ASHGATE CROFT SCHOOL
MATHS POLICY

Approved by Curriculum & Progress Committee meeting: 14th January 2019

Minute No.: 13.1/19 (C/P)

To be reviewed by: Autumn 2020

Introduction

Purpose

This policy is intended to ensure that pupils learn maths in order to support the development of their independence, daily living skills and the next stage in their education and development.

Aims

- For pupils to reach their full potential in the development of maths skills.
- For pupils to develop independence and daily living skills in conjunction with the development of core maths skills and to be prepared for the next stage in their development.
- For maths skills to be embedded in all areas of the school curriculum.

Procedures and Practice

Teaching

Planning

Each department has a Long Term Plan in place for Maths, which outlines the coverage of the subject over the year. Teachers complete Medium Term Plans, which give an outline of maths topics to be covered during each half-term. More detailed planning is described in weekly Short Term Plans, which teachers use to describe specific maths-related teaching and learning activities from lesson to lesson. Teachers use the PMLD curriculum, the National Curriculum, OCR units and Foundation Stage Entry Level curriculum to support Medium and Short Term Planning. All staff receive regular, concise termly feedback on Medium or Short Term Planning from the Maths Subject Leader.

What/When is Maths taught

Ashgate Croft School's Maths policy is linked to the statutory requirements of the new National Curriculum (from September 2014) and sensory curricula.

Sensory Classes:

What: Pupils follow the sensory curriculum where the focus is very much on learning maths through a wide variety of sensory and creative experiences and activities, for example, hand-on-hand clapping to a rhythm whilst staff count and a range of sensory experiences that relate to mathematical concepts. Pupils working on the Engagement Steps have a separate Sensory Maths curriculum to ensure they have the opportunity to experience the basic maths concepts relevant to them. Pupils in Key Stages 4 and 5 have their maths teaching embedded within their functional learning which encourage them to take part in a wide range of functional activities, such as gardening and baking. Where appropriate, pupils also have opportunities to get out and about in the local community to further develop maths skills in practical situations, for example, paying for a drink in the local café.

When: Pupils in sensory classes (Primary and Middle school) have one lessons per week (2 sessions in length) aimed at specific maths skills, with other opportunities to practise maths provided in other lessons where possible. Upper School have maths embedded across their curriculum with daily counting opportunities taken within routine times such as register.

Primary Department (EYFS, Key Stages 1 & 2) and Middle Department (Key Stage 3):

What: Pupils follow the National Curriculum at Year 1, studying the 3 main categories of Geometry and Measurement, Number and Statistics and Probability. Problem-solving activities are embedded into other lessons where possible, for example, asking pupils how many more cups we need at snack time or to work out if there are enough seats on the minibus before an outing. Class teachers will decide which level each pupil needs to be working at – some pupils may be working at a higher level so will access concepts from later years. Pupils working below Year 1 will access the Year 1 curriculum at an appropriately differentiated level.

When: Pupils in the Primary Department have three discrete, timetabled maths lessons each week; pupils in the Middle Department have two discrete maths lessons each week (these can be joined to make a half day of teaching each week). Maths is also embedded into all other lessons and mathematical links are developed between the different subject areas.

Upper Department (Key Stages 4 & 5):

What: Pupils in Upper school study 3 main categories of 'contexts for number', 'measures, shape and space' and 'handling data' all which come under the heading of functional numeracy (linked to the Adult curriculum on B^2). 'Problem-solving' activities are embedded into other lessons where possible, for example, asking pupils how many more cups we need at snack time or to work out if there are enough seats on the minibus before an outing. There is a strong emphasis on Key Stage 4 and 5 pupils developing students' abilities in maths throughout the timetable, so as well as discrete sessions which focus on specific functional maths skills; teachers identify opportunities for pupils to secure their skills in a range of functional areas, for example, on shopping trips, when baking or during PE sessions.

Students in the Post 16 Department (more able) use the Foundation Learning Entry Level Curriculum (1,2 or 3).

When: Learners have one discrete maths lesson each week. Maths skills are also embedded into other lessons and curricular areas. In Specialist classes, the maths element of the curriculum is embedded into the functional activities taking place throughout the week.

Whole School Teaching and Learning

Problem solving

Thinking about problems and coming up with appropriate solutions is a fundamental maths skill and an invaluable tool for our pupils as they become more self-directing, independent and learn to perform daily living tasks with less support. Staff set a variety of problems for pupils, offering support to highlight the thought processes involved as appropriate. Problems do not need to be overtly 'maths-related', as the focus is more on having opportunities to develop general thinking and analytical abilities, rather than utilising specific maths skills. Staff are also careful not to provide immediate solutions to real-life, everyday problems as they arise, in order to further encourage progress in this area.

Communication

Staff encourage pupils to use correct mathematical terms and language and ensure that the vocabulary used consistently. All pupils are encouraged to use their preferred means of communication to express ideas and ask questions in relation to maths concepts, to promote greater understanding amongst all learners. Staff make a range of resources to promote effective communication in lessons and the use of PECs is implemented and monitored by the school's Communication Co-ordinator. Please refer to the Communication Policy for further details.

Promoting cross-curricular learning and the development of life skills

Maths is at the very core of much of our work at Ashgate Croft School and rich opportunities to develop maths learning can be found in most lessons. Staff are aware of the importance of making maths *connections* in different lessons and making the most of every opportunity to promote maths skills, whatever the subject being taught or activity on offer. Examples of this might be counting along to a rhythm in a music session, recognising and matching colours in art, taking 'shape' photos on the iPads in a computing session or identifying numbers during a game of hopscotch on the yard. Staff also refer back to other lessons where maths learning took place, encouraging pupils to remember when they took part in a specific activity and relating it the activity currently being undertaken.

Individual teachers incorporate a mixture of maths activities into lessons, whether in the classroom, around school or 'out and about' in the local community where possible. As far as is practicable, teaching and learning activities will be based around every day, functional tasks, which help pupils to develop their independence and daily living skills. Where possible, pupils will also experience real-life activities and situations in order to further promote their understanding and to support the application of core maths learning into different life skills. Examples

of this would be teachers using real coins instead of pictures when learning about money and pupils paying for real items with them. Scenarios set up to mirror real-life situations will also be as realistic as possible, so pupils should be encouraged to learn what they might be able to buy with the different coins as they learn to recognise them, then go out and about and actually pay for items with them. This approach is mirrored throughout the mathematical concepts covered in the curriculum. As pupils progress through the Key Stages, more and more learning will take place away from the classroom, with trips into the community being used to support the development of a variety of maths skills in real-life situations.

Use of ICT

Teachers use ICT as an integral part of lessons in order to enhance maths learning and provide a range of teaching and learning experiences. Examples might be giving pupils opportunities to play interactive games, watch online videos, use different apps on the iPad or use the self-service tills when shopping in the supermarket.

Education City is available to use for activities and interactive maths teaching throughout school and a map of where to find appropriate activities for maths concepts is available to teachers.

Assessment

- Classroom staff are involved in ongoing assessment, on both formal and informal levels. Staff work together to observe pupils' learning throughout the school day, discuss progress and achievement and to identify targets.
- Most pupils are formally assessed via B Squared three times yearly. KS1-3 are assessed through the Progression Steps ; whilst KS4 & 5 use the Adult Curriculum. Pupils and sensory students are assessed on the Engagement Steps (twice yearly).
- Staff identify any areas of need after each assessment point and draw up action plans to support pupil achievement where necessary.
- Teachers encourage pupils to assess their own learning and identify areas for development through Learning Outcome target sheets where appropriate.
- Staff record help levels against pupils' work, to show the degree to which tasks were completed independently.

Role of the Subject Leader

- To keep up to date with local and national initiatives and legislation related to Maths, sharing information and good practice with the staff team.
- To participate in relevant training to support a broad knowledge of the Maths Curriculum across all ages and abilities in school.
- To lead on in-house training for staff.
- To work with Deputy Head to monitor progress in Maths.
- To work with the Assistant Heads to discuss support they may need and resources required in each department.
- To monitor teacher medium term and short term planning for Maths across the school.
- To ensure effective moderation takes place.

- To carry out work scrutiny.
- To support teachers in ensuring Maths is delivered effectively across the school, this may include peer observations of and/or shadowing good practice.
- To manage budgets for maths.

Parent/carer Involvement

- Staff ensure that parents/carers are kept up-to-date with regard to progress via telephone contact, writing in pupils' diaries, through Annual Reports, Annual Reviews, at IEP meetings and Parents Evenings.
- Teachers send out a Curriculum Coverage letter at the beginning of each term, which describes the topics and units that will be covered.
- Parents/carers are encouraged to support maths work and provide continuity between home and school through personal skills targets and homework tasks.

Equal Opportunities

Staff follow the school's Equal Opportunities policy. All staff recognise the fundamental need for inclusion and ensure that maths activities are suitably differentiated to meet individual pupil need.

See Equality Policy.

Monitoring of the policy

This policy will be monitored by the Maths Subject Leader.

British Values

Work related to the British Values (democracy, the rule of law, individual liberty, mutual respect and tolerance towards those with different faiths and beliefs) are embedded within many of the English curriculum within Ashgate Croft School. Students have the opportunity to develop personal thinking and decision making skills; to take responsibility for their own behaviour and learning; to have respect for other people and to develop skills which will assist them in becoming active citizens as they progress to adulthood.

Children's Rights

Within Maths the Children's Rights which are developed are:

Article 23 - A child with a disability has the right to live a full and decent life in conditions that promote dignity, independence and an active role in the community. Governments must do all they can to provide free care and assistance to children with a disability.
Article 28 - Every child has the right to an education. Primary education must be free. Secondary education must be available to every child. Discipline in schools must respect children's human dignity. Wealthy countries must help poorer countries achieve this.
Article 29 - Education must develop every child's personality, talents and abilities to the full. It must encourage the child's respect for human rights, as well as respect for their parents, their own and other cultures, and the environment.
Article 31 - Every child has the right to relax, play and join in a wide range of cultural and artistic activities.

References

- PMLD Curriculum
- The National Curriculum
- Foundation Learning Entry Level
- Progression Steps
- Engagement Steps
- ACS Communication Policy
- Curriculum Policy