Curriculum Policy

Statement of intent:
At Burley Oaks Primary School, we respect and value all children and are committed to providing a caring, friendly and safe environment for all our pupils so they can learn, in a relaxed and secure atmosphere. We believe every pupil should be able to participate in all school activities in an enjoyable and safe environment and be protected from harm. This is the responsibility of every adult employed by, or invited to deliver services at Burley Oaks Primary School. We recognise our responsibility to safeguard all who access school and promote the welfare of all our pupils by protecting them from physical, sexual and emotional abuse, neglect and bullying.

The main priority is to prevent an emergency from occurring in the setting; however, this is sometimes, unfortunately, out of the hands of the school. In an emergency, staff members at Burley Oaks Primary School will endeavour to take all reasonable actions in order to ensure the safety of pupils.

The procedures outlined in this policy aim to minimise disruption to the learning environment whilst ensuring the safety of all pupils, staff members and visitors.

To be read in conjunction with:

- **Home Learning Policy**
- **All individual subject policies**
- **Teaching and Learning Policy**
- **Curriculum Statements**

This policy was reviewed in May 2023 and will be reviewed again in May 2026.

Chair of Governors Christine A Smith **Date 1 June 2023**

Headteacher **Date 1 June 2023**

CURRICULUM POLICY

At Burley Oaks Primary School, our curriculum is based on the September 2014 National Curriculum for Key Stages 1 & 2 and the DfE (2021) 'Statutory framework for the early years foundation stage'. Our rigorous, well-planned curriculum combined with high quality teaching ensures that children are supported to be well rounded, empathetic young people who have a genuine thirst for learning. Children develop a strong sense of moral purpose in addition to developing a respect for and an understanding of people.

Introduction

The curriculum is all the planned activities that we as a school organise in order to promote learning, personal growth and development. It includes, not only the formal requirements of the National Curriculum, but also the range of extra-curricular activities that the school organises in order to enrich the experiences of our children. It includes the 'hidden curriculum', or what the children learn from the way they are treated and expected to behave. We aim to teach children how to grow into positive, responsible people, who can work and co-operate with others, whilst developing knowledge, skills and good attitudes to learning, in order that they achieve their true potential.

Values

At Burley Oaks Primary School we strive to make our children passionate for learning and make their learning as much fun and as meaningful and relevant as possible. Our curriculum is linked to and builds on previous knowledge. We offer children an excellent education in a safe, calm, creative, inclusive and stimulating environment. Every child is valued as an individual; we aim to nurture well rounded, respectful and confident children who will develop skills for life-long learning. We nurture our children on their journey and encourage them to be creative, unique, open-minded and independent individuals, respectful of themselves and of others in our school, our local community and the wider world. We take our responsibility to prepare children for life in modern Britain very seriously and ensure that the fundamental British Values are introduced, discussed and lived out through the ethos and work of our school.

- Our curriculum promotes respect for the views of each individual child, as well as for people of all cultures. We value the spiritual and moral development of each person, as well as their intellectual and physical growth. We organise our curriculum so that we promote co-operation and understanding between all members of our community.

- We are fortunate at Burley Oaks to have a spacious learning environment which includes an outdoor classroom, improved EYFS area, gardening beds, pond and cycle track with skills loops. The track not only build children's core strength, stamina, balance, flexibility, coordination and muscle strength but also boost positive mental attitudes. This environment is respected and used by all in school and we aim, through our curriculum, to teach respect for our world and how we should care for it so that it can be enjoyed by future generations, as well as our own.

- At Burley Oaks our values permeate all areas of school life and are reflected by the school's simple motto: **Belong, Believe, Achieve.**

Aims

At Burley Oaks Primary School, we aim to offer a balanced and broad curriculum which enables all pupils to:

- Become successful lifelong learners who are able to reach their full potential
- Feel successful in their learning and to promote high self-esteem
- Enjoy learning
- Understand and value the importance of truth, fairness, right and wrong
- Nurture positive relationships promoting working co-operatively with one another
- Become creative, independent learners
- Know what their strengths are and which areas they need to develop
- Explore their spiritual, moral, cultural, mental and physical development
- Learn and practise the basic skills of English, Mathematics and Computing
- Challenge themselves and critically think independently for deeper learning
- Be flexible learners and adapt to different situations
- Makes learning more meaningful by putting it into context
- Be given significant time to learn new skills and have time to practise those skills
- Help children understand Britain's cultural heritage

Organisation and Planning

At Burley Oaks Primary School, our curriculum is based on the September 2014 National Curriculum for Key Stages 1 & 2 and the DfE (2021) 'Statutory framework for the early years foundation stage'

2014 National Curriculum for Key Stages 1 & 2
Statutory framework for the early years foundation stage'

Our curriculum is delivered using a variety of approaches and resources depending on the nature of the subject being taught and the needs of the children (for more details please refer to the separate subject policies and curriculum pages on the school's website).

Separate curriculum statements and policies:

- English
- Maths
- Science
- PE
- Music
- History
- Geography
- RE
- Computing
- PSHE and RSHE
- MFL (French)
- Art
- Design Technology
- Phonics and early reading

The Reception curriculum is planned on a yearly basis linking to the Prime and Specific Areas of Learning in the EYFS and is guided by the children's interests. In KS1 and KS2 our curriculum is all planned on a yearly cycle with an emphasis placed on 'wow' experiences, cross curricular links and learning supported by quality texts and other quality experiences, including carefully placed trips and visitors to school. We have a strong and clear learning sequence across school which ensures the progression in each subject, enabling powerful learning as children build on and link to previous learning. Their learning will interweave, build seamlessly each year and develop depth as they 'know more and remember more'. Our curriculum design supports children committing their learning to long term memory.

Teaching is not by theme or topic, however, where links can be made to make children's leaning more powerful and meaningful these are grasped and used to develop mastery of content and concepts. Our Road Maps show clearly the 'learning journey' in each subject, our subject long term plans show where learning is 'kept warm' and our year group plans show where links are made across subjects to strengthen children's learning.

Information Technology truly underpins children's learning at Burley Oaks. Click the link to view how we ensure pupils safety.

- E-Safeguarding Policy

All teachers are responsible for planning, evaluating and teaching in their classes and the National Curriculum stipulates the expectations and the content coverage required. A planning proforma is common practice to focus learning expectations and for teachers to map the sequence of learning, teaching assistant direction (if and where required), vocabulary development, risk assessment, British Values/SMSC links, and resources required. Class teachers meet regularly to ensure continuity of provision and moderation in terms of expectations and outcomes across the year groups/phases. Particular attention is given to clear and appropriate differentiation, progression and attainment at this point in the planning process.

At Burley Oaks, we use subscriptions to subject associations to keep up-to-date with subjects and to support teaching with quality resources. Curriculum coverage is mapped against long term plans to ensure there are no gaps in our curriculum.

Time Allocation per Subject

Schools are free to decide how much time should be spent teaching each subject. English and maths are taught each day and the wider curriculum subjects are given equal importance and taught weekly. For Art, DT, geography and history this is in unit blocks but with links across subjects where relevant. Computing, Science, PE, PSHE, French RE and music are taught each week. Science is taught for 2 hours a week and we aim for 2 hours of PE also. Our linked-up learning approach provides children with plenty of opportunity to extend their learning and develop skills outside the strict timetabling of each subject.

Dual Coding and Pedagogy

'Our brains work best when information comes in more than one format – mix it up to make learning stick.'

(Mark Enser)

Our aim is to make children's learning 'stick'. Leaders and teachers keep up to date with educational developments and the theory behind powerful learning and this is disseminated to all staff in training sessions. Dual coding is used as a teaching tool to help children to commit learning to long term memory by organising their learning and attaching an image to knowledge alongside the verbal/written dialogue. As a school, we believe that practical and visual learning is powerful and how we graphically organise information for our children so as not to 'clutter' their learning is very important. An example of this organisation could be our dual coded timelines on knowledge organisers which show the linear way we move through time and how events happen both before and after each other. The detail around seminal research and the principles and properties of our curriculum design can be read in appendix 1.

Learning Environment

Our learning environments are used as teaching tools. As a school, we keep them organised and make key knowledge and vocabulary accessible so that children can locate and use this key information easily and efficiently. This can be done by signposting or using neutral backgrounds and selecting and organising our displays carefully. Overcrowded and 'busy' displays are discouraged. In the EYFS, displays and resources are organised and labelled to enable learning and to teach children organisational and ordering skills.

Displays around school are also used to showcase, value and celebrate children's achievements and great work. Our children have input into these displays and the aim of them is to promote children's self-esteem, alongside recognising and valuing excellent learning and achievement.

Assessment, Recording, Monitoring and Evaluation

Short and medium term assessment is the responsibility of the class teacher and is in line with the assessment policy and the Otrack facility. However, teachers will use informal assessment and observation on a daily basis to determine what children can do independently and to plan the next steps for learning.

- Formative assessments take many different forms and are reflected in a pupil's books/work in the detailed marking and provision of constructive feedback (not every piece of work is marked in depth). Feedback follows the school's policy and identifies areas for children to improve, giving focused challenges and expecting children to take ownership of their learning and respond and reflect in order to further improve. 'Live' marking and feedback are encouraged and recognised as good practice.

- Retrieval practice and high challenge/low threat quizzes demonstrate children's learning and identify any gaps which require addressing by teachers.

- Summative assessments support teacher assessments in the core subjects and children are presented with these in a relaxed format so as to cause minimal anxiety for pupils. These are used to help prepare children through the year groups for the end of key stage testing as required by law.

- Reception pupils are assessed using the Early Years Foundation Stage Profile. Pupil profiles are established for each child in Reception and assessments are made against the Foundation Stage Profile Statements.

For further information about assessment, as well as marking and feedback click the policy links below:

- Marking and Feedback Policy
- Assessment Policy

Children's progress and attainment in each subject will be assessed by their teacher against the end of year expectations. Pupil progress will be reported to parents at two points in the year either in writing or at an appointment where parents are invited to discuss their child's progress.

The roles of the Subject Leaders and Curriculum Leader

It is the role of each subject leader and the curriculum leader to keep up to date with developments in their subject, at both national and local level. They review the way the subject is taught in the school and plan for improvement. This development planning links to whole-school objectives. Each subject leader reviews the curriculum plans for their subject, ensures that there is full coverage of the National Curriculum and that progression is planned into bespoke, well sequenced schemes of work. The subject leader also keeps a portfolio of children's work/a set of children's work books, which s/he uses to show examples of the achievements of children at each key stage and to demonstrate the expectations of attainment. Where appropriate, a team or pair of teachers will share responsibility for a subject area.

The role of the subject leader is to:

- provide a strategic lead and direction for the subject;

- support and offer advice to colleagues on issues related to the subject;

- support staff development and improve the quality of teaching and learning over time;

- monitor pupil progress in that subject area by working alongside colleagues, book looks, pupil interviews, lesson observations and planning scrutiny;

- monitor and evaluate teachers' planning and teaching;

- keep self and other staff up to date with developments in their subject by relevant reading, INSET and policy development and update;

- liaise with appropriate bodies e.g. other schools, governors, the LEA etc. about matters relating to their subjects;

- provide efficient resource management for the subject;
- map coverage of the curriculum to long term plans;
- engage with subject associations and disseminate information to staff as 'mini' CPD.

The curriculum leader, has responsibility for the day-to-day organisation of the curriculum. They monitor provision, ensuring that all classes are taught the full requirements of the National Curriculum, and that all lessons have appropriate learning objectives and outcomes. The curriculum leader oversees the work of the subject leaders and works collaboratively to ensure the support is there for subject development and that there is a consistency across all areas of the curriculum. Their role is to share good practice and ensure that fun, laughter and hard work underpin Burley Oaks' curriculum development.

Risk Assessment

Whilst planning for the curriculum, teachers will give consideration to any relevant risks. If appropriate, these will be highlighted on planning and the appropriate documentation completed to meet with health and safety regulations. Where water is involved in a risk assessment (for example, river fieldwork as a part of geography) the LA will be notified and permission sought as part of the risk assessment. For further guidance reference needs to be made to:

- 'Be Safe' (which can be located on the pinboard in the staffroom)
- The school's Health and Safety Policy
- The school's Educational Visits Policy

Inclusion and Differentiation

In order to provide all pupils with relevant and appropriate work at each stage, we:

- Set suitable learning challenges
- Respond to pupils' diverse needs
- Endeavour to overcome potential barriers to learning

Learning is planned and adapted to enable children to broaden, deepen and accelerate their understanding and development of skills and knowledge. Children are challenged to think at depth and deepen their learning across the curriculum. Regular formative assessments identify children/groups of children for differentiated activities. Our curriculum is inclusive and promotes a growth mind set in all our children linking back to our school motto – **Belong, Believe, Achieve**. Extra support and interventions/pre-teaching are provided for children as necessary and in line with our Policy for Inclusion, Special Eduction Needs and Disability (SEND). Our aim is for all children to learn the same curriculum. All children will know more and remember more.

- SEND Policy

Subject Driven Curriculum

Our curriculum at Burley Oaks is driven by subjects. In Reception, this learning is pulled together through a common theme which supports children in linking their learning and fully immersing them in their learning experience. In KS1 and KS2 we use the strong links between subjects where there is a common theme to develop children's web of knowledge and enable joined up and purposeful learning.

Underpinning all learning are our four key drivers:

- Possibilities
- Health and Sport

- Creativity
- Environment

Through these drivers we ensure that:

- Learning activities are planned around the distinctive needs of our children at Burley Oaks
- learning is enquiry-based to promote curiosity
- outcomes raise standards
- basic skills are embedded in children's learning
- learning is meaningful and set it in context
- writing is purposeful
- positive learning behaviours are taught
- learning is underpinned by the latest research in quality learning and brain-based learning

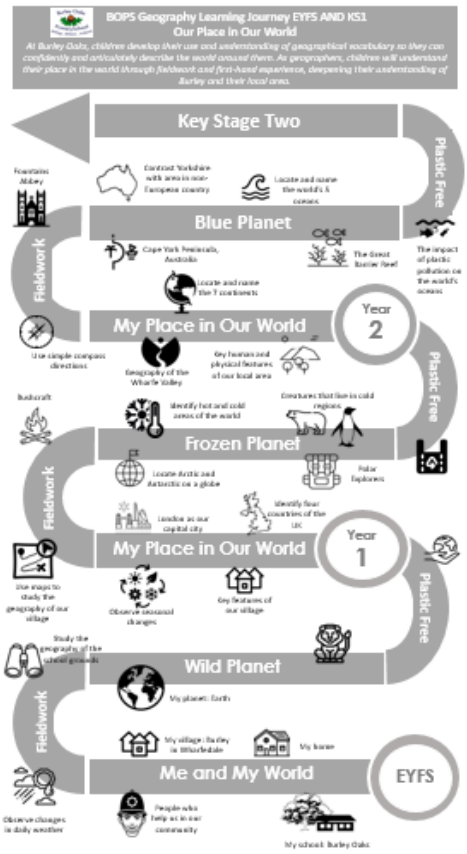
Across school, each year group has its own curriculum which has been carefully planned to be interweaving and progressive for all children. All subjects are taught discreetly on a yearly cycle but elements of these subjects are linked in the wider curriculum as appropriate to enable 'joined up/purposeful' learning.

At Burley Oaks, we have our own bespoke cycling, Bushcraft and 'What's the Buzz?' curriculums. Our 'What's the Buzz?' curriculum is concerned with enhancing our children's curriculum offer and linking their learning to our key drivers: **Sport and Health; Possibilities; Creativity and Environment.** This unit of work comes at an appropriate point within the academic year and recognises what is happening in our world at the time. It aims to challenge children's thinking and encourages them to develop their own opinions and viewpoints, as well as targeting knowledge development in a specific area/subject.

Curriculum Organisation
Teachers follow a clear planning structure for our wider curriculum.

A yearly overview/long term plan (LTP) is produced to ensure the correct National Curriculum coverage and to outline the key learning questions/enquiries for each term or half term. Subject 'Road maps' accompany these LTPs and clearly show a child's learning journey from EYFS-Y6 and clear progression and 'building up' of learning/knowledge. The LTP's for each year group can be found on the school website here.

Road map example:



Knowledge organisers enable our teachers to structure learning to ensure that key learning is well taught and that the sequence of children's learning is carefully planned, in particular the quality of and acquisition of vocabulary. Knowledge organisers identify key knowledge to be acquired.

Examples of knowledge organisers:

At the planning stage, thought is given to how we teach the learning behaviours we wish our children to develop: courage, curiosity, commitment, resilience, happiness, humility, responsibility, respect, patience, positivity. Thought is also given to the learning opportunities and how these meet the needs of our children.

The subject driven curriculum will incorporate:

- The children's own ideas and questions
- How the learning will be introduced (a 'wow' factor to get the children engaged)
- Opportunities for visits or visitors to enhance learning
- A focused learning outcome at the end of the unit e.g. a presentation, dramatisation or production of an artefact
- How children's work will be presented e.g. within subject books book, artwork, recording through ICT, display

'It is important to view knowledge as a sort of semantic tree - make sure you understand the fundamental principles, i.e. the trunk and the big branches, before you get into the leaves/details or there is nothing for them to hang on to.'

(Elon Musk)

Curriculum communication to parents

Communication with our parents about how their children are performing and what they are experiencing in school is a high priority to us and we do this in a number of ways:

- Formal reporting to parents twice a year, either in the form of a written report or a parent consultation evening where parents make an appointment to meet with their children's teachers and discuss their progress.

- The school's website and year group pages inform parents what has been happening in the wider curriculum.

- Class Blogs inform parents specifically about a class within school on the day-to-day lessons and learning of this specific group of children. Children's achievements are celebrated on these blogs.

- The school's Twitter feed informs parents instantly of whole school or enhanced activities which are taking place.

Teachers are also available at the start and end of each day for any necessary communications. Teachers regularly use email to communicate with parents and the school office is another port of call. School communications may be sent out providing details of specific events or inviting parents into school.

Home Learning

Home learning is given in line with our school policy in English and Maths. Wider curriculum work is set if a clear purpose and need is identified. All home learning is given to the children in paper format and some is accessible online such as through the Google Classroom, Spelling Shed etc…Parents are clearly signposted to this by Class Teachers.

Enhanced Provision

We aim to enrich our pupils' lives by offering a variety of non-statutory extra-curricular experiences (clubs, visits, visiting speakers, sporting events etc). In addition, we seek to enhance our pupils' learning through developing positive two-way relationships with our local community.

As part of our enhanced provision, each year we have a team of school leaders (Sports Ambassadors, Lunchtime Leaders, Sports Referees, School Councillors, Librarians…). These are important roles and give our children the opportunity to apply for and commit to a role for the year. In doing this, they develop a number of the learning behaviours which we place so much importance on our children acquiring during their time at Burley Oaks. It also fits very clearly with our key driver: Possibilities. By giving our children these opportunities, we are equipping them with life skills and ambition in order to pursue and achieve possibilities.

Resources

Subject to financial constraints, we aim to provide and maintain appropriate resources to support the delivery and development of our curriculum. All resources are organised and stored to ensure ease of location and accessibility to staff and pupils. Resources are regularly audited and checked. Requests for new resources are passed to subject leaders and budgets spent with these in mind to ensure a high-quality delivery of our curriculum.

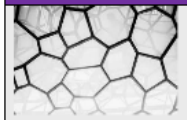
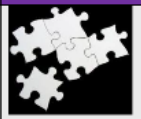
Accountability and responsibility

Our governing body is responsible for monitoring the way the school curriculum is implemented. They review curriculum development via the curriculum leader's reports, reports from subject leaders as identified by the school's development plan and Governor request, curriculum governor's information, as compiled through school visits, about quality of teaching and learning and the Headteacher's reports.

We have named governors for the overall curriculum, English, Maths, Computing, EYFS and Special Needs. The governors liaise with the subject leaders of these areas and monitor the way the school teaches these subjects.

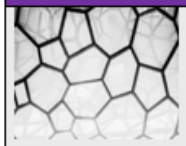
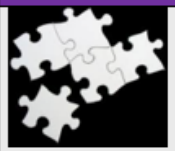
Curriculum: Exceptional Curriculum Design - Principles and Properties

Moorlands Learning Trust

Principle 1: Powerful Knowledge *Knowledge matters: the concept of a knowledge-rich curriculum.*	Principle 2: Curriculum Coherence *How learning is structured/sequenced to fit together in a logical way, allowing connections to unify components into a body of knowledge*	Principle 3: The Progress Model *The curriculum is a progression model which is planned to meet learning needs for all students. A progress model measures progress in terms of knowledge gained (and retained).*	Principle 4: How students learn *The role of cognitive science in the curriculum is important to make learning 'stick'- the curriculum is successfully implemented so that students successfully learn the curriculum.*
 **Powerful knowledge** is the knowledge that takes students beyond their everyday experiences- knowledge that students wouldn't ordinarily have access to outside of school.	 **Coherence** is the idea that knowledge is logically sequenced, so that students can embed threshold concepts, regularly encounter these and make connections to prior learning.	**Progress model** is the idea that curriculum planning shows the precise knowledge and expertise that form the bedrock of what is to come. There should be clarity on what the curriculum is building towards.	**Learning** is an alteration in long term memory. If nothing has been altered in long term memory, nothing has been learned. Students should recall information and learning should be **durable** (it lasts).
Powerful knowledge makes us question 'what?' should be taught and 'why?' in our subjects- what is essential for students to know? Curriculum intents should identify the "best that has been thought and said" for designing the content so that students can become "knowledge rich" in our specialised subject knowledge, as can be seen in their vocabulary. **Breadth and depth-** Content should be suitably broad, *at least* include the 'essential' knowledge of the National Curriculum; this should not limit the depth of learning. Depth is where students make connections to prior learning and build on these, developing from simple to complex understanding. **Threshold concepts** are the ideas within a subject that students cannot progress without- the big ideas that unlock understanding, link to later learning and lead to understanding. Threshold concepts should form the basis of curriculum design so consideration has been made for the concepts that make the next stage of learning possible. Students who understand threshold concepts securely speak fluently using the academic language and vocabulary of the subject. **Schema** is a link/connection in knowledge. Curriculum documentation should map out clear links to the big picture of the 'topic' or key concepts to help students see connections. Links should be made explicit to students by their teachers as it helps them understand new things, build on prior learning and promotes retrieval practice and memory retention. **Deep knowledge**: Careful sequencing should build students to learn more deeply, applying learning to new contexts. Teaching also deepens understanding by activating hard thinking by questioning and asking students to elaborate and build on key ideas or concepts. **Specialist subject vocabulary** should be identified at every stage and explicitly taught to deepen knowledge and understanding. Students' fluent use of academic, subject-specific vocabulary in speech or text is a sign that they have grasped the concepts and ideas, particularly if they can use these words independently and accurately when presented with a new context / when applying knowledge to new situations or problems.	**Intent-** This is everything up to the point of delivery. The subject intent forms the backdrop to a coherent curriculum which is logically sequenced. Leaders and teachers should be able to articulate the '*what*?' (the knowledge that is expected at each stage of learning), the '*why this*?' (why this is essential knowledge) and the '*why now*?' (why the sequence and ordering supports subsequent learning). Curriculum conversations with leaders provide opportunities to articulate the powerful knowledge and threshold concepts, the 'what, why this, why now?' and to outline examples of how learning is sequenced to support deep knowledge and memory. **Structure-** structured learning is not the structuring of activities, but the sequencing of knowledge. Schemes of learning should show consideration of the right components that enable subsequent performance. Students should encounter knowledge in the order outlined in the curriculum intent and schemes of learning. **Sequence-** the sequencing of knowledge is the order and positioning of knowledge ('why now?'.) Sequencing should be logical and consider what students need to know now to better understand subsequent concepts and ideas so that learning develops incrementally over time. Thought should be given to the topics or components of knowledge that need to be taught first to unlock later parts of the curriculum. This is not about teaching the easiest parts first, but the intentional ordering that allows students to build their understanding gradually and make links to deepen their understanding. **Connections (Schema)-** Students learn by linking the knowledge they acquire through ever growing webs (mental models)- so knowledge needs to be taught in an organised manner that regularly and intentionally makes explicit links to prior learning to build understanding and to aid memory retention and mastery.	**Inclusive and ambitious-** The curriculum intent should remain the same for all students, regardless of starting points, so that we expect ALL students to know more and remember more and move students towards ambitious end points. The ambition is the same, but adaptations may be necessary- e.g. planning is adjusted to compensate for gaps, misconceptions or poor retention. Some students may require re-teaching or responsive teaching to embed the necessary knowledge that leads to understanding. **Progress** is students 'knowing more and remembering more' so they have the capacity to perform by drawing on what is known (applying their knowledge to new contexts). **Curriculum progression-** there should be a clear progression of knowledge which is designed so that students can make connections to prior learning to deepen their understanding as they move from simpler/concrete to more complex/ abstract concepts. **Stages of learning-** Curriculum planning should show clarity of intent, so that teachers can clearly articulate what they expect students to know for each term/year/key stage of the curriculum. Key points of transition and understanding of threshold concepts mark students' readiness for the next stage. Outlining the content and concepts that are to be covered with students and signalling the transitions between different parts of the curriculum helps students to picture the curriculum and see the relationship between the different parts. Foregrounding and summarising the curriculum helps students to understand, memorise and make links. This can be done through presenting 'learning journeys', concept maps or knowledge organisers that focus on the content and big ideas. **Mastery** is when a student can use a concept or apply knowledge with complete independence, fluently and consistently over a period of time without pre-teaching. Mastery is the result of students acquiring knowledge, remembering it and becoming an expert learner.	**Memory Strategies-** Memory is the "residue of thought". It's important to make learning 'stick' for students, to become automatic, so that they can free up their working memory and learn more. By remembering, it enables students to make connections (schema) which helps them generate and multiply knowledge. Memory strategies should be explicitly taught to students and knowledge should be 'chunked' to help students remember it. Cognitive load theory should be considered in planning lessons and task design so that students can remember more- teachers should reduce all unecessary information so that the essential information is retained. **Revisiting and practising for memory-** Teaching should activate prior learning so that students routinely draw on previously taught content to embed their learning. This can be achieved through recapping, reviewing main ideas, recall activities and regular opportunities for practice (e.g. retreival practice strategies, knowledge quizzing, spaced practice/repetition, 'overlearning' and interleaving.) The curriculum should be designed with space in mind to provide opportuntiies for students to regularly practise a particular skill and apply knowledge. Content and concepts can be interleaved to enable students to forge deliberate connections. **Explanation, modelling and scaffolding-** Learning progresses through teacher instruction and explanation, especially at the 'novice' stage. Teachers need to regularly model their thought processes before students then practise themselves. A range of modelling techniques are effective, such as live modelling (giving a running commentary of your thought process to model thinking), modelling the struggle when going through a worked example, the 'I,We,You' model. Scaffolds make challenging material accessible- support should be gradually withdrawn over time to support mastery. **Self-regulation and metacognition-** Expert learners are able to review their own learning, determine their own learning goals and gaps, then plan how to improve through self-study. It is not enough for teachers to own the knowledge checking process- e.g. always setting quiz questions. Students have to learn how to self-study and revise using strategies from cognitive science. This is most difficult for students who have gaps in understanding (i.e. knowing how ideas connect) or memory (failing to retain). **Enacted curriculum** is the actual curricular content that students engage with in the classroom and as seen in books and student voice. A well designed curriulum means that students' books and 'voice' evidence that what was intended has been covered and that students have learned and remembered it.

Curriculum: Exceptional Curriculum Design - Seminal Research

Moorlands Learning Trust

Principle 1: Powerful Knowledge *Knowledge matters: the concept of a knowledge-rich curriculum.*	Principle 2: Curriculum Coherence *How learning is structured/ sequenced to fit together in a logical way, allowing connections to unify components into a body of knowledge?*	Principle 3: The Progress Model *The curriculum is a progression model which is planned to meet learning needs for all students. A progress model measures progress in terms of knowledge gained (and retained).*	Principle 4: How students learn *The role of cognitive science in the curriculum is important to make learning stick- the curriculum is successfully implemented so that students successfully learn the curriculum.*
 **E.D. Hirsch** *Why Knowledge Matters.* **Young** *Powerful Knowledge as a Curriculum Principle.* In *Knowledge and the Future School: Curriculum and Social Justice*	 **Myatt** *Building Curriculum Coherence* (Impact Journal) and *The Curriculum: From Gallimaufry to Coherence* **Howard and Hill** *Symbiosis: The Curriculum and the Classroom*	 **Fordham** *What did I mean by 'the curriculum is the progression model'?* ***Didau*** *How do we know pupils are making progress: the curriculum* **Sealy and Bennett** *The ResearchED Guide to the Curriculum*	 **Howard and Hill** *Symbiosis: The Curriculum and the Classroom* **Willingham** *Make it Stick: The Science of Successful Learning* **Deans for Impact**: 'The Science of Learning' **Rosenshine** *Principles of Instruction*
Why is knowledge important? It is impossible to think without knowledge and the more knowledge students have, the more they can think. Knowledge begets knowledge- knowledge is generative and so when you have secure knowledge, it enables you to 'add on' and acquire more knowledge. Knowledge acts as its own gravity; the more one has the easier it is to understand new things and to retrieve them. Schema theory and the idea of building interconnected webs of knowledge is central to building a knowledge-rich curriculum. Links and connections should be made explicit. The curriculum is a narrative. What is powerful knowledge? The best knowledge that we have in each subject that all students should know. This is specialised, expert knowledge within each subject which enables students to interpret and control the world. ("Best that has been thought and said.") Students learn and revisit the key concepts in each discipline. Threshold concepts form the basis of all knowledge encounters, unlocking the next stage of learning and understanding. Threshold concepts are the bits of the curriculum that make the next stage possible ("a proximal function") but they also connect together to achieve an enduring job: mastery of the discipline ("the ultimate function"). Deep knowledge: Deepening knowledge is possible through vocabulary learning, as a result of explicit vocabulary instruction. The issue of cumulative dysfluency (where students accumulate gaps which then limits their ability to develop complex understanding).	Curriculum design should not be reduced into disconnected "fragments of knowledge [that] float around without being placed into a coherent structure." (Myatt 2018) In a coherent curriculum, explicit links are made between the different components of learning across the subject. There is thought and consideration into sequencing between components of knowledge that then leads to ultimate conceptual understanding. When a curriculum is taught in a coherent way, students are able to become expert learners in that subject and appreciate the subject as having an interconnected body of knowledge. Connections to prior learning are always explicit. Sequencing- this is the order which you set out, where students "encounter the curriculum." (Didau) Content is sequenced to ensure that components of knowledge lead to conceptual understanding. Ordering learning to aid retention, memory and mastery.	There is a model of progression for all subjects and curriculum planning ensures sufficient coverage, depth and breadth of learning. The curriculum is a progress model and should reflect the 'best route' for expert learning. The subject curriculum is appropriately challenging for the students that it serves. The curriculum has clear and ambitious end points. Clear intent within each discipline- "what you expect students to know by certain points in their life." (Spielman) Both teachers and learners should have sharp clarity on the learning expectations for every year/ term. The curriculum works as a whole and there is clarity of how each part of the curriculum fits into the whole. This is also the case for "non-benchmark" years where there are no terminal examinations, for instance. By being explicit about the precise areas of knowledge you want students to secure at each point in their curriculum journey, it makes it easier to plan a curriculum that builds on prior learning. Students make strong progress from their relative starting points and the curriculum continues to provide access to sufficient depth and breadth of knowledge to secure subsequent success. We operate on the belief that all learners can learn the important content and reach mastery within our subject disciplines- an inclusive and ambitious curriculum.	Just because you've taught it, doesn't mean students have learned it! If content is not in a student's long-term memory then it has not been learned. The curriculum should be designed with cognitive science in mind to make learning durable (to make learning last). We do not have direct access to students' brains and teaching is not a process of transmission of knowledge- students develop a relationship with knowledge, not just for memorisation but to apply expert knowledge to think or act in different ways and to learn more/ know more. The working memory processes new learning but it can't cope with too much information at once, so knowledge should be chunked. The long-term memory is infinite and once knowledge has become embedded, it is transferred here. Retrieval practice strengthens the ability to recall knowledge from the long-term memory. Concept of the "enacted curriculum"- students should be provided with the opportunities to "learn the curriculum" and not just encounter it. The enacted curriculum can be seen through products of the curriculum such as students' work and student voice, which reflect security of knowledge and a build-up of skills/ expertise. Learning is invisible and it isn't linear- progress doesn't happen in a straight line because learning is forgotten, retrieved and strengthened again, as per the Ebbinghaus forgetting curve. It is spaced repetition over time with constant retrieval that makes learning stick. Practice: Opportunities for pupils to practise what they know – so they deepen their understanding in a discipline – is built into the curriculum. E.g. there is regular, repeated exposure to practise retrieval of what has previously been taught; purposefully practise a particular skill to build mastery; deepen understanding through applying learning to alternative contexts to develop as expert learners. Spaced practice can be used to rehearse particular knowledge retrieval over a period of time (i.e. block learning and repeat practice over time). Interleaving can be used to mix practice of knowledge retrieval over time (i.e. not AAABBBCCC, but ABCABCABC). Retrieval practice involves recalling something you have learned in the past and bringing it back to mind- this strengthens memory. Self-regulation is the sign of a master, expert learner.