 - Mathematics Problem Solving, Reasoning and Numeracy (PSRN) was the focus of the EYFS moderation in the spring term. The QEMP will build on these moderation findings and data analysis outcomes and target 20 schools.</p>	From October 2010
	b) work in partnership with schools to develop and enhance the current training programme so that there is a range of courses available which provide continued professional development in mathematics for primary teachers at all levels in their career.	<ul style="list-style-type: none"> <li>Review current training provision and maximise resource use to improve the quality of teaching and learning in mathematics. eg. Secondary mathematics team support Level 5 development work. For example an ICT consultant, with mathematics competence, has been drafted in to support the Mathematics consultancy team</li> </ul> <p>August 2011 – Quality Transition Project (QTP) supported the change in level 5 data at the end of Key Stage 2; the programme was well supported by secondary mathematics Advanced Skills Teachers (ASTs). See analysis in Appendix 2.</p> <p>The ICT consultant continues to work with mathematics team, Secondary mathematics consultant working in primary schools as well as secondary.</p> <ul style="list-style-type: none"> <li>QMP1 celebration conference established follow up activities and Community of Practice through the Virtual Learning Environment (VLE)</li> </ul> <p>August 2011 – maintaining momentum meeting was in May 2010. Aim to keep the profile of mathematics high in these schools and continue to share good practice.</p> <ul style="list-style-type: none"> <li>QMP1 Practice shared and consolidated via Learning Platform Community of Practice e.g. case studies.</li> </ul> <p>August 2011 – impact summaries scheduled to be sent out in early September.</p>	<p>August 2010</p> <p>September 2010</p> <p>September 2010 – July 2011</p>
3	East Sussex County Council to work in partnership with education providers and other local authorities to ensure the continuation of the Mathematics	<ul style="list-style-type: none"> <li>Partnership meetings with Brighton and Hove, West Sussex and Surrey to secure implementation of effective MAST programme.</li> </ul> <p>August 2011 – funding has been significantly reduced for MaST and</p>	Termly

	<p>Special Teacher programme and the Every Child Counts (ECC) programme.</p>	<p>participants are now liable for their fees in the second year. The LA will continue to have a funded role in the programme and 15 participants will embark on cohort 3.</p> <ul style="list-style-type: none"> <li>• Every Child Counts (ECC) teachers fully engaged in promoting improved quality of mathematics provision with regular opportunities to share practice more widely.</li> </ul> <p>August 2011 – the Brighton and Hove consultant will continue to work with 8 schools in 2010-11 funded directly by those schools. In 2010-11 across the 13 schools 153 children took part in the programme, making on average 17.1 months progress on the programme in the spring term.</p> <ul style="list-style-type: none"> <li>• Discuss possible Library Service focus on mathematics</li> </ul> <p>August 2011 – SLAMs attended summer term mathematics cluster meetings to promote book lists and share examples of mathematics books that can be borrowed from them.</p> <p>Mathematics rhymes in pre-school rhyme time, mathematics displays and mathematics as part of the summer holidays reading challenge were discussed and needs following up.</p> <ul style="list-style-type: none"> <li>• Discuss possible Library Service focus on mathematics with head of ESCC Library Service &amp; agree actions.</li> </ul> <p>August 2011 – as above.</p> <ul style="list-style-type: none"> <li>• Explore financial implications of seconding an Every Child Counts (ECC) Teacher Leader in Training to the Standards and Learning Effectiveness team to train 24 teachers in 2nd year 2011-2012</li> </ul> <p>August 2011 – reference meeting above with Brighton and Hove as preferred supplier of ECC training to East Sussex schools.</p>	<p>September 2010 – July 2011</p> <p>September 2010 – July 2011</p> <p>August 2010</p> <p>September 2010 – August 2012</p>
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See Excel attachments:

- QMP2
- QTP



## The Impact of QMP2

	Level 4			Level 5			
	L4+ 2011	% increase on 2010 L4+	2011 cohort	improved pupils	% increase on 2010 L5	2011 cohort	improved pupils
All Saints C E Primary School (Bexhill)	68% (19/28)	8	28	2	0	28	0
All Saints CE Junior School (Hastings)	68% (41/60)	0	60	0	-2	60	-1
Anney Catholic Primary School	63% (20/32)	8	32	3	27	32	9
Barcombe CE Primary School	72% (13/18)	-2	18	0	-13	18	-2
Bodiam CE Primary School	80% (8/10)	26	10	3	11	10	1
Bonnars CE Primary School	93% (13/14)	24	14	3	-17	14	-2
Bourne Primary School	79% (48/61)	9	61	5	3	61	2
Buxted CE Primary School	80% (8/10)	-1	10	0	9	10	1
Chantry Community Primary School	91% (30/32)	18	32	6	4	32	1
Chiddingly Primary School	100% (9/9)	46	9	4	24	9	2
Dallington CE Primary School	86% (12/14)	11	14	2	-15	14	-2
Denton Community Primary School	68% (19/28)	4	28	1	15	28	4
Firle CE Primary School	91% (10/11)	11	11	1	-2	11	0
Five Ashes CE Primary School	80% (8/10)	13	10	1	20	10	2
Fletching CE Primary School	50% (2/4)	10	4	0	5	4	0
Forest Row CE Primary School	68% (25/37)	-2	37	-1	8	37	3
Framfield CE Primary School	89% (16/18)	31	18	6	36	18	6
Hamsey Community Primary School	92% (11/12)	32	12	4	42	12	5
Harlands Primary School	83% (25/30)	6	30	2	-36	30	-11
Hawkes Farm Primary School	72% (43/60)	5	60	3	0	60	0
Hellingly Community Primary School	86% (25/29)	-1	29	0	-18	29	-5
High Hurstwood CE Primary School	86% (12/14)	6	14	1	3	14	0
Highfield Junior School	58% (29/50)	-2	50	-1	2	50	1
King Offa Primary School	70% (41/59)	5	59	3	3	59	2
Langney Primary School	72% (23/32)	-6	32	-2	2	32	1
Oakwood School	76% (16/21)	14	21	3	-5	21	-1
Park Mead Primary School	36% (4/11)	-32	11	-4	-19	11	-2
Parkland Junior School	73% (43/59)	-2	59	-1	6	59	4
Parkside Community Primary School	90% (26/29)	17	29	5	17	29	5
Peasmarsh CE Primary School	85% (17/20)	18	29	5	19	29	6
Pebsham Community Primary School	77% (23/30)	9	30	3	21	30	6
Pells CE Primary School	25% (2/8)	-37	8	-3	-14	8	-1
Pevensey and Westham CE Primary School	78% (49/59)	3	59	2	4	59	2
Punnetts Town Community Primary School	67% (6/9)	0	9	0	-36	9	-3
Rodmell CE Primary School	88% (6/8)	0	8	0	-38	8	-3
Rye Community Primary School	67% (20/30)	-12	30	-4	6	30	2
Salehurst CE Primary School	86% (18/21)	17	21	4	-4	21	-1
Shinewater Primary School	76% (32/42)	33	42	14	14	42	6
Sidley Community Primary School	76% (16/21)	14	21	3	-2	21	0
Sir Henry Fermor CE Primary School	74% (40/61)	-2	61	-1	10	61	6
St Mary's Catholic Primary School (Crowborough)	92% (23/25)	11	25	3	39	25	10
St Michael's Primary School (Withyham)	88% (14/16)	-6	16	-1	28	16	4
St Pancras Catholic Primary School	75% (15/20)	-10	20	-2	-14	20	-3
St Paul's CE Primary School	82% (73/89)	18	89	16	10	89	9
St Peter and St Paul CE Primary School	74% (46/62)	18	62	11	-3	62	-2
St Thomas à Becket Catholic Junior School	89% (59/66)	5	66	3	1	66	1
Stafford Junior School	75% (69/92)	0	92	0	11	92	10
Telscombe Cliffs Community Primary School	74% (59/80)	5	80	4	-1	80	-1
			<b>1570</b>	<b>105</b>		<b>1570</b>	<b>69</b>

increase **6.7%**

increase **4.4%**

QMP2 impact on LA L4+	2.1%
QMP2 impact on LA L5	1.4%

The Impact of QTP		Level 5			
		L5 2011	% increase on 2010 L5	2011 cohort	improved pupils
QMP2	Anney Catholic Primary School	31% (10/32)	27	32	9
QMP2	Bourne Primary School	21% (13/61)	3	61	2
QMP2	Chantry Community Primary School	28% (10/32)	4	32	1
	Guestling Bradshaw Church of England Primary School	41% (11/27)	19	27	5
QMP2	Hellingly Community Primary School	28% (8/29)	-18	29	-5
	Hodderm Junior School	7% (4/55)	-4	55	-2
	Hollington Primary School	13% (7/54)	2	54	1
	Holy Cross Church of England Primary School	23% (7/30)	-17	30	-5
	Meeching Valley Primary School	17% (3/18)	2	18	0
QMP2	Parkland Junior School	31% (18/59)	6	59	4
	Seaford Primary School	38% (24/63)	22	63	14
	South Malling CofE Primary School	36% (10/28)	27	28	8
	Southdown Junior School	19% (10/52)	1	52	1
	St Leonards CofE Primary School	14% (6/43)	1	43	0
QMP2	St Marys Catholic Primary School	33% (11/33)	-14	33	-5
QMP2	St Thomas A Becket Catholic Junior School	38% (25/66)	1	66	1
	St Thomas' Church of England Aided Primary School	35% (6/17)	4	17	1
QMP2	Stafford Junior School	32% (29/32)	11	92	10
	West St Leonards Primary School	16% (9/57)	-18	57	-10
	Westfield School	24% (7/29)	-15	29	-4
	Wivelsfield Primary School	42% (8/19)	10	19	2
				<b>896</b>	<b>26</b>

increase **2.9%**

QTP impact on LA L5	0.5%
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