Coombe Academy Trust

Knollmead Primary School

Maths Policy

Equality Analysis Impact

Title of Policy: Maths

Considered at Governors' Committee meeting:

Date: Summer 2018
Review: July 2019

Is there relevance to equality?

1. Does the policy have an adverse effect on employees, pupils or the wider community and therefore have a significant effect in terms of equality? If yes, then please answer questions 2 and 3. **No**

2. Does the policy have an adverse effect upon a group with protected characteristics? (sex, race, religion or belief, disability, sexual orientation, gender reassignment, pregnancy or maternity, age) **No**

3. Does the policy affect one or more of the equality objectives set by the school? (Please refer to the Equality and Diversity Policy) **No**

If the answer to question 2 or 3 is yes, a full equality analysis will need to be completed by the SLT Lead before the next committee meeting.

Please detail the objective and explain the relevance of the policy to the objective and protected characteristics below.

Knollmead Primary School Maths Policy

Introduction

This policy outlines the teaching, organisation and management of the Maths taught and learnt at Knollmead Primary School. The policy is based on the 2014 expectations and aims of the 'New Curriculum' for mathematics and the Early Years. It aims to embed the principles of both Every Child Matters and Excellence and Enjoyment within our numeracy teaching, by supporting all children's access to excellent teaching , leading to exciting and successful learning.

Aims and Objectives

At Knollmead Primary School we acknowledge that Maths is fundamental to the intellectual, personal and social development of our pupils. All pupils, irrespective of gender, race, culture, class or disability are given equal opportunity to acquire the appropriate skills, concepts and knowledge required by the National Curriculum. The new National Curriculum for mathematics aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics, including through varied and frequent practise with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately;
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language;
- can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

At Our School We Aim to:

· enable pupils to be proficient, competent and confident with numbers, shapes and measures, and to have the ability to apply previously acquired concepts, skills and knowledge and understanding to new situations both in and out of school;
· foster positive attitudes towards mathematics by developing pupils' confidence in using mathematical equipment and vocabulary, providing an enjoyable experience of mathematics which is accessible for all children;
· use ICT as a tool to enhance learning and support our pupils to become independent learners.

Organisation

The National Curriculum is at the core of our Maths teaching, which follows the three strands of learning (mathematical reasoning, fluency and problem solving), as set out in the new framework. Covering the objectives in the three strands will support children in their progression towards the Early Learning Goals and the appropriate National Curriculum Attainment Targets for Key Stage One and Two.

From Year 1, all pupils will have a dedicated daily Maths lesson. Within these lessons there will be a balance between whole class work, group teaching and individual practice. In the Foundation Stage learning largely takes place through practical activities as stipulated in the EYFS Framework.

Planning

Teachers currently plan from the National Curriculum objectives and the new objectives and areas of learning are incorporated into our planning. Long term and medium term planning follows the guidance set out in the New Curriculum. Short term or weekly plans are adapted from a published resource. These short

term plans include objectives for the teaching focus, differentiated group tasks to meet the needs of the class, resources to be used and the allocation of adult support.

Assessment and Recording

Teacher assessment is an integral part of the teaching of Maths and is used to inform planning and set targets for the whole class, groups of children and individuals.

Assessment and recording is undertaken at three levels : short-term, medium-term and long-term :

- short-term assessments are the records teachers make as part of the evaluation of their daily lessons. These daily assessments are annotated onto weekly plans and will help inform future planning;
- medium– term assessments are undertaken at the end of each half term when key objectives from the NC, which have been covered during the term's work, are assessed. As a result of these assessments class, group and individual targets are compiled and discussed with pupils and parents during consultations;
- long-term assessments are made through a combination of teacher assessment and end of year tests. National tests at the end of Year 2 and 6 and the optional tests for Years 3, 4 and 5 are used as a summative form of assessing individual pupil's attainment. This information is reported to parents in the form of an annual school report, and is passed on to new teachers to aid them with groupings and setting targets for the new academic year.

All of the above mentioned feed into the recording of pupil progress as part of the Assessment process, where staff record judgments against learning objectives and progress made against the National Curriculum programme of study and recorded onto an assessment spreadsheet.

Where possible children should be involved in assessing their own work. This might include:

- using the traffic light system (red, amber and green) to indicate how they found the work
- peer assessment, where children assess their peers work against success criteria.

Marking

Marking is a very powerful tool, which should be carried out according to the needs of the individual child. It should relate directly to the task objectives, offer encouragement and advice, and direct the child towards improvements and new targets. (See Marking Policy)

Additional Needs

All children with additional needs will be taught and given the opportunity to learn and progress at their own pace and level of achievement. This will be achieved through appropriate planning, differentiation, the use of support staff and in Years 4,5 and 6 through some setting arrangements. Through assessments, some groups of children will be identified to take part in intervention programmes such as cluster school more able mathematician events, and others may be identified as needing further support, to be provided by teachers, teaching assistants and senior leaders, and will have individual plans and targets put in place to address their specific needs.

Equal Opportunities

We aim to give all children access to a rich, balanced and rewarding curriculum for mathematics and will ensure that all children have the opportunities to become numerate. Care will be taken to ensure equal access to the curriculum by:

- providing a range of materials and resources which will appeal to all children regardless of ethnicity or gender;

- use a variety of teaching strategies to cater for different learning styles;
- ensure equal access to ICT resources;
- using a variety of groupings within the class to maximise learning for all.

ICT

Computers and interactive whiteboards will be used to enhance the teaching of Maths within our school. Children will have the opportunity to use computer programs and the internet (see Internet Policy) to:
· explore, describe and explain number patterns ;
· practise and consolidate upon number skills and calculations;
· input, interpret and explain data;
· estimate and compare measures;
· consolidate upon their knowledge and understanding of mathematics by solving problems.

Learning Environment

Teachers should provide an attractive and stimulating environment to support the children's learning. Every class should have a Maths Working Wall which is changed or added to on a regular basis. In addition to the working wall there should be prompts and resources to support, challenge and motivate the children to become independent learners.

Evaluation

There are systems in place to monitor the teaching and learning in Maths within the school and to evaluate how effective these are in raising standards. This is primarily the responsibility of the Maths Coordinator but is supported by the school's Leadership Team. The monitoring and evaluation process is undertaken systematically by :

- scrutiny of pupils' work in books;
- discussions with groups of children;
- observation of lessons;
- scrutiny of teachers' planning;
- analysis of a range of data and assessments.

Role of the Lead Teacher

The Maths Coordinator will be responsible for improving standards and learning in Maths throughout the school:

- ensuring the policy and resources are well organised, reviewed and easily accessible;
- being aware of National developments in Maths, attending training and ensuring staff are fully updated on any changes;
- lead professional development in Maths in accordance with staff development needs and encourage the sharing of good practice;
- identify strengths and weaknesses within the subject, setting clear targets to sustain and improve pupil progress
- further parental involvement and knowledge through family curriculum activities and resources to support their children at home.