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	OVERVIEW	

Bishop Challoner Catholic College
Quality of Education Policy

1) The Evolution of our Quality of Education Policy

Over the last five years there has been unprecedented change in the educational landscape. Progress as a measure of success has become the key metric in evaluating the effectiveness of schools. National Curriculum Level Descriptors have gone, as have modular examinations and coursework. Linear examinations place huge cognitive demands on pupils and require the retrieval of large bodies of knowledge from long term memory. New national curriculum orders , GCSE and A Level specifications are now much more knowledge heavy and the new Ofsted framework has been redesigned to reflect the primacy of knowledge and a coherent, well sequenced curriculum. A more profound change, however, has been in our knowledge of how we learn and what strategies best facilitate learning. According to the cognitive psychologist, Dan Willingham, more progress has been made in the last five years in this area than in the previous two and half thousand years.

This progress in pedagogical understanding is reflected in the new Ofsted Framework, which places curriculum and the acquisition of knowledge at the heart of teaching and learning. Schools are now minded to ensure they engage with curriculum design and to the provision of a broad and balanced programme of study. In terms of the implementation of our curriculum, Bishop Challoner has embedded evidence based teaching practice. So, this Quality of Education policy now advocates strategies that were almost heresy ten years ago. For example, “Child Centred” educational strategies have been demonstrably less effective in eliciting student progress than “Teacher- Led” or “Direct Instruction” strategies. And, in assessing the impact of our curriculum, we will look at a range of evidence; including data, lesson observation, work-book scrutiny and student voice. Together, these elements will determine whether the intentions behind the careful sequencing of our subject curriculums are having the desired outcome: student learning and student progress.

Our Quality of Education policy has therefore evolved to reflect both our growing understanding of the learning process and our resolute commitment to using education as a tool in addressing social justice.

It is our school conviction that in studying God’s world we move closer to God and that education is, in itself, an act of worship. We are proud of the structures and architecture we have created to surround our learners with all the support necessary so that the school may fulfil its mission and give glory to God by fully utilising our God given talents.

2) Whole School Curriculum Rationale

"In reality, the curriculum as a whole, and every part of it is religious, since there is nothing which does not ultimately relate to God".

The curriculum, in all its aspects, reflects the fact that Christ is the focal point of our school. Based on the belief that the human and the divine are inseparable, our curriculum is designed to educate the 'whole' young person: spiritually, morally and academically. It upholds the uniqueness of the individual in which each person is seen as made in God's image and loved by him.

Driven by our spiritual quest for excellence, the best educational knowledge and research has been embedded into our curriculum. Through a combination of the subject, local and 'hidden' curriculum, students receive a learning experience which is balanced, broad, relevant, challenging, progressive and engaging. The wide scope of our curriculum means that there are a variety of learning pathways, meaning that students leave our care with the knowledge and understanding necessary to achieve their 'full potential'. Strong moral principles underpin the learning experience at Bishop Challoner, developing in our students the character attributes necessary to become well-rounded citizens of a democratic society.

At KS3, students at Bishop Challoner have a broad range of experiences: linguistic, mathematical, scientific, technological, human and social, physical, and aesthetic and creative. The curriculum offered by individual subjects is both broad and in-depth; allowing students to excel and become masters in any subject area. At KS3, we don't 'teach to the test'; we take every opportunity to enrich understanding of subject disciplines and embed cultural capital. As a result, we believe our students have the opportunity to make well informed choices - both in the short term: GCSE subjects, and in the long term: Post 16 routes.

Gospel values underpin all that we do at Bishop Challoner and as such, our highly valued 'hidden' curriculum means that students' access to a broad range of experiences is not narrowed; allowing them to continue in their personal growth.

The knowledge that students acquire through the experience of just 'being at school' is to us, equally important in helping them to fulfil their potential. Each year there is a whole school focus on aspects of personal growth such as 'Service', 'Health and Well-Being' and 'Community'. As students journey through school, they are inspired by the celebration of student success: past and present; engaged with issues impacting on the world around them and encouraged by the on-going, extensive charitable work carried out by students of all key stages.

At Bishop Challoner, the range of learning opportunities and choices means that our curriculum is inclusive. All students can participate, and because our whole school curriculum reflects the individual nature of our Catholic school and community, it is an education for all.

3) The Distinctive Nature of a Catholic Education

'In our Community of Faith in Bishop Challoner Catholic School
We give glory to God,
By developing our full potential,
And in our service to others.
In the name of the Father,
And of the Son,
And of the Holy Spirit'

One of our most important curriculum aims is to assist our young people in their journey of faith. We share with our students the Catholic vision of life through a structured programme of education.

We have, therefore, a holistic view of educating the young person within our Community of Faith.

What a Catholic education looks like at Bishop Challoner:

- A Religious Education programme based on the Catholic Directory of RE at KS3, 4 & 5. The religious education programme of study supports and helps strengthen the ethos of the college, and the partnership between family, parish and school.
- A full programme of spiritual, personal, social and health education based on Gospel values and the Church teaching. This provides our curriculum with an overall coherence that transcends individual departments. Key elements include: Identity and cultural diversity, Health and Well Being, Community participation, Enterprise, Global dimension and sustainable development, Technology and the media.
- A strong pastoral care system.
- A broad and balanced academic curriculum, which is inclusive and equitable.
- A study support programme, including: revision classes, coaching, homework clubs, open learning centres and resources.
- A 'hidden' curriculum in the form of a rich extra-curricular programme to allow each individual to develop their interests and talents to the full.
- Well planned programmes of study through schemes of work and policies.
- Well taught lessons through highly professional and committed teachers who are passionate in their vocation
- Formative and summative assessment that underpins progress in understanding, learning and achievement.
- A well-structured continuous professional development, based on a whole school focus, on teaching and learning within a coherent and consistent framework.

Through which stems:

- Respect, courtesy and cooperation between all members of a community centred in Christ and the teaching of the Church.
- Openness, dialogue, and community.
- A sense of justice, compassion, fairness and citizenship with our fellow human beings.
- A recognition of right and wrong and clear moral purpose.

4) Building an effective, dynamic curriculum

Research has, over the last five years, recognised the increasing importance of a coherent and appropriately sequenced curriculum **at subject level**. This means "access to knowledge for all, to enable our students to 'think the unthinkable and the not yet thought.' "

This emphasis requires teachers to think about the curriculum they offer in a new way. Knowing that knowledge accumulates in mental schemas means that at Bishop Challoner we think about each subject curriculum as a **narrative.** (For details of Christine Counsell's 'The Curriculum as a Narrative', please see **Appendix A**)

What we recognise as effective curriculum provision:

- There is a clear and coherent rationale for curriculum design which is shared and fully understood by all.
- The curriculum is planned and sequenced so that new knowledge and skills build on what has been taught before, and towards defined end points.
- Curriculum coverage allows pupils to access the content and make progress through the curriculum.
- The curriculum ensures that the most disadvantaged pupils and pupils with a SEND are given the knowledge and cultural capital they need to succeed in life.
- Reading is prioritised to allow pupils to access the full curriculum offer.
- Leaders regularly review and quality assure the subject to ensure it is implemented sufficiently well.
- The curriculum is inclusive and planned to meet the needs of all pupils.
- The curriculum for each subject is a progression model.
- Assessment is designed to shape future learning and are reliable.

Which results in:

- All students making good progress.
- Students making informed decisions as they pass from being GCSE ready to being ready for the next stage of their life journey.
- Learning being a positive experience for all.
- Students feeling comfortable and secure in the school environment and enjoying their education.
- Students are developed as fully rounded citizens of the 21st century.

5) Quality of Education: Intent, Implementation and Impact

The Curriculum and Teaching Development Team (CAT)

The CAT team has been established to support departments in providing a curriculum, accessible for all students, which is broad, rich and deep. The Team will work with colleagues from all subject areas to support the development of a whole school curriculum.
The key areas of focus for the CAT team are:

- **Curriculum Design**
- **Supporting staff in realising their potential in the classroom**
- **Providing opportunities, through the curriculum, to address disadvantage and provide equality of opportunity**
- **Incorporating careers into the curriculum**
- **Ensuring our curriculum reflects our local context**
- **Support for building and developing a KS3 Humanities curriculum**

Curriculum Intent: What we teach and why

At Bishop Challoner, each department has produced a curriculum intent document which clearly outlines, for each subject discipline, the important concepts related to curriculum design, such as knowledge progression and sequencing of concepts. The subject curriculums at Bishop Challoner use the national curriculum standards as a minimum expectation and reflect the subject rationale.

For an example of how this might look at a subject level, please see **Appendix B** (English Department Intent document: Year 7)

Curriculum Implementation: How we teach for learning

So that subject curriculum can be implemented successfully we have ensured that our subject leaders, at all levels, have clear roles and responsibilities and that they have the knowledge, expertise and practical skills to design and implement their curriculum, and to enable others to do so. Subject leaders will be lead on the design of schemes of work, which will lay out, in more detail, how the curriculum will be implemented, in terms of teaching and assessment.

For more detail on what a typical SOW might look like, please see **Appendix C** (History Department Year 8 SOW)

Principles of Evidence Informed Teaching for Learning

Each teacher at Bishop Challoner is expected to demonstrate in routine classroom practice, the behaviours, knowledge and pedagogic understanding set out below and detailed in **Appendix D**

10 Principles of Evidence Informed Teaching and Learning

Evidence shows that:

1. Most effective teachers routinely exhibit certain behaviours.
2. Some approaches to lesson design are more effective than others in securing high quality outcomes.

3. More effective teachers understand how students learn new content, concepts and ideas.
4. Most effective teachers know what practices are most effective in building knowledge and long term memory and why.
5. Most effective teachers place a strong emphasis on the importance of modelling and explaining.
6. Effective teachers place a strong emphasis on the importance of effective questioning.
7. Effective teachers place a strong emphasis on feedback.
8. Most effective teachers place a strong emphasis on assessment.
9. Most effective teachers place a strong emphasis on Behaviour for Learning.
10. Most effective teachers have a strong understanding of, and deploy strategies taking cognisance of, Cognitive Load Theory.

An important role of the CAT and Lead Teacher teams is to provide a range of T&L CPD which support our teachers in **embedding these principles** into every day practice.

Curriculum Impact: Monitoring and Evaluation of intent and implementation

The impact of our curriculum will be monitored in a number of ways, by senior and middle leaders. The monitoring process will be a supportive, collaborative one, reflecting the ethos of the Bishop Challoner community.

Senior and Middle Leaders will engage in:

- Learning Walks (see the Year of Teaching and Learning for more detail).
- Work review and informal pupil discussion (to extricate evidence of learning).
- KS3, 4 and 5 reviews of curriculum and data (using the intent and common framework documents as a basis for discussion).

6) Subject Specific Continued Professional Development

'One subject differs profoundly from another. And these differences are significant….If conversations about matters such as 'teaching' and 'learning' are to have any meaning at all, then the substance of what is being taught and learned needs primacy.' (C.Counsell)

We respect the uniqueness of each subject as a discipline and therefore the importance of CPD which is subject specific.

Opportunities for subject specific CPD:

- Subject Specific mentoring for Year 1&2 teachers
- Use of department time for subject knowledge discussions
- South Birmingham Network subject working groups
- Membership of subject associations – e.g. The Geographical Association
- Whole school membership of 'The Day'
- Princes Trust Institute 'subject knowledge days' (hosted by Bishop Challoner, for teachers new to the profession)
- Subject specific Twitter groups
- Subject specific Facebook groups
- Exam board subject specific training

7) Cultural Literacy, SMVSC, Taught not Caught

Bishop Challoner recognises that the most powerful vehicle for the development of cultural capital is the subject curriculum. That said, Bishop Challoner also offers a bespoke programme that responds to current affairs via form tutor time.

Appendix A – Curriculum as a Narrative

- Curriculum is content structured as narrative over time.
- A narrative (think novel, film, symphony, song …) is full of internal dynamics and relationships that operate across varying stretches of time
- Every bit of content has a function.
- A narrative works on its reader or listener through constant interplay of familiar and strange, and things can only be familiar or strange by virtue of earlier reference points, ones that stay with us.
- Armed with multiple sub-surface associations, from prior knowledge, we rapidly assimilate and interpret the new
- Narrative (I mean a good one) has the effect of keeping multiple strands all spinning at once.
- A narrative is constantly unifying, pulling things together so that they function.
- The narrative (curriculum) has rendered it (early detail) so secure in memory that lots of memory space is freed up for speedy grasp of plot twists (new knowledge)
- A narrative works through the indirect manifestations of knowledge.
- To put it another way, knowledge is fertile, generative and highly transferable.
- This is just how curriculum works – or is supposed to work.
- Grounded in memory through...secure recall, they (initial knowledge gained in lessons) are like clues at an early stage in a novel, it's now there, ready, waiting, in memory, for a 'wow, here it is again!'
- The core (specification) is like a residue – the things that stay, the things that can be captured as proposition (assessment/exam). Often, such things need to be committed to memory.
- If, for the purposes of teaching, we reduce it to those propositions, we may make it harder to teach, and at worst, we kill it.
- The act of reading the full novel is like the hinterland. To bypass reading the novel altogether would be vandalism.
- The term 'hinterland' is as fertile in curricular thinking as its literal meaning. It's not clutter. This is nothing to do with fun stuff to make things more interesting or engaging, nothing to do with extraneous activities to 'engage' (which are so often redundant when the content itself is engaging and its mastery rewarding).
- Hinterland helps us distinguish between a vital property that makes curriculum work as narrative and merely 'engaging activities'

Appendix B – English Department Intent: Year 7

Rationale:

- *We believe that through an engaging curriculum we can encourage pupils to reflect on the world in a meaningful and critical way and increase their cultural capital through their exploration of Literature and non-fiction texts.*
- *We aim to develop and refine our students' use of language, promoting vocabulary acquisition*
- *Instil a life-long love of reading and develop resilience when faced with challenging texts.*

Intent:

Subject: English — **Curriculum Intent Year 7**

Term	Core Propositional Knowledge (The what)	Procedural Knowledge (The How)	Hinterland
Autumn	• **Childhood Experiences** *Jane Eyre – Victorian schooling; Romelu Lukaku – poverty; Thai boys cave rescue – adversity; Wonder & One – disability; We Refugees - refugees* • **Writing to narrate/describe** • **A Christmas Carol – Dickens** *Victorian Christmas traditions/class/poverty*	• **Retrieval** • **Inference** • **Finding supporting evidence** • **Understanding vocabulary in context** • **SS1-11 (X-Y1); 1-5 (Y2-W2)**	• **Library induction** • **Book Doctor** • ***A Christmas Carol* theatre trip** • **WoW/key concepts – perseverance, gratitude, benevolence, remorse, adversity, altruism** • **Vocab banking**
Spring	• **Animal Farm (X&Y band)** *Social/historical context – Russian Revolution, WW2* • **Short Stories (W band)** *The Hitchhiker; The Man with the Yellow Face; Lamb to the Slaughter; The Sniper – understanding narrative structure, plot twists and characterisation* • **Writing to persuade/describe/inform**	• **Retrieval and inference** • **Finding supporting evidence** • **Understanding vocabulary in context** • **Linking texts to context** • **Exploring characterisation** • **Understanding writers' intentions** • **SS1-14 (X-Y1); 1-6 (Y2-W2)** • **Oration – persuasive speeches**	• **Poetry competition** • **Political awareness/current affairs** • **Farm trip – cross-curricular with eco group TBC** • **Readathon** • **WoW/key concepts - communism, dictatorship, democracy, corruption, propaganda** • **Vocab banking**
Summer	• **P2 Preparation** Reading fiction extracts • **Poetry (X&Y band)** *This is just to say; Timothy Winters; Stealing; Still I Rise; This is the place; Out of the Blue; Mr Oxford Don; White Comedy –social/cultural/historical influences on literature; variety of poetic forms and styles; biographical knowledge of poets.* • **Poetry (W band)** *Badger; The Eagle; Lone Dog; Revolting Rhymes – literary heritage poetry plus poetry in performance* • **Writing to describe/poetry**	• **Retrieval and inference** • **Finding supporting evidence** • **Understanding vocabulary in context** • **Linking texts to context** • **Understanding writers' intentions** • **Use of figurative language - personification, simile, metaphor** • **Cohesion and structure of descriptive writing** • **Oration – performance poetry**	• **WoW/key concepts - cultural identity; homelessness; 9/11; feminism; oppression** • **Poet Laureate competition** • **Vocab banking** **ALL YEAR:** • **Debate Mate** • **Student Writes – creative writing club** • **Writing challenge lessons** • **Equal Access to Reading (EAR) lessons – class novels/non-fiction booklet.**
Year 7: End Point	**By the end of Year 7, our aim is that all pupils will have been exposed to a range of high quality, challenging modern, classic and culturally diverse texts in different forms, supplemented by non-fiction. They will be beginning to understand links between texts and contexts. They will be able to respond to short-answer MCQ-style questions on unseen texts and begin to extend personal responses. Vocabulary will be extended through direct instruction and WoW; all students will be proficient with a range of synchronised sentences and developing confidence in independent writing. Key social/literary concepts are introduced to be embedded in later years.**		

Appendix C – History Department: Year 8 SOW

This is a snap shot of a newly revised History Scheme of Work, which sets out the key content and concepts, disciplinary knowledge, assessment and teaching methods. Again, it reflects both the rationale and intent of the History Department.

From Industrialisation to wars of destruction: Was this an era of progress?

Why might the Vindolanda 'Treasure Trove' surprise a History student?

Lesson	Key Question	Learning Objectives	Resources/Activities/Ideas	Propositional Knowledge	Procedural Knowledge	Opportunities for Hinterland	Teaching Methods
1.	***What can the objects at Vindolanda teach us about Roman Britain?***	To know what Vindolanda was. To understand why the Vindolanda tablets are so significant. To be able to compare Roman Britain to Britain today.	Students to consider what the artefacts tell us about the Romans and their lifestyle. Use documents of writing on the tablets to analyze the lifestyles and activities.	Frontier Artefacts Vindolanda Fort Hadrian's Wall	Use of Sources Use of Evidence Compare & Contrast	Discussion of the regular excavations of the area and the Vindolanda museum.	Direct Instruction Elaborate Interrogation Dual Coding
2.	***Did the Romans 'civilize' Britain?***	To know some key changes the Romans introduced to Britain. To understand the positive and negative impacts of these changes. To be able to judge how civilized Roman Britain was.	Could begin with looking at a Medieval town and labelling it, thinking about what the conditions are like. Compare and Contrast Medieval town with Roman town with a focus on art/architecture and hygiene. Consider why this might be 'surprising'.	Aqueduct Public Health System Forum Public Baths Amphitheatre Basilicas	Use of Evidence Change and Continuity Consequence	Comparison to our public health system.	Retrieval Practice Spaced Interleaving
3.	***How tolerant were the people of Roman Britain?***	To know the tensions that existed in Roman Britain. To understand why these tensions existed. To be able to compare the tolerance of Roman Britons to the tolerance of British monarchs.	With a focus on treatment of women, the treatment of slaves and other religions. Compare to actions of British monarchs: any similarities in the treatments of other religions etc.	Druids Slavery Equality	Diversity Compare & Contast	Links to conflict and cultural differences today. Modern slavery. Modern day discrimination e.g.: islamophobia and sexism	Retrieval Practice Direct Instruction

DEMO VERSION

Appendix D – The 10 Principles of Evidence informed Teaching for Learning

Principle 1	So we expect our teachers to…
Evidence shows most effective teachers routinely exhibit certain **behaviours**	• possess strong knowledge that is highly integrated, so that they combine new subject matter with prior knowledge and make lessons uniquely their own by changing, combining, and adding to them according to their students' needs and their own goals. • spontaneously recognize sequences of events occurring in the classroom which in some way affect the learning and teaching of a topic. • concentrate more on information that has instructional significance. • make better predictions based on their understanding about the classroom. • identify a greater store of strategies, stories, mnemonic and memory techniques that students might use when solving a particular problem, and predict what types of errors students might make • be more focused on solving problems with respect to individual students' performance in the class rather than the entire class. • opportunistic and flexible in their teaching. • take advantage of new information, quickly bringing new interpretations and understanding of the problem to light • spend a greater proportion of their time trying to understand a problem to be solved as opposed to trying out different solutions. • monitor their ongoing solution attempts, checking for accuracy, and updating or elaborating on issues as new issues emerge. • be great seekers and users of feedback information about their teaching such as tests and oral responses • have strong mental plans (as opposed to lesson plans) for their lessons, including a general sequence of lesson components and content. • leave aspects of instruction such as timing, or pacing the exact number of examples and problems to be determined during the lesson on the basis of student questions and responses. • skilful in keeping the lesson on track and accomplishing their objectives, while also using students' questions and comments as springboards for discussions. • achieve a balance between content-centred and student-centred (guided practice) instruction • build climates where error is welcomed, student questioning is high, engagement is the norm and where students can become resilient, reflective, resourceful and reciprocal learners. • walk around the classroom, making sure they spend some time in each part of the room to ensure full engagement. • periodically scan the faces of the students in the class, making eye contact with each student if possible. • pay particular attention to incidents or behaviours that look like they could turn into problems. • make eye contact with those students involved in an incident or who are exhibiting off task behaviour

	• move toward the students if the behaviour or incident continues, say something to the students, keeping the comments as private as possible. • intervene promptly when inappropriate behaviour threatens classroom climate • minimise **"timing"** errors (time between behaviour and intervention) • minimise **"targets"** errors (mistakes in identifying students responsible for the problem) • anticipate and prevent disturbances from occurring owing to a wider scope of anticipation and more selective information gathering. • detect when students lose interest and are not understanding. • adept at evaluating possible strategies while seeking and adding further feedback information to ascertain the effectiveness of their teaching. • meticulous in their efforts to adequately check and test out their hypotheses or strategies • have "automatic" cognitive skills derived from well learned routines. • respect students as learners and people, and demonstrate care and commitment for them • recognize possible barriers to learning and can seek ways to overcome these barriers. • receptive to what the students need, not attempting to dominate the situation. • motivate their students to master rather than perform by enhancing students' self-concept and self-efficacy about learning, • set appropriate challenging tasks, aiming for both surface and deep outcomes. • recognise that the gain pupils make between the end and beginning of the school year (progress) is the most reliable measure we have • distinguish between learning and performance and view testing as offering powerful insights into the impact of their teaching on learning and make adjustments to it in light of the messages to be gleaned from it. • Evaluate their own impact • Recognise surface learning is more about the content (knowing the ideas, and doing what is needed to gain a passing grade), and deep learning more about understanding (relating and extending ideas, and an intention to understand and impose meaning).
Principle 2	**So we expect our teachers to**
Evidence shows that some approaches to **lesson design** are more effective than others in securing high quality outcomes	• **1 Begin lessons with a Review of prior learning**. • A review of prior learning (retrieval practice) strengthens connections between material learned and improve recall so that it becomes effortless and automatic, thus freeing up working memory. • **2 Present new material in small amounts or steps** • Recognising working memory is small and can only cope with small chunks at a time teachers avoid presenting too much information at once recognising it overloads and can confuse students, who won't be able to process it.

	• Recognise sufficient time needs to be allocated to processes that will allow students to work with confidence independently. Expert teachers deal with the limitation of working memory by presenting only small amounts of new material at a time. • **3: Ask a large number of questions and check the responses of all students** • recognise questions allow students to practise new material and connect new material to prior learning and so ask a lot of them to determine how well material has been learned and whether additional teaching is required. • ask students to explain the *process* they used and *how* they answered the question, as well as answering the question posed • **4: Provide models** • recognise students require support to reduce the cognitive load on their working memory and help them to solve problems faster. Examples include: • provide clearly laid out, step-by-step worked examples • Identifying and explaining the underlying principles of each step • Modelling the use of prompts • Working together with students on tasks • Providing partially completed problems • **5: Guide student practice** • understand new material will quickly be forgotten without sufficient rehearsal. Rehearsal helps students to access information quickly and easily when required. Additional time needs to be spent by students summarising, rephrasing or elaborating on new material so that it can become • stored in long-term memory • is easily retrieved and • can be used for new learning and problem solving • recognise the quality of storage relies on : student engagement with the material and providing feedback to the students to correct errors and ensure misconceptions aren't stored • understand the rehearsal process can be facilitated and enhanced by: questioning students, asking students to summarise the main points and supervising students during practice • spend more time guiding practice, for example by working through initial problems at the board whilst explaining the reasons for each step or asking students to work out problems at the board and discuss their procedures. provide multiple models for students to allow them to be better prepared for independent work. • **6: Check for student understanding** • Frequently check for understanding to identify whether students are developing misconceptions as well as providing some of the processing required to move new learning into long-term memory. • Recognise getting students to answering questions causes them to elaborate and strengthen connections to prior learning in their long term-memory

	• Recognise the answers provided by students alert the teacher to parts of the material that may need re-teaching • **7: Obtain a high success rate** • Recognise that when students learn new material, they construct meaning in their long-term memory but understand errors can be made, as they attempt to be logical in areas where their background knowledge may still be weak. • Realise that the optimal success rate for fostering student achievement is approximately 80% and that high success rates during guided practice lead to higher success rates during independent work. • Recognise that if practice does not have a high success rate, there is a chance that errors are being practised and learned, which then become difficult to overcome. • Understand the development of misconceptions can be limited by breaking material down into small steps, providing guided practice and checking for understanding. • **8: Provide scaffolds for difficult tasks** • Recognise scaffolds of temporary support to help students to learn difficult tasks. These are gradually withdrawn with increasing competence. The use of scaffolds and models, aided by a master, helps students to serve their *"cognitive apprenticeship"* and learn strategies that allow them to become independent. • Scaffolds include: • thinking aloud by the teacher to reveal the thought processes of an expert and provide mental labels during problem solving • providing poor examples to correct, as well as expert models • Tools such as cue cards or checklists • Prompts such as "Who?" "Why?" and "How? that enable students to ask questions as they work • Box prompts to categorise and elaborate on the main ideas • A model of the completed task for students to compare their own work to • **9: Require and monitor independent practice** • always offer opportunities independent practice either at home or in the classroom. This follows guided practice and involves students working alone and practising new material. Sufficient practice is necessary for students to become fluent and automatic. This avoids overcrowding working memory, and enables more attention to be devoted to comprehension and application. • Recognise that independent practice should involve the same material as guided practice, or with only slight variation. Optimal teacher-student contact time during supervision is 30 seconds or less, with longer explanations being required if the teacher receives an indication that several students are practising errors. • **10: Engage students in weekly and monthly review (Retrieval Practice)** • Recognise that as students rehearse and review information, connections between ideas in long-term memory are strengthened. The more information is reviewed, the stronger these connections become. This also makes it easier to learn new information, as prior knowledge becomes more readily available for use. It also frees up

	space in working memory, as knowledge is organised into larger, better-connected patterns. • Practical suggestions for implementation include: • Review the previous week's work at the beginning of the following week • Review the previous month's work at the beginning of every fourth week • Test following a review • Weekly quizzes
Principle 3	**So we expect our teachers to…**
Evidence shows more effective teachers **understand how students learn new content, concepts and ideas**?	• **1: Recognise students learn new ideas by reference to ideas they already know.** • offer a well-sequenced curriculum to ensure that students have the prior knowledge they need to master new ideas. • use analogies because they map a new idea onto one that students already know, elaborating on them, and directing student attention to the crucial similarities between existing knowledge and what is to be learned. • **2: Understand that to learn, students must transfer information from working memory (where it is consciously processed) to long-term memory (where it can be stored and later retrieved).** • Recognise that students have limited working memory capacities that can be overwhelmed by tasks that are cognitively too demanding, use "worked examples" as a method of reducing students' cognitive burdens. • use multiple modalities to convey an idea; for example, they will speak while showing a graphic but take care to ensure that the two types of information complement one another — such as showing an animation while describing it aloud — learning is enhanced. But if the two sources of information are split — such as speaking aloud with different text displayed visually — attention is divided and learning is impaired. • Make content explicit through carefully paced explanation, modelling, and examples can help ensure that students are not overwhelmed. (Note: "explanation" does not mean teachers must do all the talking.) • **3: Understand cognitive development does not progress through a fixed sequence of age-related stages. The mastery of new concepts happens in fits and starts.** • Refrain from keeping content from students because it is "developmentally inappropriate" but ask only "has the student mastered the prerequisites?"
Principle 4	**So we expect our teachers to…**
Evidence shows most effective teachers know what practices are most effective in building **knowledge and long term**	• **Recognise Information is often withdrawn from short term memory just as it went in and before it is processed and that memory is a "residue of thought"** • assign students tasks that require explanation (e.g., answering questions about how or why something happened) or that require students to meaningfully organize material to focus students' attention on the meaning of course content. • help students learn to impose meaning on hard-to-remember content by using stories and mnemonics

memory and why?	• **Practice is essential to learning new facts, but not all practice is equivalent.** • space practice over time, with content being reviewed across weeks or months, to help students remember that content over the long term • explain to students that trying to remember something makes memory more long-lasting than other forms of studying. • use low- or no-stakes quizzes or self-tests in class to do this, • interleave (i.e., alternate) practice of different types of content. For example, if students are learning four mathematical operations, it's more effective to interleave practice of different problem types, rather than practice just one type of problem, then another type of problem, and so on. • **Each subject area has some set of facts that, if committed to long-term memory, aids problem-solving by freeing working memory resources and illuminating contexts in which existing knowledge and skills can be applied. The size and content of this set varies by subject matter.** • teach different sets of facts at different ages. For example, the most obvious (and most thoroughly studied) sets of facts are math facts and letter-sound pairings **in early elementary grades**. For maths, memory is much more reliable than calculation. Math facts (e.g., 8 x 6 = ?) are embedded in other topics (e.g., long division). • Recognise a child who stops to calculate may make an error or lose track of the larger problem. • **Recognise the distinction between episodic and semantic memory.** • Avoid too many gimmicks and novelty in lessons in which students remember the context of lesson (semantic) rather than the content of the lesson (episodic) • Recognise the extraneous features can be what get remembered, rather than the more prosaic, but more important information that we want them to learn. • Recognise, however, if all students can think about is how boring it is, then that will be what is remembered, at the expense of content. **Intelligence is made up of fluid & crystallised intelligence** • Fluid: the ability to reason and solve problems • Crystallised: the ability to access and utilise information stored in long-term memory • Fluid intelligence is highly dependent on crystallised intelligence as 90% of problem solving is derived from long term memory
Principle 5	**So we expect our teachers to…**
Evidence shows most effective teachers place a strong emphasis on the importance of **modelling and explaining**?	**Recognise that Modelling and explaining are not the same thing.** • Appreciate explaining has to do with propositional knowledge ie what you think about and modelling has to do with procedural knowledge ie what you think with **Offer Effective explanations exhibiting the following features:** • Brevity- (take cognisance of concentration) • Clarity-(strong subject knowledge, use appropriate academic language) • Memorability-(novelty yes, gimmicky, no)

	• Relevance- (sequenced-building up knowledge must happen a step at a time) **Use Pre prepared models recognising they powerfully assist learning because they:** • Allow students to see an outcome • Allow students to explicitly articulate outcomes • efficiently cover content and make expectations explicit **Use Live (real time modelling) because:** • Allow students to see/hear an expert do it for the first time • Allows students to hear the expert "thinking aloud" about the decisions they are making • Allow students to hear what expert is thinking at each stage • Allow students to ask questions about the process as it is happening • Allow teachers and students to identify problems as they arise and think aloud about how to solve them • Allow teachers to slow the process down to look in detail and most difficult part • Allows students to predict next steps **Model Effectively knowing it must be:** • 1 Formal queued part of the lesson • 2 Appropriate length • 3 Clarity (diction, enunciation, academic language/terminology) • 4 Memorable • 5 Relevant (appropriately sequenced) • 6 Mediated through continual questioning • 7 Deploys advance organisers (?) • 8 Explores underlying principles so students see what is involved • 9 Shares thinking making mental processes explicit • 10 Encourages students to think about process and ask questions • 11 Highlights possible pitfalls, blind alleys, easy misconceptions • 12 Provides immediate opportunities for students to practice the new skill while fresh in their minds (memory is a residue of thought) • 13 Vigilant (teacher continually scans and questions to ensure engagement) • 14 Supports initial attempts with prompts (verbal and gestural), scaffolds and praise • 15 Repetitive to combat continued misconceptions and build autonomy • 16 Enables pupils to and learn from the efforts of other
Principle 6	**So we expect our teachers to…**
The evidence shows effective teachers place a strong emphasis on the importance of effective **questioning?**	**Recognise the answers of a few confident students to teacher questioning are a bad guide to what the rest of the class is thinking or understanding** • Recognise higher order questioning and high participation is an "optimal classroom" (0.9) • Understand order questioning with low participation is a "cruising" classroom (0.4) • Aware that lower order questioning with high participation is a "growth" classroom

	• Appreciate lower order questioning with low participation is an "unsatisfactory" classroom • Use a balance between closed (factual seeking) and open (enquiry based) type questions? • Give the pupils time for reflection before requiring an answer? • Give further prompts to elicit extended answers? • Offer opportunities to explain why they have offered that response? • Encourage students to confer, perhaps in pairs or small groups, before deciding on an appropriate answer? • Form a clear structure for questioning – e.g. teacher initiates, pupils respond & teacher provides feedback? • Offer time ever for pupils to initiate their own questions to test the learning objectives of the lesson? • Prepare key questions in advance of the lesson that demand more than recall of knowledge • Fully utilize all pupil response systems
Principle 7	**So we expect our teachers to**
The evidence shows effective teachers place a strong emphasis on **feedback**	**Adhere to the advice of researchers such as John Hattie, Robert Mazarno and Dylan Wiliam, who claim that feedback is the single most powerful thing a teacher can offer to ensure progress.** • Avoid where possible feedback with a grade attached to it- recognising it is probably pointless because it will not be read. • Recognise oral feedback is much more powerful than written feedback • Appreciate student feedback to teachers is much more powerful than teacher feedback to students • Understand the best feedback a teacher can possibly give is the next lesson • Appreciate the only thing that matters about feedback is what students do with it
Principle 8	**So we expect our teachers to…**
The evidence shows most effective teachers place a strong emphasis on **assessment**	**Adhere to the advice of researchers such as Hattie, Mazarno and Wiliam that suggest assessment is a tool by which teachers measure the impact of their teaching on learning** • Identify key areas of knowledge, concepts and skills in their curriculum, then identify a set of tasks which will demonstrate to what extent pupils have fully mastered the important content. • Ensure assessments are chosen strategically to help pupils recall the right information. • Ensure there is a clear purpose for assessment – does it measure what it is intended to measure? • Get a balance between frequent, short knowledge recall tests and synoptic assessment. • Ensure there is clarification between formative and summative assessment: formative assessment produces a consequence for the teacher and the learner, summative assessment judges the extent of pupils' learning of the material. • Encourage learners to reflect on their own learning in order to calibrate the security of their learning. • Use exemplar pupil work to clarify what success looks like in specific assignments.

	• Try to assess independent application of knowledge in unfamiliar contexts. • Ensure assessment strategy contains synoptic assessment to support linear qualifications • Clearly distinguish between assessment at the point of learning (where recently taught material is being tested) and assessment distant from the point of learning (where long term memory and recall are being called upon for problem solving)
Principle 9	**So we expect our teachers to…**
The evidence shows most effective teachers place a strong emphasis on **Behaviour for Learning**	**Foster and nurture a behaviour for learning classroom by embedding a set of non-negotiables:** • Insistence on good behaviour is not oppressive and believing it is can be an "attitudinal impediment." • Instill a conviction that self-restraint"+ "self-regulation"= "self-mastery" • Believe "Self-mastery" is essential to being truly free and participating in society • Recognise that compliance to rules and norms is the first rung on the behaviour ladder to autonomy, independence and freedom • Appreciate that "Good" behaviour is not the absence of "bad" behaviour • Understand that "Good" behaviour is multi-faceted and is about coping, interacting, resourcefulness, reciprosity, reasonableness, resilience, reflectfulness and respectfulness. **1: Constantly monitor (with-it-ness)** • Continually look for signs of off-task behaviours, restlessness, lack of understanding, boredom, etc. • Continually communicate to an off-task student that they are aware of his/her behaviour. If it is minor and non-disruptive, they may not want to call attention to the student and stop the rest of the class from learning. Instead, they give a look, nod, or some other signal that they are aware of the issue. • Recognise that student behaviour and expressions can tell a lot. If everyone looks totally lost, it may be time to stop and check for comprehension or ask for questions. **2: Use time democratically** • Avoid spending too much time with any one student or group, recognising it may be convenient to always talk to the students in the front row or cater their lesson to the group of students that seems to be paying attention, but recognise this only increases classroom management problems. • Appreciate spending any more than **30 seconds** may be "too long" to spend with any student/group and focusing on the "chosen few," sends the signal it's okay for the other students to ignore them and that they don't expect much from the rest of the class. **3: Keep small things big!** • Deal with 'small' issues as they arise to ensure they do not have to deal with major discipline issues.

	• Ensure consistency by developing a classroom management plan with policies and procedures on how to deal with inappropriate behaviour Ensure students know their policies and always enforce them every time. • Take advantage of the **ripple effect** recognising that when students see them effectively deal with a classmate's misbehaviour, the other students become less likely to act up. The reverse is also true - students who see others get away with inappropriate behaviour will test the limits, themselves. **4: Prioritise** • Where two or more misbehaviours are occurring simultaneously, **deal with the more serious misbehaviour first**, making sure to give the other offender(s) a nonverbal gesture to communicate their awareness of the situation. **5: Keep students alert** • Call on students randomly by posing a question, pausing for a few seconds, and then pouncing on a student for an answer. • Recognise that Pose, pause pounce is not only an excellent questioning strategy but a highly effective behaviour for Learning strategy. • Circulate through the room checking on individual and group assignments while students work. • During direct, or teacher-led instruction, attempt to **make eye contact** with each member of the class about once a minute. • Take time to explain each rule itself and the reason behind it recognising it helps students see the need for the rule and increases likelihood of accepting it
Principle 10	**So we expect our teachers to…**
Evidence shows most effective teachers have a strong understanding of, and deploy strategies taking cognisance of, **Cognitive Load Theory**	**Appreciate why Dylan William maintains that Cognitive Load Theory (CLT) is "the single most important thing for teachers to know." CLT, first researched by Sweller, is based around the idea that our working memory – the part of our mind that processes what we are currently doing – can only deal with a limited amount of information at one time. Reif's description of cognitive load is extremely useful: 'The cognitive load involved in a task is the cognitive effort (or amount of information processing) required by a person to perform this task.'** **1: Recognise there are theory three different forms of cognitive load:** • **Intrinsic** cognitive load: the inherent difficulty of the material itself, which can be influenced by prior knowledge of the topic • **Extraneous** cognitive load: the load generated by the way the material is presented and which does not aid learning • **Germane** cognitive load: the elements that aid information processing and contribute to the development of 'schemas'. CLT suggests that if the cognitive load exceeds our processing capacity, we will struggle to complete the activity successfully. In short it learning is hampered when working memory capacity is exceeded in a learning task'. **2: Understand working memory should be seen as short term and finite, whereas long-term memory can be seen as infinite.**

	Understand learning is about moving knowledge to long-term memory because when a student is exposed to new material, they can draw on this previous knowledge and the cognitive load is reduced. Recognise, if subject knowledge is incomplete, the student is unable to fall back on the long-term memory and the working memory becomes overloaded, leading to working memory failures. **3: Recognise there are multiple ways expert teachers reduce cognitive load** • **Recognise Intrinsic cognitive load** can be reduced by breaking down the subject content, sequencing the delivery so that sub-tasks are taught individually before being explained together as a whole. Thus avoiding overwhelming a student too early on in the introduction of new work. • **Understand Extraneous cognitive load** can be reduced by the way in which instructions are presented. Learners make sense of new material by referencing schema or mental models of pre-existing knowledge. Lack of clarity in instruction puts too high a load on the working memory, and so too much time is spent problem-solving the instructions as opposed to new schema formation. For example, lessons that use PowerPoint with excessive writing and the teacher talking at the same time, can inadvertently generate excessive cognitive load and lead to working memory failures. • **Deploy Simple-to-complex sequencing to reduce cognitive load**. Start with worked examples (where a full solution is shown, which students then have to apply to a new question), then moving into completion assignments (where a partial solution is given and they have to complete it themselves), and then moving to conventional tasks, where they are simply given the question. This acts as a form of scaffolding, which helps students to learn independently, without necessarily needing the help of their teacher for each stage. • **Recognise the dangers of excessive use of worked examples for the more able?** • Aware of the 'expertise reversal effect' suggested by Kalyuga. By continuing to provide worked examples for very able students, their usefulness is significantly reduced because worked examples contain information that the more able could work out for themselves, making it redundant and therefore extraneous cognitive load rather than useful germane cognitive load.