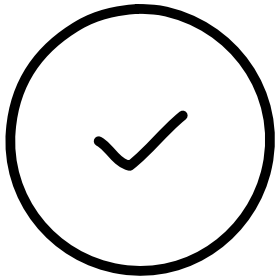
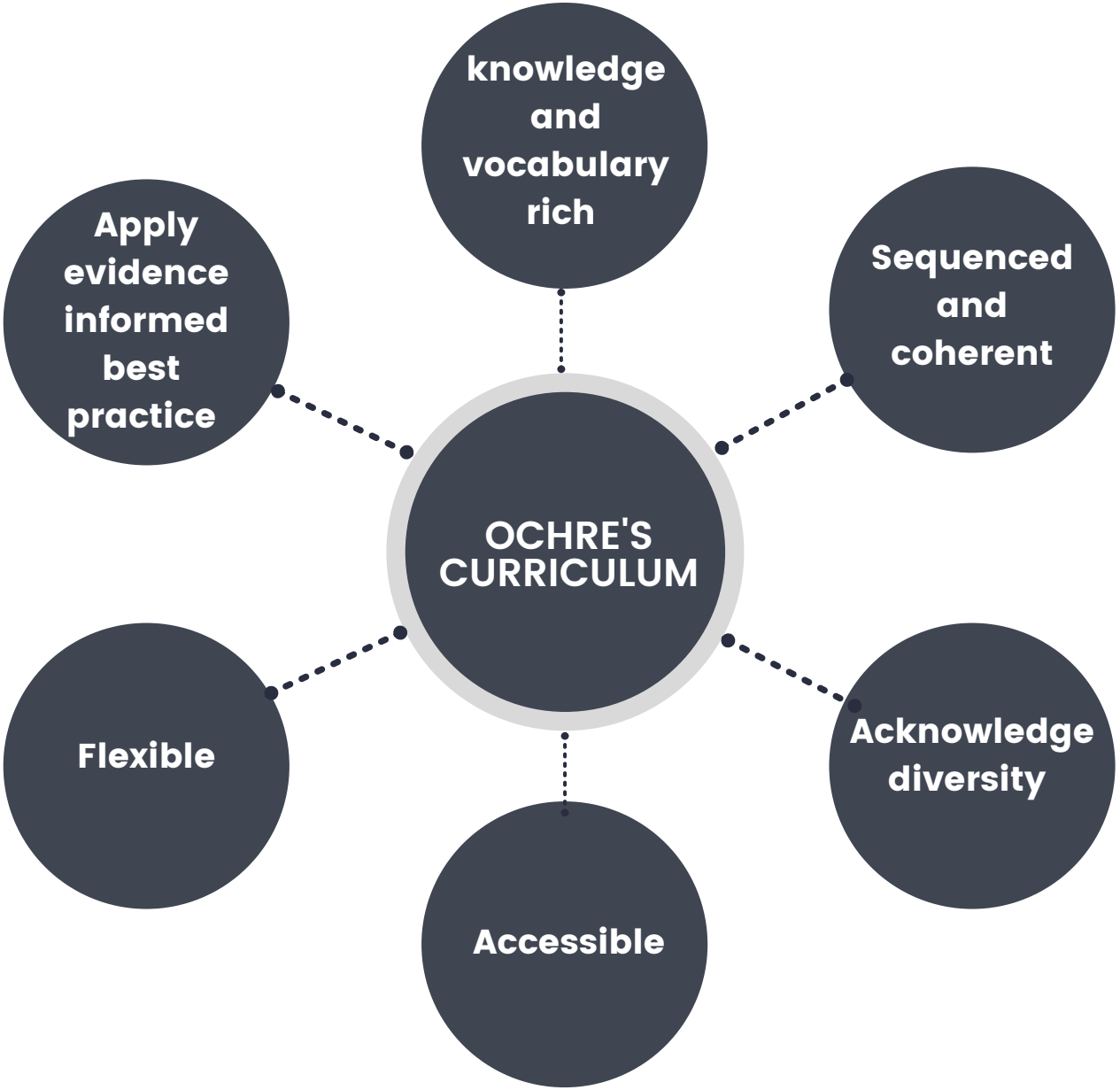
Curriculum principles



OCHRE EDUCATION

Ochre Education's philosophy

Six underlying attributes sit at the heart of Ochre's approach



Ochre Education's philosophy

Six underlying attributes sit at the heart of Ochre's approach

1. Our lessons apply **evidence-informed best practice** and the **science of learning**. The approach is underpinned by the ongoing work of the Australian Education Research Organisation (AERO) and its Tried and Tested guides.

2. Knowledge is **sequenced and mapped** in a coherent format so that students make meaningful connections within and between units. Lessons in the Ochre sequence are mapped to the Australian Curriculum, enabling teachers to more easily enact the Curriculum.

3. Lessons and units are **knowledge and vocabulary rich** so that students build on what they already know to develop their knowledge and become successful lifelong learners.

4. Our resources are **flexible**, enabling schools and teachers to tailor Ochre's content to their curriculum and context. Lesson resources are editable and available for download.

5. We acknowledge **diversity of learners** and commit to **diversity in the teachers, language, texts and media** we use, so all learners feel positively represented. By featuring teachers from a range of contexts, Ochre's lessons aim to provide local knowledge and understanding for students across the country.

6. All our content is developed by teachers and is designed to be **accessible** to address the needs of all students. All Ochre materials adhere to AA standards of accessibility.

Primary English curriculum notes

1. Introduction to Ochre's Primary English curriculum

English at Primary comprises several elements that complement and reinforce each other. These are Writing, Reading, Spelling, Grammar and Vocabulary. We have integrated these elements into each unit; however, some units are more focused on the development of students' writing while others are focused on developing students' reading. Reading units are typically 5 lesson units centred around a specific text, author or genre. Some of these units link to writing units. Generally these units are designed to be used independently of other units. Reading is also taught and reinforced through the writing units.

Writing units are centred around a specific text or theme. The units also incorporate the other skills and knowledge within the wider English curriculum: Reading, Grammar, Spelling and Vocabulary building. They build towards written outcomes with a focus on writing for purpose. The writing units are generally in blocks of 2-3 weeks, building towards a written outcome of a specific text type.

2. Coherence and flexibility

We strive to support schools by giving them online learning resources that can be flexible to fit alongside their existing in-classroom curriculum and the needs of particular students and classes. We provide sequences of lessons to ensure that learning is coherent from lesson to lesson. This is particularly important in English where we want students to experience whole stories or texts and therefore require longer sequences of lessons to build up knowledge and skills. We encourage schools and teachers to consider how flexible adaptations can ensure students develop understanding from lesson to lesson.

3. Knowledge organisation

Primary English has been organised into units to ensure a balance of coverage and progression across the year, incorporating key knowledge and skills relating to Reading, Writing, Grammar and Spelling. Oracy underpins teaching in all units. All elements of English are embedded within the units, rather than being taught as separate strands. Our curriculum is arranged in a suggested sequence to ensure logical progression and development of knowledge and skills. The curriculum reinforces the reciprocal relationship between reading and writing. Although some phonics practice is embedded, Ochre is not providing a phonics programme.

4. Knowledge selection

We aim to support schools to deliver their curriculum to children who cannot attend school. Our choice of what to teach will primarily be guided by what is being taught in schools so that we can serve them well and will follow the guiding principles of the Australian Curriculum. We provide units that are knowledge-rich and challenging, with the underlying principle that teaching knowledge is important as it accelerates future learning, facilitates deeper conceptual understanding, and enables better creative problem solving.

5. Inclusive and ambitious

Ochre is designed to support all children. Our units are appropriately scaffolded so that students with different starting points can access them. This is supported by developing students' skills in communication and language throughout the Primary English curriculum. Schools, who know their students best, will be essential in identifying which lessons will most help them.

6. Student engagement

We need students to be thinking during their lessons - both to engage with the subject and to strengthen memory of what is being learnt. As Daniel Willingham says: "Memory is the residue of thought." Our lessons are not video lectures. Students' minds are exercised throughout the lessons, including posing questions and tasks during instruction, just as we would in classroom teaching.

7. Motivation through learning

Like all teachers, we recognise that clear presentation and teaching helps students keep participating in our lessons. We build intrinsic motivation through students' success and enjoyment within lessons. As English teachers, we believe in the power of storytelling and language to motivate and inspire children, and we hope to capture this in our video resources.

8. Additional information about writing units

Writing effectively for purpose incorporates significant knowledge and skills: the knowledge of conventions within specific text types, wide ranging vocabulary, awareness of the reader – and using grammar and punctuation precisely and for effect. Writing units ensure that students are first clear on the 'what to write' (the content, the sequencing, the ideas, the vocabulary) so that they can the focus on 'how to write' (effective use of punctuation, sentence structure, cohesive and stylistic devices) in order to achieve the intended purpose on the reader. Knowledge of spelling, grammar and punctuation is applied in context – with specific rules and conventions taught incrementally, to ensure mastery of application.

9. Curriculum sequence guidance

The Primary writing units are sequenced in a proposed order. This sequencing allows for logical progression of knowledge and skills across the year.

Primary Maths curriculum notes

1. Introduction to Ochre's Primary Maths curriculum

As mathematics teachers, we want our students to reach fluency in the skills that are being taught. In mathematics, fluency requires a deep understanding of concepts and the ability to apply them flexibly and with automaticity. The mathematics curriculum uses multiple representations to help make connections across concepts in order to build a deep conceptual understanding. By making consistent use of the same core representations we aim to scaffold students' thinking to help them understand abstract mathematical concepts. Learning and practising maths facts and standard procedures is crucial for developing fluency and accuracy in mathematics. The curriculum includes intelligent practice that is designed to help students develop automaticity in their mathematics. We aim for our students to be able to use the precise language of mathematics, vocabulary that is distinct from everyday language. The curriculum will do this by explicitly teaching mathematical vocabulary and introducing core sentence structures with which to communicate, express, connect, reason with and apply mathematical structures and ideas. Finally, we also aim for our students to be able to think mathematically by linking mathematical knowledge to familiar contexts. The tasks and activities used in the curriculum teach students the components of mathematical thinking: to sort and classify, compare and contrast, specialise and generalise, to make conjectures and to prove them.

2. Coherence and flexibility

We support schools by offering a maths curriculum that can be flexible to fit alongside their existing in-classroom curriculum and the needs of particular students and classes. However, complete flexibility over unit ordering is impossible due to the cumulative nature of mathematics and the importance of prior knowledge.

3. Knowledge organisation

The units in the maths curriculum are grouped as appropriate for each year level, with a suggested route organised within year groups. We have grouped lessons into units: coherent sequences of 5 or more lessons. Although each lesson can be accessed individually, explicit connections are made to earlier lessons and later lessons in the same unit. This is because making connections between mathematical concepts is vital to deepening understanding and facilitating transfer.

4. Knowledge selection

Our mathematics lessons cover the full scope of the Australian Curriculum. We have given more time (both in number of lessons and number of units) to those concepts within the Australian Curriculum that the evidence tells us are foundational to success in maths, such as place value and number operations understanding.

5. Inclusive and ambitious

We know the difference it makes when children believe they "can do" maths. We are guided by the principles of the Australian Curriculum to ensure that every student, regardless of starting point, develops their fluency, accuracy and reasoning. Our activities are scaffolded so all students can succeed. Students are offered frequent opportunities to be and feel successful as students of maths. We develop conceptual understanding by always building new understanding on what students already know, by representing concepts in different ways, and by making connections between concepts. The mathematics curriculum makes consistent use of the same core representations across year groups to help students connect prior learning to new learning. These representations are selected to make key mathematical structures and ideas accessible to all students, no matter what their starting points.

6. Student engagement

Students learn maths by thinking about maths. We need students to be thinking during their lessons - both to engage with the subject and to strengthen memory of what is being learnt. As Daniel Willingham says: "Memory is the residue of thought." Our lessons are not video lectures. Students' minds are exercised throughout the lessons, including posing questions and tasks during instruction, just as we would in classroom teaching.

Mathematical thinking is woven into the units using scaffolds and prompts such as 'what is the same and what's different?', 'is it sometimes, always or never true?' and 'which could be the odd one out?'. Throughout the curriculum, all students have opportunities to sort and classify, compare and contrast, specialise and generalise, to make conjectures and to prove them.

7. Motivation through learning

We believe that mathematics is inherently interesting and that all children are entitled to a positive and successful experience of mathematics. Like all teachers, we recognise that clear presentation and teaching helps students keep participating in our lessons. We build intrinsic motivation through students' success and enjoyment within lessons. The tasks and activities that students engage with harness innate ways of thinking and develop the habits of mind that are drawn upon when being mathematical. Problem solving is at the heart of every lesson, with opportunities to investigate, explore and reason.

8. Unit prior knowledge requirements

To develop deep conceptual understanding requires building on what has been previously understood. Constructing the curriculum with this principle in mind results in careful sequencing within a topic, a year group and across years to create a coherent progression for students. For example, before learning about addition and subtraction within 10 in Year 1, students will need to have learned how to say, read and count numbers to 10.