

Local Procedure Title	Numeracy
Site	Coxlease School
ACS Policy number and title	
Local Procedure template reference	
Local Procedure date	05/08/2021
Local Procedure review date	January 2024
Local Procedure Author(s)	Lisle Smith
Local Procedure Ratification	Checked and Approved by: SLT

1. Rationale, Aims & Outcomes
<p><u>Rationale</u></p> <p>Pupils' confidence in their own mathematical abilities is vital. At Coxlease School, we understand the importance and relevance of 'real-life' learning concepts and therefore endeavour to provide our students with opportunities that will encourage natural problem-solving and reasoning. Our students must feel they are able to use the skills taught in the classroom in a variety of settings, therefore we provide learning opportunities, which will challenge, relate, and build confidence in our students.</p> <p>At Coxlease School, we respect a variety of learning needs and gaps within our pupils' education, so deliver a mathematical model, which allows individual progress and the monitoring and assessment of this to ensure our students achieve their best academic outcomes.</p> <p><u>Purpose</u></p> <p>The teaching of Mathematics helps and enables learners to be able to reach their own convictions, as it models problem solving with an outcome that is objective and logical. Mathematics quickens minds and helps our students, in general, to deepen and think when faced with complex problems. It is a skill that is utilised in many different contexts every day. Therefore, it is a priceless skill to teach children. From cooking, to reading medication, to driving – mathematics surrounds our pupils.</p> <p>Teaching them the skills involved in Mathematics equips them for daily living skills as adults. At Coxlease School, the purpose of Maths is to deliver a full and skilled curriculum through a varied and relevant approach.</p> <p><u>Aims of the Policy:</u></p> <p>The aims of teaching Mathematics at Coxlease School are to enable the pupils:</p> <ol style="list-style-type: none"> 1) To develop positive attitudes towards mathematics as an interesting, worthwhile, and enjoyable subject. 2) To acquire skills, concepts, and knowledge in a cumulative and coherent way. 3) To learn to interpret and understand information presented in Mathematical form. 4) To be able to relate the mathematics learned in class to real life. 5) To utilise skills learned in a wider context, such as problem solving and reasoning. 6) To leave Coxlease School with a relevant Mathematics qualification.

Aims will be presented to pupils according to their special educational needs and preferred ways of working, with consideration of age, ability, behaviour, and the requirements of the national curriculum.

2. Numeracy in KS2 (Primary) & KS3

Implementation

Mathematics at Coxlease School follows an 'aiming for mastery' pedagogy. This is a school-wide approach which targets to ensure all learners access the subject using three fundamental aspects: conceptual understanding, procedural implementation, and deeper understanding. By adapting the 'White Rose' Scheme, we provide opportunities to grasp concepts through concrete examples, learners practise problem solving skills. Using a range of activities and resources, learners are taught concepts and number sense alongside procedural algorithms.

Structure

- Mathematics is taught five times a week with each lesson totalling 45-minutes. This is delivered by one consistent teacher in the same nurturing environment to minimise uncertainty and provide much needed routine. By remaining with the same members of staff, we maximise opportunities to relate skills and knowledge in mathematics to other programmes of study.
- Lessons are formulated around a weekly focus within an umbrella topic, with our mixed attainment approach utilising a concrete, pictorial, abstract approach to delivery. We personalise needs through scaffolding/modelling, ensuring independent learning where possible. The aspiration is that pupils learn fluency, reasoning and problem solving with the goal of mastering a topic area.

We strongly encourage a rich vocabulary approach, where learners are immersed in the language required to process, comprehend, and apply skills needed to achieve. At Coxlease school, we present our topics in a variety of ways to encourage 'out the box' thinking and what naturally leads into discussion and evaluation.

Assessment

To ensure our students are making excellent progress and for gaps to be targeted and actioned, we use a summative assessment three times per the academic year. This supports teachers in identifying specific topic gaps for individuals, allowing them to provide effective interventions when needed.

Assessment for Learning is at the forefront of our teaching model. Our students have opportunities to recap and use retrieval knowledge as a means of consolidating learning. We strongly believe this is an effective means of ensuring our students are confident mathematical learners.

3. Numeracy in KS4

Implementation

By key stage 4, our students have developed the resilience and knowledge to access a discrete model of teaching. We believe they have grasped the 'real-life' learning approach to mathematics and therefore are able to think rationally as to how to apply specific skills. At Coxlease School, our

pupils experience a retrieval model, as well as the appropriate coverage to prepare them for achieving a GCSE in mathematics.

Structure

- Students at key stage 4 are taught 45-minute lessons, 4x weekly.
- Students are taught discreetly utilising a ‘carousel curriculum model’ which runs over two years. This ensures that the breadth of the National Curriculum is covered.
- Personalisation is achieved through individual outcomes, ensuring the pupils are supported effectively, regardless of level, in the same overriding mathematical topic.

Indeed, aspirational outcomes for learners ensure that pupils are GCSE ready; lessons are delivered at this level with scaffolding/modelling implemented to ensure that learners who are not working at this level are still supported.

Assessment & Qualifications

Teachers use an in-house model to identify gaps for individuals. Their progress is tracked and recorded individually using our central documents. Coverage is monitored through a breakdown of topic outcomes, for each pupil, which is also used to identify where the student is working at in terms of academic level.

The qualifications that are offered at Coxlease School, are as followed:

Qualification
<i>AQA Entry Level Certificate 1, 2 & 3</i>
<i>AQA Functional Skills Level 1 & 2</i>
<i>AQA GCSE Mathematics</i>

The use of the pupils’ central documents supports teachers in the decision of appropriate entry level for each individual and regular moderation ensures expected achievement are accurate for all pupils. This includes ensuring our students remain on track and provide the appropriate support, if required.

4. Numeracy in Post-16

Implementation

What is being delivered and why?

Our Post-16 provision promotes independence and ownership through a balance of taught sessions, target focus time and independent study time (2x taught, 1x BKSb – all at 50 minutes).

Following the Functional Skills expectations, students are taught a range of skills, which reflect real life concepts. This is to prepare our students for after education and their chosen paths. Teachers demonstrate the skills required to work successfully within a given topic area during their core lesson. This is followed by skill practise with the support of staff to consolidate taught skills. Interventions are on offer for students who may require additional support within that topic area.

Post-16 uses the BKSb programme to target areas of need within Mathematics. Each pupil completes topic assessments, with the outcome being targeted areas of study, on a personalised

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basis. This effectively encourages students to take ownership of their learning, whilst directing them specifically to a given skill that requires interventions.

Assessment & Qualifications

All our learners are monitored through our BKS B programme, with further intervention aimed at students who may require it.

Our functional skills assessments allow our learners to be assessed through coursework, along with our functional skills testing as standard.

We follow the Entry Level or functional skills assessment process of:

- Entry Level Coursework (teacher assessed & external moderation)
- Functional Skills Mathematics Paper 1 (non-calculator)
- Functional Skills Mathematics Paper 2 (calculator)

The qualifications that are offered at our Post-16 provision, are as followed:

Qualification
<i>AQA Entry Level Certificate 1, 2 & 3</i>
<i>AQA Functional Skills Level 1 & 2</i>
<i>AQA GCSE Mathematics (when applicable)</i>

Contents Checklist (Local Sites may add additional items – this is a core list)

Arrangements for baseline assessments		Procedures for formative and summative assessment	
How are children and learners assessed?		Examination process or link to separate procedure	
What are the monitoring systems in place?			
Describe the interventions that take place when progress is an issue			

Local Procedure Review History:

Date Reviewed	Reviewer	Summary of revisions
13/09/21	Kayleigh McCarter	Updated policy – new structure
10/01/2023	Lisle Smith	Reviewed and updated where required