Curriculum Leadership Handbook

2024-2025

Primary Knowledge Curriculum
Name:
Subject:

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1. An Introduction to the Primary Knowledge Curriculum

Since its conception, the Primary Knowledge Curriculum (PKC) has placed 'powerful knowledge' at the heart of learning. This is knowledge that "is powerful because it provides the best understanding of the natural and social worlds that we have and helps us go beyond our individual experiences" (Young, 2013). Through a deep respect of the traditions of each unique subject, the PKC recognises the identity of the disciplines that are studied. Our vision, and intent, was to create a well-sequenced, well-specified and ambitious curriculum for all children to access. As a result, the PKC has been organised coherently to ensure it builds interesting and meaningful connections within and across history, geography, science, art, DT and English, allowing children to think deeply about interesting content. Our aim is to inspire the next generation of learners through teaching them essential background knowledge, so that they can embark on their next step in their journey filled with confidence, able to form their own opinions and develop a deep love for learning.

What is a knowledge-rich curriculum?

A knowledge-rich curriculum exposes children to ambitious content that has been highly specified and well-sequenced, leaving nothing to chance. Within schools, time is limited, and a knowledge-rich curriculum ensures that each moment will support children in acquiring the knowledge, skills and cultural capital that they will need to become well-educated citizens of the future. Every historical figure encountered, philosophical idea grappled with, and scientific concept applied, fits neatly into a scheme of learning that holds a sense of purpose and develops logically from lesson to lesson, unit to unit and year to year. Utilising cognitive science, the psychology of learning, memory and schemata, a knowledge-rich curriculum is designed to ensure that the knowledge is taught to be remembered. At its core, a knowledge-rich curriculum democratises knowledge – it enables all children, regardless of socio-economic background, to be provided with the opportunities to succeed in later life. The PKC has taken evidence and research into account to ensure that it incorporates the principles of spaced retrieval, formative low-stakes quizzing and plenty of practice to develop knowledge fluency in pursuit of mastery.

2. What is cultural capital?

In Ofsted's new framework, it states that leaders need to take on or construct a curriculum that is ambitious and designed to give all learners the knowledge and cultural capital they need to succeed in life. Ofsted's understanding of 'knowledge and cultural capital' is derived from the wording on the national curriculum as, "the essential knowledge that pupils need to be educated citizens, introducing them to the best that has been thought and said and helping to engender an appreciation of human creativity and achievement."

For us, this means the knowledge children need to be able to think for themselves, to understand the circumstances within which they live, to recognise systems within society, to ask questions and know how to find answers.

Initially, the phrase had caused some controversy, especially regarding how essential knowledge was defined. However, this term has been around long before Ofsted used it. It was French sociologist Pierre Bourdieu who first wrote about the concept of a person possessing "capital". Bourdieu (1984) explores the theory of cultural capital and highlights the link between an individual's background and their access to knowledge. Bourdieu observed that cultural capital is often linked to social class and as a result reinforces social divisions, hierarchies of power and inequality within society. As with knowledge, those with cultural capital can gain more as they move through society with much more power than those who do not have it.

Therefore, developing cultural capital within a school setting can expose children to experiences that they may otherwise not have had: our well-defined knowledge-rich curriculum does this. It is the intention of the PKC to address social disadvantage by developing pupils' cultural capital. It is important that teachers know that cultural capital is not just an 'add-on' that can be 'done' through trips or through musical instruments. Schools following PKC have embedded cultural capital into the fabric of their curriculum offer.

3. Intent, Implementation, & Impact

The curriculum is content that is structured over time. At a more complex level, it encompasses everything that happens in a school. This includes what is learnt in classrooms (the enacted curriculum) and what is learnt everywhere else in school, from corridors to assemblies (the hidden curriculum).

The Primary Knowledge Curriculum team have thought deeply about curriculum design; what is included, why we have chosen it, how we sequence curriculum content and how it then contributes to children learning and remembering more over time. This ensures everything we teach has a clear rationale and our curriculum is the best it can be.

We want all teachers to understand the content of the curriculum but also the thinking behind it. Through engaging with the subject and unit rationales, and curriculum-focused professional development, we want to enable all staff to think deeply about curriculum intent, implementation and impact.

Ofsted and the 'Three I's'

When inspectors discuss **'intent',** they are referring to 'the extent to which the school's curriculum sets out the knowledge and skills that pupils will gain at each stage'. When they talk about '**implementation'** they will 'consider the way that the curriculum developed or adopted by the school is taught and assessed in order to support pupils to build their knowledge and to apply that knowledge as skills'. Finally, when inspectors look at **'impact'** they will 'consider the outcomes that pupils achieve as a result of the education they have received.'

Our Curriculum Intent

The three principles of a knowledge-rich curriculum that underpin the Primary Knowledge Curriculum:

- Knowledge is **valued** and **specified**
- Knowledge is **well-sequenced**
- Knowledge is **taught to be remembered**

The content in our curriculum has been carefully chosen by subject experts and has been sequenced in a meaningful way that enables children to make connections and progress from unit to unit, term to term and year to year. We value each subject and teach them discretely, ensuring that our children develop a deep understanding and love of each distinct discipline. Where appropriate, links are made across disciplines to enable children to make meaningful connections (e.g. our children learn about Northern Europe in geography before learning about the Vikings in history). Every school who works in partnership with PKC is encouraged to make adaptations to include local history, geography and other locally relevant subject content. Schools should think carefully about local powerful knowledge (powerful knowledge relevant to their local context) and weave this into the curriculum.

We specify exactly what we teach in each subject and communicate this with teachers and parents. Our intended curriculum can be found in these documents:

- Whole school curriculum overview: outlines the units covered in each subject across the year
- Subject curriculum maps: detail exactly what we cover in each subject, with additional detail showing what is covered in each lesson
- Subject rationales: explain the reasoning behind how our curriculum was developed for each subject
- Unit rationales: outline the substantive knowledge, concepts and disciplinary knowledge taught in each unit, and how each unit fits in with the bigger curriculum picture
- The knowledge goals (KG) and assessment goals set out in our planning documents for each subject: KGs explain what we plan for all children to know by the end of each lesson, and the assessment shows what we expect children to commit to long-term memory by the end of the unit

Curriculum Implementation

Our intended curriculum is translated over time in the classroom following a structured approach. Teachers are provided with detailed documents for each unit to support with subject knowledge and planning. This ensures every teacher has secure subject knowledge and reduces workload, enabling teachers to spend more time thinking about how each lesson can be effectively enacted in their classroom to support their class.

Each lesson starts with a prior learning review, where children are supported to retrieve prior knowledge and make connections. We have an emphasis on explicitly teaching vocabulary, and each lesson introduces, orally rehearses, and engages with key vocabulary (e.g., looking at the etymology of new words). Key vocabulary is contextualised throughout the lesson and children are given multiple opportunities to apply new words. Our teachers enact our intended curriculum using research-based pedagogy, such as Rosenshine's Principles of Instruction, to ensure information is presented in small steps, clearly explained and modelled, and children have many opportunities to talk, answer questions, explain their learning and work independently. Throughout lessons, teachers assess/monitor pupil responses (e.g., through questioning, written and oral responses, multiple-choice quizzes or MCQs, using Knowledge Organisers) and provide effective feedback.

Curriculum Impact

As we have clearly specified what we want our children to know, do and remember, when reviewing impact, we assess against the Knowledge Goals laid out in the intended curriculum, enabling us to check whether children can remember what we set out for them to learn. We carry out subject-specific monitoring and curriculum reviews to assess impact and use these to plan for future development.

As we know that curriculum intent, implementation and impact go hand in hand, the curriculum cannot be successful without careful thought in all three areas. We are always reflecting upon the impact of our intent and implementation and identifying ways in which we can improve outcomes for our children. Our curriculum work is never finished - it is at the very core of our purpose and our children deserve the very best curriculum we can create.

4. What does Ofsted say about curriculum?

From September 2019, the Education Inspection Framework (EIF) that Ofsted use changed to reflect a more explicit focus on curriculum at a whole-school and subject level.

- Ofsted use the terms 'Intent; Implementation; Impact' to describe the three states that the curriculum goes through in a school.
- In Ofsted's view, the result of a good, well-taught curriculum is that pupils will know more, remember more and are able to do more.
- Intent, implementation and impact are never to be treated as separate, disconnected sub-judgements.
- There is no expectation from Ofsted to write a school 'intent' statement.

The intent in individual subject curricula should show what exactly it is that pupils should know at different points of their education. Knowing what they learn (and perhaps more importantly, what they don't learn) and why they learn it, shows a good grasp of the curriculum intention.

What does Ofsted say about curriculum intent, implementation & impact?

Curriculum Intent:

Ofsted and Curriculum Intent	**PKC Curriculum Intent**
The school's curriculum is rooted in the solid consensus of the knowledge and skills that pupils need, in order to take advantage of opportunities, responsibilities and experiences of later life. In this way, it can powerfully address social disadvantage.	*The content in our ambitious curriculum has been carefully chosen by subject experts and has been sequenced in a meaningful way that enables all children to make connections and progress from unit to unit, term to term and year to year. For example, before our children study the 'History of Human Rights and Equality' in Year 6, all children would have built the pre-requisite knowledge needed for this unit, e.g., learning about the Magna Carta. The curriculum was developed with collaboration from secondary school teachers to ensure that it provides children with foundational knowledge that will serve them well in KS3 and beyond.*

Ofsted and Curriculum Intent	**PKC Curriculum Intent**
It is clear what end points the curriculum is building towards and what pupils need to know and be able to do to reach those end points.	*The knowledge goals (KGs) outline what all children need to know by the end of each lesson, and lesson 6, the unit assessment, shows what we expect children to commit to long-term memory by the end of the unit. The end points set by Year 6 require pupil's to have developed a secure foundation of substantive and disciplinary knowledge across the curriculum. The endpoints for each unit are set out in each unit rationale.*
The school's curriculum is planned and sequenced so that new knowledge and skills build on what has been taught before and towards its clearly defined end points.	*We think deeply about how we sequence chosen curriculum content and how it contributes to children learning, doing and remembering more over time. Everything we teach has a clear rationale. Teachers have access to unit rationales and planning documents, which highlight where children are building on prior knowledge.*
The curriculum reflects the school's local context by addressing typical gaps in pupils' knowledge and skills.	*The PKC is adapted to include local history, geography and other locally relevant subject content. We think carefully about local powerful knowledge and weave this into the curriculum e.g., the spatial sense units Y1-Y6, and the local study in Y5 geography. We support teachers to identify and address gaps and misconceptions unique to their school and amend planning appropriately, without sacrificing the sequence of the curriculum.*
Curriculum planning accounts for delays and gaps in learning that arise as a result of the pandemic. The curriculum remains as broad as possible for as long as possible, including when delivered remotely.	*The broad curriculum is being followed consistently by all pupils, and teachers are supported with scaffolding learning for pupil's with knowledge gaps. Taking children out of class during this curriculum provision for interventions should be avoided where necessary.*
There is high academic ambition for all pupils, and the school does not offer disadvantaged pupils or pupils with SEND a reduced curriculum.	*At its core, the PKC enables all children, regardless of socio-economic background, or SEND, to be provided with the opportunity to access an ambitious curriculum so that they too can succeed in later life. In certain situations, further adaptations and scaffolds are put into place to ensure all pupils succeed and that all pupils can access the curriculum.*

Curriculum Implementation:

Ofsted and Curriculum Implementation	**PKC Curriculum Implementation**
Teachers have expert knowledge of the subjects that they teach. If they do not, they are supported to address gaps in their knowledge so that pupils are not disadvantaged by ineffective teaching.	*In the PKC, we support teachers' subject knowledge in the plans and through CPD. Teachers are provided with detailed documents for each unit, prepared by subject specialists, to support with subject knowledge and planning. This ensures every teacher has secure subject knowledge and reduces workload, enabling teachers to spend more time thinking about how each lesson can be effectively enacted in their classroom to support their class. Regular training and support should be provided to teachers.*
Teachers enable pupils to understand key concepts, presenting information clearly and encourage appropriate discussion.	*In the PKC, we support teachers to achieve this through carefully structured lessons including directly teaching vocabulary, explicit instruction and meaningful talk tasks to encourage discussions.*
Teachers check pupils' understanding effectively and identify and correct misunderstandings.	*Throughout lessons, teachers assess/monitor pupil responses (e.g., through questioning, written and oral responses, MCQs, using Knowledge Organisers) and provide effective feedback. The PKC recommend that senior leaders and teachers from each school attend our 'Responsive Teaching Programme'.*
Teachers ensure that pupils embed key concepts in their long-term memory and apply them fluently.	*Each lesson starts with a prior learning review, where children are supported to retrieve prior knowledge and make connections. MCQs, Knowledge Organisers and written assessment tasks are also used to develop fluency.*
The subject curriculum is designed and delivered in a way that allows pupils to transfer key knowledge to long-term memory. It is sequenced so that new knowledge and skills build on what has been taught before and pupils can work towards clearly defined end points.	*Because the curriculum has been well-sequenced, teachers can focus on presenting information in small steps. A good example of building on what has been taught before is how the spatial sense units in geography build on one another to develop geography skills such as map reading. Another example might be how children develop colour mixing skills in art, particularly in KS1. In History, you might like to look at an example of conceptual understanding such as how children build their knowledge around the concept of empire.*
Teachers use assessment to check pupils' understanding in order to inform teaching, and to help pupils embed and use knowledge fluently and develop their	*The PKC plans contain suggested assessment tasks and the end of units alongside continual formative assessment through questioning, the use of MCQs, tasks that require fluency and opportunities to show*

understanding, and not simply memorise disconnected facts.	*understanding in every lesson. OFSTED do not require any particular type of assessment, or data, but they want to know if the assessment you do highlights what has been learned and matches your rationale for your subject. We want our pupils to be able to talk enthusiastically about their learning, making connections and forming opinions. We believe memorising disconnected facts does not lead to meaningful learning and so we focus on developing understanding gradually as pupils make their way through our curriculum.*
Their approach to teaching remains rooted in evidence and the key elements of effective teaching. Teachers consider the most important knowledge or concepts pupils need to know and focus on these. Feedback, retrieval practice and assessment are prioritised.	*Our approach to teaching is based on findings from cognitive science and credited educational research. For example, our lesson plans promote the use of Rosenshine's Principles of Instruction. The PKC plans will support you to identify precisely what children need to know and how to check they have been successful, using questioning, talk tasks, assessment tasks, the Knowledge Organisers and MCQs.*

Curriculum Impact:

Ofsted and Curriculum Impact	**PKC Curriculum Impact**
A well-constructed, well-taught curriculum will lead to pupils learning more and so achieving good results. Therefore, such a curriculum contributes to evidence of impact. There need be no conflict between teaching a broad, rich curriculum and achieving success in examinations and tests.	*The PKC is broad and rich. Every discipline taught is valued and we do not narrow our curriculum in preparation for tests. We advise schools to timetable the curriculum for each class and ensure that all children have access to the full curriculum.*
Disadvantaged pupils and pupils with SEND acquire the knowledge and cultural capital they need to succeed in life.	*We think carefully about how to scaffold learning, not differentiate, to enable all learners to succeed. We recommend that teachers attend our 'Closing the Gap' CPD session on how to effectively support all pupils.*
Pupils are making progress in that they know more, remember more and are able to do more. They are learning what is intended in the curriculum.	*We monitor this through our pupil voice interviews, and because the curriculum is the progression model, we can pick up a Y3 book and a Y6 book and see the progression.*
All learning builds towards an end point. Pupils are being prepared for their next stage of education, training or employment at each stage of their learning. Inspectors will consider	*We are always reflecting upon the impact of our intent and implementation and identifying ways in which we can improve outcomes for our children and support their transition from EYFS to KS1, KS1 to KS2, and from KS2 to KS3. We work closely with our secondary school*

whether pupils are ready for the next stage by the point they leave the school or provision that they attend.	*to ensure that our curriculum supports pupils to thrive at KS3 and beyond.*
If pupils are not able to read to an age-appropriate level and fluency, they will be incapable of accessing the rest of the curriculum, and they will rapidly fall behind their peers.	*We encourage pupils to read widely and often. Our PKC English units support reading in different subject areas, building on what children have learned in history, geography, science and art. We know that comprehension problems are reliant on background knowledge, and we address this through our knowledge-rich curriculum.*

5. Curriculum Leadership

a. The role of Senior Leaders

A school which privileges curriculum development will ensure that time is found for curriculum work to happen. Moreover, it is integral that Senior Leaders are involved in curriculum conversations and have a clear understanding of the principles behind their curriculum. This includes knowing what is taught, when it is taught and what students should be able to accomplish. Ofsted expectations highlight that there should be regular and sustained conversations about the curriculum at SLT level, that are focussed purely on the content and quality of curriculum. The temptation for reductive interpretation, wholesale adoption and imposition of generic requirements is appealing but must be resisted (Ashbee, 2021).

Harris (2004) notes, 'the job of those in formal leadership positions is to hold the pieces of the organisation together in a productive relationship… distributing leadership equates with maximising the human capacity within the organisation' (p. 14). The idea behind Harris' thinking here is that leadership is no longer bound by traditional structures, but instead is shared by middle and senior leaders through a variety of curriculum responsibilities. Therefore, everyone who teaches the curriculum is responsible for the development of it, so everyone can make a meaningful contribution. School development priorities set by SLT should feed into the subject-specific action plans, and all leaders must be clear on what the areas for development are each year.

Below are the questions that should be routinely discussed during line management meetings and in regular conversations with middle leaders, subject leaders and SLT:

- By the end of the Key Stage, what knowledge should your pupils be able use with fluency (speed and accuracy)?
- How were decisions about the selection and sequencing of knowledge made? A follow-up question: What aspects of your subject's domain have you left out within your curriculum? Why?
- What is the impact of having taught (choose a specific sequence of learning) in year X, when the child gets into year Y?

- How is your assessment designed to ensure that you can tell whether all students have security in the core knowledge?
- For a chosen unit in year X, what core knowledge did pupils need to know in advance, and how did you ensure this was secure?
- Do your team share your vision for the curriculum in this subject? What would they say the vision is?
- How do you know that you are being ambitious for your pupils? Can you show me an example of appropriate challenge in your curriculum model?
- How do you ensure all children can access the curriculum? What scaffolds and support do you provide for learners, including children with SEND?
- Do you have subject-specific vocabulary which students need to learn for each year group?
- How will you use homework to ensure that pupils meet the curriculum intention?

The role of Subject Leaders

a. Curriculum oversight
b. Raising standards
c. Achieving consistency
d. Managing resources
e. Evidence-gathering, reviewing and improving

a. Curriculum oversight

Senior leaders need to have curriculum oversight across all subjects and know what is being taught, when it is being taught and why.

The role of a subject leader is to become the expert of their subject within their school, even if they would not consider themselves 'experts' before taking on their role. Their role is to have curriculum oversight of their subject from EYFS through to Year 6. With the PKC, the subject leader is supported in doing this as the curriculum has been highly specified.

Subject leaders need to familiarise themselves with their subject's curriculum overview, the subject rationale and the individual unit rationales across the curriculum. They should also familiarise themselves with national curriculum requirements to understand how the PKC meets these requirements and how it

may exceed them. The sequencing of the curriculum has been meticulously planned, and subject leaders play an integral part in ensuring that the curriculum is being implemented correctly and professionally by staff. Omitting lessons or changing the sequence could disadvantage pupils. We recommend partner schools speak with the PKC team when considering making significant amendments to content and/or the sequence of the curriculum to ensure fidelity and rigour is maintained.

Lastly, where appropriate, subject leaders need to understand substantive and disciplinary knowledge within their subjects and how children build both through the curriculum. They should also understand the local context and how the PKC has been written, or adapted, to reflect the school's local community.

b. Raising Standards

A fundamental part of being a subject leader is to ensure that standards within the curriculum subject are always improving. Subject leaders are a driving force in enacting the curriculum; therefore, they should be engaged in developing understanding of best practice in their subjects. There are excellent subject associations that subject leaders should join, such as the Historical Association, the Geographical Association and the Royal Society of Chemistry, which provide training and support for primary practitioners. By sharing their understanding from professional development, subject leaders can help other teachers to teach their subject better, which should be their core aim.

Subject leaders need to carefully consider what good teaching and learning look like both generally and within their subject. A school could have the best curriculum in the world, but if it is not being implemented well by skilled teachers, it will not succeed. Subject leaders should familiarise themselves with Rosenshine's Principles of Instruction and consider how they can implemented by staff in their day-to-day practice. Subject leaders need to also consider how the curriculum can be accessible to all children, so that all children can obtain a high success rate.

c. Achieving consistency

All PKC lessons follow a consistent lesson structure. This ensures that children always know what to expect and what they must do in each section. This prevents cognitive overload and allows our pupils to familiarise themselves with

clear, embedded routines. As a subject leader, it is important that consistency across the school is achieved. This helps to ensure a high-quality education for all. Leaders must ensure that tasks are purposefully completed and that fidelity to the planning is evident.

Learning environments should also be considered. For example, at the Knowledge Schools Trust, working walls should always consistently have certain elements visible: the subject and unit displayed, knowledge organisers; key vocabulary and key facts, key people, and key dates, where appropriate.

d. Managing resources

For the curriculum to be enacted by all staff effectively, resources need to be available and accessible. The role of the Headteacher is to decide on appropriate budgets for curriculum subjects. The role of subject leaders/middle leaders is usually to know their budget and to ensure that resources are effectively managed within it. It is the duty of subject leaders to follow the financial policies and procedures before any purchases are made, displaying the highest level of financial integrity, and always considering value for money when making purchases. It is the role of the subject leader to ensure that physical resources are organised and stored safely. Keeping a stocklist of items purchased ensures that subject leaders know how many items there are and where they are located (e.g., each classroom having a globe).

e. Evidence-gathering, reviewing, and improving

Evidence-gathering refers to the information subject leaders collect. This is completed systemically through a range of activities. Gathering evidence enables us to evaluate the effectiveness of teaching and learning and the impact on pupil progress.

Reviewing considers the outcomes from the evidence-gathering and determines any action necessary for improvement. This informs judgements about the progress towards improvement targets and actions required.

Improving ensures that schools continuously strive to become better places of learning for the pupils and better places to work for the staff.

Gathering evidence around the effectiveness of the curriculum is an essential element of the role of school leaders and subject leaders. The evidence gathered allows leaders to evaluate impact and decide on actions to improve further. Effective review of school life enables proper decisions to be made in relation to curriculum subjects.

f. Action Planning

Action planning is a strategic method for school leaders to decide which steps to take to improve. Targets set out on action plans need to take into consideration the school's development priorities. They should also ensure the school/trust vision is maintained.

Action plans should be purposeful and lead to improvements in teaching and learning. All subject leaders must write and review their subject action plan as the year progresses, taking ownership and accountability for their subject.

It is important that the overarching targets are broken down into a sequence of smaller steps. Action plans should set realistic and specific timescales and include clear success criterion so that targets can be more easily understood and met. Accountability should be clearly set out.

6. EYFS

Every child deserves the best start in life. We are all aware that children do not begin school on a level playing field, and we have all seen the gap between those who have lots of prior life experience and those with little. The Primary Knowledge Curriculum for Early Years has been written with the intention of closing that gap, so that every child believes that they have the power to determine their own lives and to make a positive change in the world. The PKC Early Years teaching resources will take children beyond the limits of their personal experiences and the classroom to ensure that no child is left behind.

Our aim is to provide our youngest pupils with the tools that they need to establish a strong sense of identity and to feel empowered by the knowledge they have of the world around them. The PKC EYFS teaching materials have been carefully written to spark pupils' curiosity and to develop their oral language, communication and comprehension through engaging, high-quality teaching resources. We want to enrich and widen their vocabulary, so that they can confidently and effectively think, reason, argue, and participate in the important conversations in life.

The EYFS Framework

In Early Years, learning and development is split into seven inter-connected areas:

- Communication and Language
- Physical Development
- Personal, Social and Emotional Development
- Literacy
- Mathematics
- Understanding the World
- Expressive Arts and Design

The PKC Early Years materials have a strong focus on the specific area of Understanding the World (UW), as this ELG lends itself for greater transition into Key Stage 1. History (Past and Present), Geography (People, Culture and Communities) and Science (The Natural World) are interwoven within UW as

children are encouraged to observe and explore the physical world, communities and life both past and present. Pupils are encouraged to think about scientists, historians and geographers and consider what they do, what they think about and how they find out what they know. This foundational knowledge helps children to develop disciplinary understanding over time.

The PKC Early Years resources fit into the whole-school approach to curriculum design and provide children with both the substantive and disciplinary knowledge that they need to become confident, powerful and inquisitive learners. Our materials support staff in building a strong foundation of learning for our youngest pupils and to encourage a seamless transition to Key Stage 1 and into Key Stage 2.

High-Quality Teaching

Within Early Years, it is vital that children receive effective teaching and develop characteristics of effective learning that form a firm foundation for their future learning. The EYFS Framework identifies the following characteristics of effective teaching learning that are embedded in our vision for our early years' curriculum:

- playing and exploring - children investigate and experience things, and 'have a go'
- active learning - children concentrate and keep on trying if they encounter difficulties, and enjoy achievements
- creating and thinking critically - children have and develop their own ideas, make links between ideas, and develop strategies for doing things

Within Early Years, children should be taught through a range of approaches in a teacher's repertoire, for example: storytelling, role play, exploration and discussion. At the beginning of every lesson, pupils should be given time to orally rehearse the key vocabulary that the teacher has identified from the plans and from their knowledge of the children. There should be multiple opportunities within the lesson for partner talk, where children are encouraged and praised for use of the key vocabulary. Pupils' learning, vocabulary and understanding of the world should be enriched through exposure to poems, stories, non-fiction texts, maps, external trips, and visitors.

EYFS Provision & Continuous Provision

Whilst the PKC EYFS plans suggest two teacher-led sessions and one adult-led session a week, we also make suggestions for both provision and continuous provision. These are the activities and resources that children have access to consistently throughout the week, term or year. During child-directed time, they may choose to engage with this provision that has been carefully selected and prepared by staff who know the curriculum and the children well. Resources are selected for the wealth of learning opportunities they provide, and provision is designed to help children to develop the characteristics of effective learning. Children can engage with continuous provision independently, with peers or with an adult. Examples may include provision for construction, creative play, sand and water play, a reading area, mark-making, roleplay and small world play, among other things.

Primary Knowledge Curriculum for Early Years

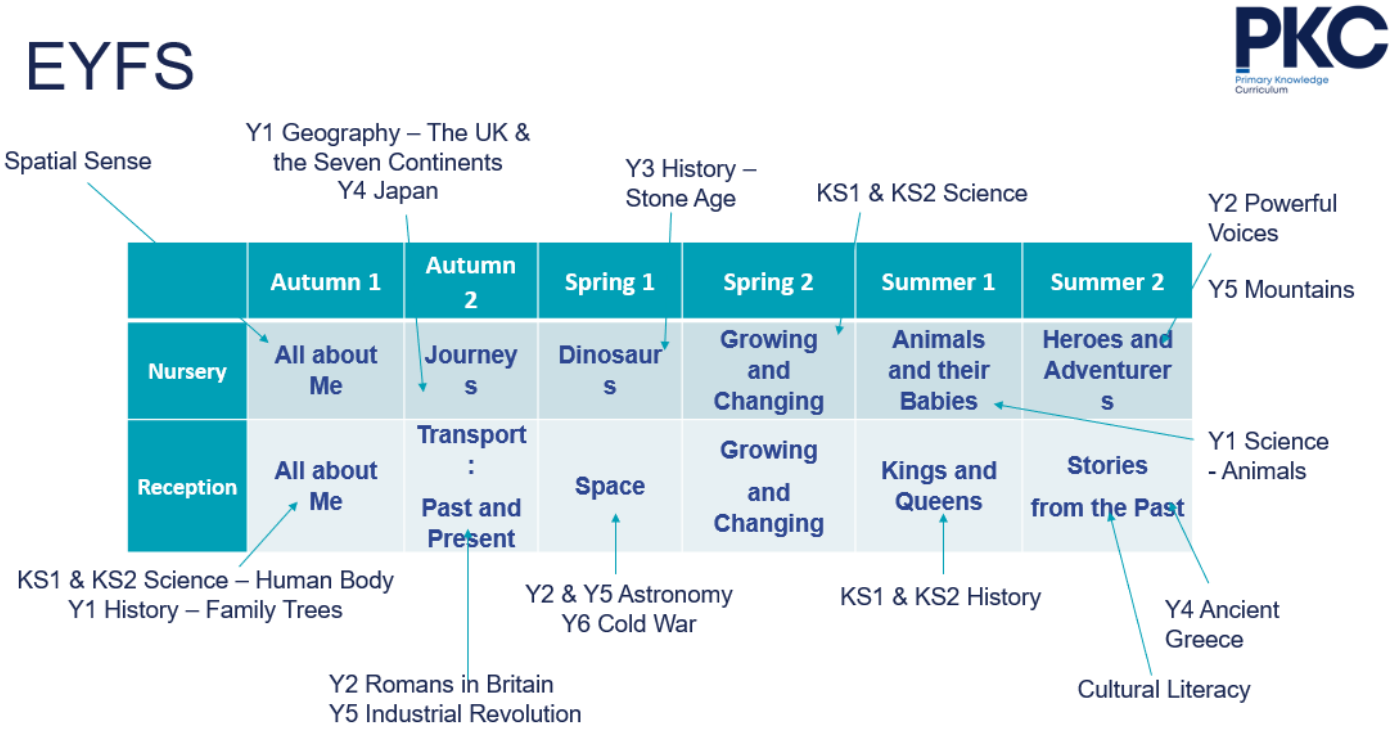
Our PKC EYFS materials will take children on a journey from their local area to outer space, from the fascinating world of dinosaurs to the ancient stories of Greek Gods. Children will encounter interesting people such as George Stephenson, known for his steam train 'The Rocket', and Valentina Tereshkova, the first woman in space. They will explore captivating places such as The North Pole and Mount Everest. They will grow plants, study maps, look closely at fallen leaves, observe ice melting, design floating boats and much more. Importantly, they will be learning and using new vocabulary in a wide range of contexts. Children will learn more and remember more as they progress through their early years, enriching their play and their conversations with the powerful knowledge in our curriculum.

We have specified powerful knowledge content, vocabulary, supporting texts and ideas for continuous provision in an easy-to-use planning format. The plans focus on content that will support children to meet the new (2021) Early Learning Goals for Understanding the World, with additional ideas for other areas of learning included.

It is important that subject leaders, who may not be teaching within Early Years, are familiar with the curriculum content. For example, if you are a geography lead, you will need to know how your subject develops in the Early Years, so you will need to talk to Early Years teachers about Understanding the World and how geography is being introduced. *Which places do they learn about? Which maps*

do they use? Important conceptual understanding begins to develop in the Early Years, such as spatial sense and chronological understanding. Subject leaders need to know how their subject works from Early Years through to the end of Key Stage 2.

EYFS Curriculum Links with KS1/KS2



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	All about Me	Journeys	Dinosaurs	Growing and Changing	Animals and their Babies	Heroes and Adventurers
Reception	All about Me	Transport: Past and Present	Space	Growing and Changing	Kings and Queens	Stories from the Past

7. Evidence-Gathering

Our aim at the PKC is to improve the lives of children through our ambitious curriculum and through high-quality teaching and learning. School leaders, including senior, middle, and subject leaders, all have a responsibility to gather evidence on the quality of teaching and learning. Effective evidence-gathering helps to establish priorities for future school improvement plans. The evidence-gathering process should be supportive and encourage staff to work collaboratively within and across teams. If a school is working effectively, there will be a positive impact on pupil outcomes.

Definition of evidence-gathering:

Within the context of a school, evidence-gathering is both the process of keeping track of performance and to ensure compliance with policies. Effective evidence-gathering shows whether a system, or process, is functioning efficiently as intended. The process of evaluation is more to do with effectiveness and improvement. Evaluation focuses on assessing the quality and impact of processes, learning from them, or identifying ways of improving them. Evidence-gathering focuses on checking if the processes are in place.

It is important for school leaders to know that not everything that matters is measurable, and not everything that is measurable matters, and that the more a specific metric is used to make important decisions, the more it will be gamed (Muller, 2019).

Evidence-gathering includes:

a. Data
b. Pupil Voice
c. Book Looks
d. Lesson Observations
e. Learning Walks
f. Planning and Resourcing

a. Data:

The new Ofsted framework states that inspections will not examine any internal school data. Internal data still has use and is essential for gathering evidence on impact. It is important to note that internal data can be both quantitative and qualitative. When internal data is collected, it needs to be meaningful and purposeful, and should be used to inform school improvement planning, decision making and our curriculum. Data collection that does not achieve this only serves to increase workload unnecessarily.

It is important that school leaders and classroom teachers know how well their pupils are making progress over time and how the curriculum caters for all groups of children. Senior leaders need to consider what decisions needs to be made, they then need to decide what type of data is to be collected and why; all school leaders need to understand how data is used to improve attainment and progress over time (Wiliam, 2013). Additionally, for Senior Leaders and specific subject leaders (English, Phonics and Maths), a thorough understanding of external data is essential, including EYFS Baseline Assessment, Phonics Screening Checks and KS2 SATs. Overall, it is important that we remember that school data is about maximising potential and is focused on how to best help pupils with their learning. In addition, data that has already been collated (e.g., data on SEND pupils, Disadvantaged, EAL etc.) can be used to inform other curriculum subjects.

<u>Decision-driven data collection model (Wiliam, 2019):</u>

1. What decisions need to be made?
2. What data will help to make those decisions in a smart way?
3. Collect and use the data.

b. Pupil Voice:

Pupils are the main stakeholder in any school. We view pupil voice as deep conversations with pupils about their learning. As Crane (2001:54) states: “schools cannot learn how to become better places for learning without asking the students.” When considering evidence-gathering and evaluating the impact of our curriculum, discussions with pupils play an integral part. The Ofsted

inspection handbook highlights how in grading the overall effectiveness of a school, inspectors are asked to: 'evaluate what it is like to be a pupil in the school.'

Pupil voice provides school leaders with a view as to the impact of the enacted curriculum. Senior leaders and subject leaders can hear first-hand from the pupils and discern what has been taught and, more importantly, what has been remembered. As stated, when conducting pupil voice, it is important that the questions asked focus on pupils' learning.

Example of pupil voice questions:

1. What can you tell me about…democracy/migration/seasons/Impressionism?
2. What do you know about history/geography/science/art?
3. What do you know about historians/geographers/scientists/artists?
4. How is this knowledge linked to what you have learnt before?
5. How do you develop your vocabulary in lessons?
6. What is the most fascinating thing you have learned in (insert subject)?
7. Why is learning about History/Geography/Art/Science important?
8. Thinking back to people you have learned about across the curriculum (e.g. Darwin, Elizabeth I, Boudicca) – why were they important to learn about?
9. What helps you with your learning in class?
10. What did you learn last year that has helped you with your learning this year?
11. How does your learning in geography link to your learning in history?
12. How are you challenged in history/geography/science/art?
13. What is a lesson like in your class?
14. What is a knowledge organiser and how do you use it in class?

c. Book Looks:

Book looks can be understood as reviewing pupil outcomes, within pupil books, and observing progress over time to form a view of whether pupils know more, can do more and remember more. It is suggested that book looks are done in conjunction with pupil voice in order to get a better picture of pupils' understanding. When looking at work in pupils' books, we can infer the pride that pupils take in their work and the standards that are expected by teachers. However, school leaders need to look further than poor proxies for learning such as neatness of presentation and handwriting. When looking through pupil

books, leaders need to grapple with whether the knowledge and concepts have been deeply understood and consider if this has had impact on long-term learning. It is important that school leaders ensure a hybrid approach to book looks which marries up **quality assurance** (e.g., Is the curriculum coverage evident? Are standards consistent? Is there evidence of compliance with school policies?) with **expected best practice** (e.g., How are pupils challenged? How have misconceptions been addressed?)

It is also important to know that looking at work in pupil's books does not provide a reliable indication of what pupils have *actually* learned. Books on the surface may look presentable, and task may have been completed, but the focus needs to be on what the pupils themselves *know* and remember, so a triangulation of book looks, lesson observations and pupil voice is needed.

Example of questions to consider when conducting a book look:

1. What substantive knowledge is evident/has been understood?
2. Which concepts are evident/have been understood?
3. Which subject-specific vocabulary has been used?
4. Which disciplinary knowledge is evident?
5. Have any misconceptions been made?
6. How well do children write in my subject?
7. What do assessments tell me about how well the curriculum is being enacted?
8. How are children with SEND and lower prior attaining pupils supported?
9. How are children challenged?
10. Are standards in books consistent across the school?
11. Do children take pride in their work?
12. Can children recall information showing that learning is durable?
13. Have children made strong progress from their starting points?
14. Do the tasks effectively capture the learning from the lesson?
15. Can I see evidence of children knowing more, doing more and remembering more as they progress through the year/years?

d. Lesson observations:

Within a school context, a lesson observation is defined as the act of observing another teaching professional whilst they teach. There are two main purposes of lesson observation: (1) a form of quality assurance and evaluation; and (2) a

form of professional development. Within our trust, we view lesson observations as a tool to develop teaching practice, rather than to evaluate. When conducting lesson observations, best practice can be to include both a pre-meeting and a post-meeting. During the pre-meet, it is encouraged that the observee discusses what it is that they would like to focus on and improve. Matt O'Leary (2020) states that one of the central aims of a lesson observation is to, "encourage the teacher to engage in a process of reflection and analysis." During the post-meet, the observer is required to provide precise feedback which *directly* relates to improving the teaching and learning. The observee is required to engage with the professional dialogue to reflect deeply on their lesson taught. Effective teachers take greater responsibility for their own learning and development.

When conducting lesson observations, it is important that leaders understand the difference between learning versus performance. 'Performance' refers to the temporary behaviours immediately observable after the instruction process and refers to short-term learning. Conversely, 'learning' refers to the permanent changes in behaviour or knowledge that support retention and refers to the long-term. So, what a pupil can tell you immediately after your instruction is 'performance', but what they can tell you after a considerable amount of time has elapsed is 'learning'. Learning (long-term retention) is the goal of education, whereas performance is a poor proxy of learning.

It is important to consider the Poor Proxies for Learning (Coe, 2015) when observing in a classroom:

- Students are busy: lots of work is done (especially written work)
- Students are engaged, interested, motivated
- Students are getting attention: feedback, explanations
- Classroom is ordered, calm, under control,
- Curriculum has been 'covered' (i.e. presented to students in some form)
- (At least some) students have supplied correct answers, even if they
    - Have not really understood them
    - Could not reproduce them independently
    - Will have forgotten it by next week (tomorrow?)
    - Already knew how to do this anyway

Remember, performance is short-term, whereas learning is long-term. What this means in practice is that teachers will not know if their students have *learnt*

something until significant time has passed. Our goal as educators is to foster an environment in which we equip our pupils with knowledge and skills that are both durable and flexible. Overall, we want our pupils to step into classrooms today knowing more, doing more and remembering more than they did yesterday.

Having more experienced staff conduct lesson observations and learning walks with novice teachers and leaders is an excellent way to increase conscious competence. By watching a lesson with an expert narrator, implicit classroom practice can be illuminated, and the narrator can focus in on aspects of practice which may have otherwise been misinterpreted or entirely missed.

e. Learning Walks:

The purpose of learning walks is to gain a 'big-picture' understanding of the teaching and learning within a school. It is important to know that they are not intended to focus on the performance of an individual but of the collective. Learning walks are intended to be developmental and undertaken in a supportive and professional manner. Any evidence collected should feed into future school improvements. Prior to commencing a learning walk, school leaders should decide on what they which to focus on during the learning walk (e.g., behaviour, feedback, scaffolding, questioning strategies etc.). Feedback to the staff body should address the intent of the learning walk, what the findings show, and what the next steps are going to be to ensure a continuous cycle of school improvement.

f. Planning & Resourcing:

The purpose of monitoring the planning and resourcing is to ensure that the intended curriculum is being delivered, to better support teachers and enhance their professional development.

<u>Example of questions to consider when monitoring planning & resourcing:</u>

1. What are the knowledge goals and are they evident on the plan?
2. Does the planning emphasise prior learning?
3. Is the learning broken down into small manageable steps?
4. Are pre-determined hinge questions evident in the planning?
5. What subject-specific vocabulary is included?

6. Does the planning effectively pre-empt misconceptions?
7. When and where are models provided?
8. Are there scaffolds evident and are they effective?
9. How is the learning broken down to support *all* pupils?
10. How are pupils challenged?
11. Do the tasks effectively capture the learning from the lesson?
12. Are the resources having the impact that was intended?
13. Is it evident that teachers know where the learning is going?

Overall, the purpose of monitoring is for school leaders to seek to influence adults' knowledge and behaviour. When certain behaviours develop into cultural norms, they become systems and processes. When established, the systems and processes dictate the climate of the school. In turn, the climate of the school can be monitored through surveys with pupils, parents, and staff.

g. Monitoring Feedback:

The purpose of feedback is to develop reflective teachers who can critically think about their own practice. Research has shown that if teachers stop receiving useful feedback, their performance is known to plateau around their third or fourth year of teaching and grow slower in their subsequent years (Papay and Kraft, 2015). It is important to perpetually develop teacher knowledge as more experienced teachers help pupils to achieve more than their novice peers (Papay and Kraft, 2015) and the difference between an expert teacher and a 'poor' teacher could be as high as whole year's learning (Sutton Trust, 2011).

Research has shown that if a teacher receives regular and actionable feedback, they are more able to make adaptations to their practice, which can result in better teaching (Wood et al, 2014). This is something that school leaders need to carefully consider when implementing a culture of developmental monitoring to ensure that time for professional dialogue, after the monitoring activities, is carefully factored in.

Effective Feedback:

Coe et al (2014) suggests that there are six principles of effective teacher feedback:

1. Ensure the focus is maintained on improving student outcomes
2. Ensure the feedback focuses on clear, specific, yet challenging, goals
3. Focus on the learning rather than the person, and not comparing the person to others
4. Encourage teachers to be continual independent learners
5. Ensure the feedback is given by a mentor in an environment of trust and support
6. Ensure SLT promote an environment of professional learning and support

From an evolutionary perspective, our brains are wired to thrive from belonging, trust and high expectations. Brown, Stoll, and Godfrey (2017:136) summarise the importance of social relations within school context and outline the vitality of optimal relationships to ensure self-improvement; the authors' go on to state: 'Empirical evidence suggests that where social relationships are steeped in high-levels of trust, they are likely to improve outcomes for pupils.'

Direct Feedback:

When referring to direct feedback the purpose is to identify a past or current behaviour. In this context, feedback is given to reinforce an appropriate behaviour. It is suggested that direct feedback be used for Early Career Teachers.

To ensure effective direct feedback is enacted by staff, the Situation-Behaviour-Impact (SBI) model is a useful tool which ensures that the feedback being given is meaningful, actionable and specific. Actionable feedback ensures that the recipient has something concrete they can do to improve their behaviour or habit; and for feedback to be actionable it needs to be specific. The SBI model follows the following steps:

Situation: describe the *specific* situation (where and when) in which the behaviour you are targeting took place.
Behaviour: describe the behaviour you *directly* observed. Keep this factual, and do not insert opinions of judgements.

Impact: describe the *effect* the behaviour had on others (pupils, parents, staff). When feedback is given consistently, in-the-moment, and well, then a culture of trust can be established amongst all staff who will be more open to accepting and acting on future feedback, creating a pattern of learning and growth.

Examples of direct feedback:

Situation: During the teach section of the geography lesson…
Behaviour: You noticed that several pupils did not understand the concept of migration. You then spent 20 minutes asking questions on what the pupils think migration is…

Impact: Because curriculum time is precious, a better use of teaching time would have been to explicitly state what migration was and then focus your questioning to check for understanding, rather than spending time trying to facilitate an answer without first teaching the pupils. This would have ensured that all pupils were clear on this learning.

Situation: During the independent task in the history lesson…
Behaviour: You went over to your desk and began flicking through the slides for the next lesson, and a couple of pupils during this time still had not started on their independent task…

Impact: If you navigated the room, clarified misconceptions, answered questions, and scaffolded the task for the struggling pupils, this would have ensured that you obtained a high success rate for all pupils.

Situation: In the English lesson, during the guided practice section…
Behaviour: You asked pupils to include a fronted adverbial of time at the start of their sentence, and several pupils began their sentences with 'The' and 'They'…

Impact: Without explicitly guiding student practice in this section, some pupils will be left behind. If you had shown examples of different fronted adverbials of time, explained these and their purpose before asking pupils to include one, it would have enabled all pupils to be successful.

Situation: This afternoon, when we were walking into the assembly hall…

Behaviour: You noticed that several pupils from other classes were not lining up in silence, so you intervened to ensure that all pupils, irrelevant of whether they were in your class or not, were behaving correctly…

Impact: It was impressive how quickly you went over to deal with the issue ensuring our school standards were being upheld by all.

Instructional Coaching:

Instructional coaching is a form of professional development which involves a trained expert working with teachers to help them improve their practice. The principles of instructional coaching link to Ericsson and Pool's (2016) theory of deliberate practice: the idea that if you want to improve in something you need to deliberately practice that specific component in pursuit of mastering it. For example, if you want to improve your modelling ability, rather than stating, "I will practise modelling in each lesson", which is quite vague, you will say, "I will practise live-modelling a task and thinking aloud as I do it so pupils understand my line of thought". Ericsson and Pool (2016) emphasise that deliberate practice requires determination and focus.

In a school context, teachers can move from their current performance towards this target performance by practising a sequence of sub-goals with the aid of a coach. This allows them to overcome existing habits and adopt new behaviours. The input of the coach involves observing the teacher's current performance, and then setting precise sub-goals and designing deliberate practice of these future goals. Generic feedback such as, "You need to improve your pace" because it is vague and does not provide specificity on how to improve.

Coaching feedback needs to target the performance, identify the gap between current performance and the target, and then break this down into components that can be deliberately practiced. Ultimately, the role of the coach is to help the teacher to create manageable, bite-sized steps for improvement. For instructional coaching to be successful, the coach needs to be an expert teacher who has deep understanding of effective teaching and learning.

Examples of Instructional Coaching Feedback:

Current performance: A teacher struggles to link prior learning with new learning.

Target performance: Teacher to activate prior knowledge at the start of each lesson. This is because the more a pupil engages with their prior understanding, the more likely they are to learn well, build their schema and the less likely they are to misinterpret new material.

Steps to achieve this: Coach to look at the curriculum materials with the teacher to help familiarise them with what the pupils have previously learnt. Deliberately add prior learning activities into the lesson plan and flipchart for the next lesson. Prepare a script for the next lesson which offers a model example of activating prior learning. Begin the next lesson with a prior learning section.

Current performance: A teacher does incorporate enough time for pupils to engage in structured discussion.

Target performance: Teacher to provide opportunities for pupils to talk about the material learnt in a productive manner utilising the think-pair-share questioning technique.

Steps to achieve this: Establish talk partners for every pupil. Set the question with a goal and a timeframe, “You have three minutes to explain the process in four bullet points.” Give the pupils 1 minute to think about this for themselves. For the remaining 2 minutes, set pupils off to work with their partners and circulate the room and listen as pairs are talking. Afterwards, use cold calling to sample pairs’ responses.

Current performance: Teacher sets an independent task which leaves pupils confused.

Target performance: Teacher to use live modelling showing the pupils how to do things effectively, highlighting key procedures and the thinking that underpins them; making the implicit explicit.

Steps to achieve this: Think about the next independent task pupils need to complete and think about a model you can provide to help the pupils achieve this task. During the next lesson, model completing a task step-by-step, narrating the process as you go. Model your decision-making process and how you organise any thinking. Review the piece of writing and evaluate if the model is correct. Set a task to emulate the model.

Current performance: Teacher does not use any self-quizzing with the pupils.

Target performance: Teacher to train pupils to self-quiz using knowledge organisers so that they can study on their own in order to build a secure schema with strong recall of core knowledge.

Steps to achieve this: Coach to work with teacher in identifying which parts of the knowledge organiser would be suitable for self-quizzing to benefit pupils in the upcoming lesson. In the lesson, direct pupils to read specific sections. Ask pupils to read and rehearse the information, either aloud or internally. Then train pupils to close and cover the specific section and engage in generative recall process, e.g., remembering definitions, adding labels to a diagram, placing ideas in the correct sequence. Then check for accuracy.

8. Closing the Attainment Gap

Supporting the attainment of all pupils is a key priority for us at the PKC. Class teachers are encouraged to adapt lesson planning and provide scaffolds to ensure the learning is accessible to all pupils. Additional specialist advice should be sought when appropriate to support SEND, EAL and disadvantaged pupils.

SEN: A child has special educational needs and disabilities (SEND) if they have a learning difficulty and/or a disability that means they need special health and/or education support.

EAL: A child for whom English is an additional language (EAL). A pupil recorded as having English as an additional language if they are exposed to a language at home that is known, or believed, to be other than English.

Disadvantaged Pupils: Disadvantaged pupils are defined as pupils who have been eligible for Free School Meals (FSM) at any point over the last 6 years; pupils who have been looked after continuously for at least one day in the last year; and pupils who have left through a formal route, such as adoption.

Lower Prior Attainment: A term used to refer to the current achievement of a pupil, which is below the level expected of average pupils. The term lower attaining (LA) is used to indicate the current state and does not indicate anything about limitation on a child's potential.

It is important that all our children have the support they need to reach the knowledge goals set out within the lesson. We know that some children may require additional support and scaffolding to obtain a high success rate across the class. Below, we have identified some examples of what we can do to support all children within lesson. Additionally, we have provided further tips and adaptations that can be made to support SEND, EAL, LA and disadvantaged pupils.

a. **Goal: We want all children to develop extensive academic vocabularies**

What we can do in PKC lessons for all children:

- Explicitly teach key vocabulary in PKC lessons
- Use etymology or morphology where appropriate to explain the meanings of key vocabulary
- Orally rehearse and discuss vocabulary at the beginning of the lesson, using images, different voices, or actions, where appropriate.
- Contextualise and refer to vocabulary throughout the lesson, e.g., underline key vocabulary on the IWB.
- Require pupils to use key vocabulary during talk tasks, independent tasks and in verbal answers back to the teacher
- Display key vocabulary on the working wall
- Use sentence stems to assist children using new words in full sentences
- Provide word banks for independent tasks and set expectations that children use the words in their writing
- Provide feedback on their use of key vocabulary in written tasks
- Include some examples of the PKC vocabulary in the children's spelling homework

Additional support for SEND, EAL, disadvantaged or lower attaining pupils:

- Provide word banks with visuals (or even concrete resources where appropriate) that can be used on the carpet or at desks. The images can be taken from the flipchart and knowledge organiser to maintain consistency. Children or adult could point to the word/image each time it comes up in the lesson to reinforce the meaning.
- Children could tick off words from their word bank in independent tasks
- Pre-teach key vocabulary
- Post-teach key vocabulary
- Share knowledge organisers and ask parents to support their children learning key vocabulary at home

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b. **Goal: We want all children to develop secure disciplinary knowledge**

What we can do in PKC lessons for all children:

- Every time we teach a lesson, ensure we introduce the discipline. Ask questions such as ‘what is history?’, ‘what do historians do?’
- Explain why we are doing tasks - e.g., scientists need to have a lot of knowledge about a subject, and then they can produce their own hypothesis and use the scientific method to see if they are right
- Use sentence stems to support children with talking and writing like historians/scientists/artists/geographers
- Support children in seeing themselves as a scientist/historians etc by dismantling limiting, stereotypical ideas. E.g., the stereotypical image of a scientist being a man, white lab coat and instead expose them to the vast range of scientists from diverse backgrounds as well as different fields of science, e.g., palaeontologist, botanist, meteorologist, naturalist etc.

Additional support for SEND, EAL, disadvantaged or lower attaining pupils:

- Ensure they can access the tasks and be motivated knowing that they can, and are working as ‘scientists’, ‘historians’ etc too. This could include using scaffolds and breaking down new learning into smaller steps.

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c. <u>Goal: We want all children to develop secure substantive knowledge</u>

What we can do in PKC lessons for all children:

- Focus on the knowledge goals when planning and teaching lessons. Be aware of cognitive load and not overloading working memory
- Use low-stakes quizzing frequently
- Refer to the Knowledge Organiser each lesson and engage with core content in a meaningful way, including using retrieval practice
- Use cold calling and no-opt-out questioning. If a child does not know an answer, get the correct answer from another child (or provide one), and then go back to the original child to check for the correct response
- Use storytelling and models during the teach section
- Check for understanding throughout the lesson

Additional support for SEND, EAL, disadvantaged or lower attaining pupils:

- Maintain high expectations that all children can learn the knowledge goals, apart from in unique cases. If a child is unable to reach the expectations set out in the curriculum, then the most ambitious curriculum for that child needs to be planned with the SENDCo
- Use targeted questioning in lessons
- Pre- and Post-teaching of core knowledge
- Open-ended tasks, with support where needed
- Opportunities for children to share knowledge verbally or through other ways (e.g., MCQs) if writing is a barrier
- Support with reading key texts, e.g., sources, where reading is a barrier
- Additional key images, models and scaffolds provided during teaching input and independent practice to support learning - these could be used with an adult or accessed independently
- Tasks could be broken down into smaller chunks e.g., each component of the task could be written as a step on a whiteboard for the child to tick off as they accomplish it

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d. <u>Goal: We want all children to develop chronological understanding in history</u>

What we can do in PKC lessons for all children:

- Place all new learning in the context of what has been learned before
- Refer to the KO each lesson, and provide retrieval practice using the KO, referring to the timeline on KOs when necessary
- Ask questions to elicit chronological awareness - e.g., what came first, this or that?
- Draw on causation when possible – e.g., how did X lead to Y?
- Use visual timelines on the IWB and Working Wall

Additional support for SEND, EAL, disadvantaged or lower-attaining pupils:

- Provide additional visual timelines on the carpet/at tables
- Use flashcards to order key events - begin with two/three events, and move on to more when they can do this fluently

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e. <u>Goal: We want all children to develop locational knowledge</u>

What we can do in all PKC lessons for all children:

- When learning something new, use a map to locate where the event took place or where the person lived
- Look at where this place is near to and its relation to where we are. Also, look at what continent it is in and retrieve prior knowledge of this location
- Frequently recall and make links to key locations; continents, countries, capital cities, locations that have featured elsewhere in the curriculum e.g., in history or art

Additional support for SEND, EAL, disadvantaged or lower attaining pupils:

- Children could have a map of the world/UK printed out for reference. This could be with them on the carpet, kept by an additional adult or at their table. When talking about a place or an event that happened, the child can be supported to find that place on a map to give them context while also developing essential locational knowledge
- Support children's memory of locations by using flashcards with maps/flags/key images

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f. <u>Goal: We want all children to develop their knowledge of Spatial Sense in geography:</u>

What we can do in PKC lessons for all children:

- When planning the spatial sense lessons, look at content covered in previous years and use questioning in class to recall previous learning and check for understanding. E.g., a child who has not secured basic understanding of maps of the local area and what maps represent may struggle with the concept of scale.
- Frequently reinforce spatial understanding; *is this near to us or far away? Which is closer to us? What else is in this place?* With younger children: *how would we get to this place? Would we walk or need to fly on a plane? Is this a place we can easily visit or is it too far away?*

Additional support for SEND, EAL, disadvantaged or lower attaining pupils:

- For children with large gaps in learning, ensure they have mastered the key concepts in the Spatial Sense units, including what a compass is and how it is used, the difference between a map/globe, what a cartographer does, what an aerial view is, where the equator is (and how and why geographers draw 'imaginary lines' on the world) and simple map drawing with a key, moving on to using grid references
- Use deliberate practice, followed by retrieval practice to embed this knowledge e.g., show them pictures of aerial views and maps - *how do you know which is which?* Followed up by targeted questioning in lessons, quizzing and blanking out knowledge organisers
- Some children may need more concrete experience going outside and drawing simple maps of the school grounds with adult support

Pre-Teaching

As mentioned above, it is important that all our children have the support they need to reach the knowledge goals set out within the lesson. For all our pupils to obtain a high success rate, pre-teaching is an intervention we can utilise prior to the lesson being taught that week. Having a specified curriculum supports teachers in knowing which key words, key people, key events, key processes or key statistics need to be highlighted to ensure the core knowledge of the lesson is understood. Utilising the lesson plans, with the specified knowledge goals and specified vocabulary, as well as the knowledge organisers, will support teacher in identifying the core knowledge which may need pre-teaching to support our lower prior attainers.

9. Assessment

The purpose of curriculum assessment is to inform teaching practice in order to obtain better outcomes for our pupils. It is important that we regularly use formative assessment to understand the impact of our curriculum, based on whether the pupils have learnt more, can do more and remember more. Learning has only occurred if there is permanent change in long-term memory. Assessment is the means through which we can assess whether this change has happened or not. By utilising the assessment goals, all teachers are aware of the endpoints of a lesson or unit.

Assessment should:

1. Help learners to embed and use knowledge fluently
2. Assist staff to identify clear next steps for learners
3. Provide information that can help shape development of the curriculum

Knowledge Organisers (KOs): KOs demonstrate the core knowledge that pupils will learn over the course of a unit and that they are expected to commit to memory. KOs should be shared with parents to secure better parental engagement and keep them informed of what their children are learning about. Teachers should refer to KOs at the start of every lesson to support long-term retention. Pupils should be taught how to use the knowledge organisers for self-quizzing. Sections of the knowledge organiser can be blanked out so that pupils can retrieve core knowledge and add back in the relevant information.

Low-stakes quizzes: In our history, geography, science and art subjects, teachers can use a repertoire of assessment strategies to assess pupil knowledge. Assessments, such as low-stakes quizzes and recall questioning, help to identify gaps in pupil knowledge and support long-term retention.

Prior Learning: The purpose of the prior learning is to activate previously encountered knowledge from the same or different discipline or subject areas. Sealy (2017) explains one key benefit of revisiting prior learning: “Each time a concept is encountered within a different context, not only is the concept more likely to be remembered, the understanding of that concept becomes more nuanced”. The prior learning section of each lesson is the link to prior learning,

allowing pupils to reflect on previous learning from last lesson/last week/last term/last year etc. It also encourages the pupils to consider what previous learning they may need in order to access subsequent learning.

Written Tasks: Written tasks play a crucial role in helping teachers assess their pupils' understanding by providing a tangible and documented representation of their knowledge and skills. Dylan Wiliam emphasises the importance of formative assessment, where teachers use ongoing feedback to understand pupil progress and adjust their teaching strategies accordingly. Written assessments, such as extended writes, essays, map work, scientific diagrams or knowledge showcases, allow teachers to gauge the depth of pupils' comprehension, whilst identifying misconceptions, and thereby tailoring their future teaching to address specific learning needs.

Book Looks and Pupil Voice: These should be used in conjunction with one another as an assessment strategy to see what has been learnt over time and how the curriculum is established in pupil's work. These should be used in conjunction as books alone are not an effective assessment tool for ascertaining what pupils have remembered long-term. When looking at books, remember to keep poor proxies for learning, such as presentation and neat handwriting, in consideration. The emphasis should be placed on the key concepts and core knowledge that pupils are remembering or forgetting.

In order to assess pupils and whether they have achieved the assessment goals, teachers will need to use a variety of assessment strategies in combination.

10. Questions for Subject Leaders

NB: These are examples to build understanding. You should come up with your own answers for your subject in discussion with your senior leaders.

Questions	Example notes (Consider answers for your own subject)
Curriculum	
Tell me about your curriculum approach.	*We would advise against saying 'We use the PKC'... an inspector may not know what this is. We might start with 'The curriculum at our school is knowledge-rich, we have designed it with careful thought to specify the powerful knowledge we want our children to learn, to sequence that knowledge and to make sure it is taught to be remembered.'*
What are the school's strengths in teaching (subject)? How do you know?	*Think about your school context. At our KST primaries, we might say: consistency in how the curriculum is implemented. Teacher expertise. CPD and centralised planning has increased teacher subject knowledge, evidenced through professional discussions and pupil discussions, quality of work in books.*
How do you know there is a consistent approach to the delivery of the (subject) curriculum across the school? Why PKC? Are all teachers following the curriculum with fidelity and are all key concepts being covered? How do you know?	*We know through the monitoring of planning, lesson observations, evidence gathering. We have agreed expectations for delivery of lessons/vocabulary/texts. Use of high-quality exemplary planning resources that are informed by research (i.e., PKC) to help structure curriculum. Elements of a knowledge-rich curriculum (valued, specified, carefully sequenced, taught to be remembered) have been learnt to automaticity.* *Fidelity to curriculum is monitored through book looks, learning walks, observations, pupil voice and professional discussions.*
Is there a whole school plan? How has this been planned? Who takes ownership of this? Do teachers adapt MTP?	*The curriculum is well-structured, sequenced to remember and follows a whole school vision. SLT take ownership, teachers know to discuss any suggestions with SLT/PKC team, planning has been carefully pieced together, interlinking knowledge within and between year groups/subjects. Lesson plans can have adaptations to meet the specific needs of the class, but any significant adaptations to content are discussed with the PKC team to*

	ensure there is no knock-on effect regarding progression. Local elements are planned in.
Can you give an example of how the curriculum builds on children's knowledge and skills?	*A good example is how the spatial sense units in geography build on one another to develop geography skills such as map reading. Another example might be how children develop colour mixing skills in art, particularly in KS1. In History, you might like to look at an example of conceptual understanding such as how children build their knowledge of empires. In Science, you may consider the example of the human body.*
Why have you planned the (subject) curriculum in this way, what choices have been made and why?	*We teach like this because …* *We chose this content because …* *Disciplinary concepts – think like a scientist/artist. Knowledge is valued, specified, cumulative, connections made to other subjects, planned, and taught to be remembered. Content choices have made collaboratively with subject experts and discussions with secondary teachers.*
How have you ensured it is relevant to your pupils? Why is this right for your school/children?	*Consider: context, experiences, family life, opportunities, vocabulary/knowledge gaps, ambition, diversity, values. Included local scientists, historical places/events, links to local area e.g., looking at local war memorials, local issues (e.g., fly-tipping), local history of the canals in the nearby town.*
How do you know if what has been planned is being taught?	*Scrutiny of planning against books. Discussion with pupils against LTP. Evidence-gathering process and triangulation.*
If I go into a (subject) lesson in any year group in this school, what should I expect to see? Are there any inconsistencies? Do teachers understand how to put lessons together effectively and with maximum effect? How do you know?	*Rosenshine's Principles embedded. Responsive teaching, retrieval practice, quizzes, KOs. Teachers following the lesson sequence. Clear knowledge goals. Teacher with good subject knowledge breaking down learning into small, manageable steps…* *Consistency of delivery, expectations have been agreed whole staff, monitored and development points provided by SLs and SLT. Training provided by PKC e.g., a Knowledge Rich Curriculum in Practice*
How do you know how children are doing in your subject?	*Through rigorous evidence-gathering: book looks, pupil voice, speaking to teachers about progress. Checking planning against what is being taught. Termly check-ins to speak about pupils not reaching our curriculum expectations and planning in supports and scaffolds for them.*

How does the (subject) curriculum in Y5 build on that of Y4? How does it prepare pupils for Y6?	*Clear, sequential order of specified knowledge that pupils need to know.* *Key technical vocabulary is planned and shared with staff, pupils and parents. Use examples from unit rationales.* *(e.g. learn about empires, including Roman Empire in Yr4. Then learn about the British Empire in Yr5, which supports children with thinking about the global political context for World War I when they learn about that in Yr6)*
How are you checking what pupils have learnt and remembered? How do you check prior learning to know where gaps in knowledge are? What do teachers do about these gaps? If intervention takes place, what are pupils missing? i.e., when is this and how do you know it does not create further gaps?	*Provide concrete examples outside of Subject Lead's own year group will help demonstrate awareness of what is happening beyond their own practice.* *Prior learning check at the start of each lesson.* *Teachers know what pupils remember and therefore what needs teaching/re-teaching.* *Teachers evaluate the quality of the curriculum and its implementation, identifying where changes/improvements need to be made to ensure pupils remember the specified core knowledge and build understanding of key concepts.* *Teachers have shared PPA sessions to discuss gaps in knowledge and plan how to address these collaboratively, sharing expertise. Flexible, targeted interventions take place but not at same time every day.*
Are all pupils working within curriculum expectations? How do you know children are working within curriculum expectations? How does your curriculum meet the needs of the children at your school? If over time pupils continue to require support and adaptations to work within curriculum expectations, what does this mean?	*Pupils can access the curriculum being taught. Pupils remember it. Teachers know what pupils remember and therefore what needs teaching/re-teaching.* *Staff scaffold learning and check if pupils able to make progress. If not, we ask why not. How is learning scaffolded? What is engagement with parents? What support is offered?* *Needs of SEND are well met; ambition and access for all pupils. Action is rapid and effective.* *Subject Leads monitor how teachers are making adaptations for slower/faster graspers.*
Have you formulated a rationale about why your subject is important and about the curriculum in their subject(s)? Have you thought of how this links to the subject content you have selected to be taught?	*See our subject rationales for an overview of what content has been selected and why.*

What will students take away from your subject when they stop studying it?	*Core foundation of substantive knowledge, substantive concepts as well as a secure understanding of disciplinary knowledge.*

Leadership Role	Suggestions
How have you as a subject leader stepped into a greater leadership role?	*Strategic oversight. Opportunity to attend CPD, develop subject expertise. Leading staff meetings, action planning, shape curriculum choices.* *Developed whole school curriculum oversight, ambition for all, articulate the vision and direction.*
What has been the impact of CPD that you have attended? and/or led within your school? How do you know?	*Impact on action planning. Support provided to teachers - sharing good practice. Evaluating good practice and clear areas of development.*
As a subject leader, how do you know if your choice of an action is correct? What are you currently developing and why?	*Impact on children - book looks, pupil voice.* *How did you come about next steps - training, from monitoring, working with PKC team, addressing gaps in learning.*
What do you still need to develop in your subject? How do you plan to go about this?	*Need time to embed the work that has already been undertaken.* *Ensure consistency of high expectations/delivery in all classes.* *Develop teacher subject knowledge.*
How do you engage with/have been supported by the Trust?	*CPD, subject leader development days, subject communities, peer-to-peer development, subject/phase meetings, SPD meetings, work with PKC Team.*
Have subject leaders established the narrative journey of their curriculum from EYFS to KS2? Are your subject teachers confident about what students have learnt before in your subject?	*The curriculum is the narrative journey from EYFS to KS2 as it is also the progression model. This narrative can also be seen in our unit rationales.*

11. Recommended Reading

Recommended reading for academy curriculum leads/ SLT
Curriculum Theory and Design
• Hirsch, Jr E.D. (2016). Why Knowledge Matters: Rescuing our children from failed educational theories. Cambridge: Harvard Education Press. • Ashbee, R. (2021). The Curriculum: Theory, Culture and Subject Specialisms London: Routledge • Counsell. C (2018). 'Taking curriculum seriously' [online] Impact 4. Available at: https://impact.chartered.college/article/taking-curriculum-seriously/ [Accessed 24 June 2020] • Fordham, M. (2017). 'The curriculum as progression model.' [online] Clio et cetera. Available at: https://clioetcetera.com/2017/03/04/the-curriculum-as-progression-model/ [Accessed 2 June 2020] • Fordham, M. (2018). 'The scourge of curriculum: genericism's destructive power.' [online] Clio et cetera. Available at: https://clioetcetera.com/2018/04/15/the-scourge-of-curriculum-genericisms-destructive-power/ [Accessed 2 June 2020] • Fordham, M. (2020). 'What did I mean by "The curriculum is the progression model"'? [online] Clio et cetera. Available at: https://clioetcetera.com/2020/02/08/what-did-i-mean-by-the-curriculum-is-the-progression-model/ [Accessed 2 June 2020] • Mountstevens, J and Skelton, H (2019) 'Curriculum Development through dialogue: A broad and balanced process' [online] Impact 6. Available at: https://impact.chartered.college/article/curriculum-development-through-dialogue-broad-balanced-process/ [Accessed 11th September 2020] • Myatt, M (2018) 'Building curriculum coherence' [online] Impact 4. Available at: https://impact.chartered.college/article/building-curriculum-coherence/ [Accessed 11th September 2020] • Priestly, M (2019) 'Curriculum: Concepts and Approaches' [online] Impact 6. Available at:

https://impact.chartered.college/article/curriculum-concepts-approaches/ [Accessed 11th September 2020]

- Ramakrishnan, V (2019) 'Creating a broad and balanced curriculum' [online] Impact 6. Available at: https://impact.chartered.college/article/creating-a-broad-balanced-curriculum/ [Accessed 11th September 2020]
- Sealy, C. (Ed) (2020) Research Ed Guide to The Curriculum: An evidence-informed guide for teachers. Ipswich: John Catt
- Tharby, A. (2019) An evidence informed approach to curriculum design. [online]. Available at: https://researchschool.org.uk/durrington/news/an-evidence-informed-approach-to-curriculum-design/ [Accessed 29th September 2020]
- Turner, S. (2016) Secondary Curriculum and Assessment Design. London: Bloomsbury Publishing
- Turner, S. (2019) Developing your curriculum design skills. [online]. Available at: https://earlycareer.chartered.college/developing-your-curriculum-design-skills/ [Accessed 2nd June 2020]
- Young, M, Lambert, D, Roberts, C and Roberts, M (2014). Knowledge and the Future School. London: Bloomsbury Publishing.
- Wiliam, D (2013). Principled curriculum design. London: SSAT
- Myatt, M. (2018) The Curriculum: Gallimaufry to coherence. Ipswich: John Catt
- Standish, A. and Cuthbert, A.S. (2017) What should schools teach? Disciplines, subjects and the pursuit of truth. London: UCL Institute of Education Press
- Almond, N. (2019) 'Ramble #6 Achieving coherence in primary science (Why primary Science needs to be less like the Simpsons and more like Game of Thrones)' Available at: https://nutsaboutteaching.wordpress.com/2019/01/04/ramble-6-achieving-coherence-in-primary-science-why-primary-science-needs-to-be-less-like-the-simpsons-and-more-like-game-of-thrones/
- Robinson, M., 2013. Trivium 21c: Preparing young people for the future with lessons from the past. Crown House Publishing.
- Hirsch, E.D. (2020) How To Educate A Citizen: The Power of Shared Knowledge to Unify a Nation. John Catt Educational.
- Such, C. (2021) 'The A4 Curriculum'. [online] Available at https://primarycolour.home.blog/2021/06/20/the-a4-curriculum/

- Sealy, C. (2020) The researchED Guide to The Curriculum. John Catt Educational.
- Sherrington, T. (2018) What is a 'knowledge-rich' curriculum?. Chartered College of Teaching. Available at: https://impact.chartered.college/wp-content/uploads/2018/03/Sherrington-Article.pdf
- Gibb, N. (2021) 'The importance of a knowledge-rich curriculum'. Available at: https://www.gov.uk/government/speeches/the-importance-of-a-knowledge-rich-curriculum
- The Key (2021) 'Implementing a knowledge-rich curriculum'. Available at: https://schoolleaders.thekeysupport.com/curriculum-and-learning/curriculum-guidance-all-phases/structuring-curriculum/implementing-knowledge-rich-curriculum/

Curriculum Leadership

- Counsell, C (2018). In search of senior curriculum leadership: Introduction – a dangerous absence. [online]. The Dignity of the Thing. Available at: https://thedignityofthethingblog.wordpress.com/2018/03/27/in-search-of-senior-curriculum-leadership-introduction-a-dangerous-absence/ [Accessed 2 June 2020]
- Counsell, C. (2018). Senior Curriculum Leadership 1: The indirect manifestation of knowledge. A curriculum as narrative. [online] The Dignity of the Thing. Available at: https://thedignityofthethingblog.wordpress.com/2018/04/07/senior-curriculum-leadership-1-the-indirect-manifestation-of-knowledge-a-curriculum-as-narrative/ [Accessed 2 June 2020]
- Howard K. and Hill C. (2020). Symbiosis: The curriculum and the classroom. Ipswich: John Catt
- Robbins, A., 2021. Middle Leadership Mastery: A toolkit for subject and pastoral leaders. Crown House Publishing Ltd.
- Lock, S. (2020) The researchED Guide to Leadership: An evidence-informed guide for teachers. John Catt Educational.
- Myatt, M. and Tomsett, J. (2021) Huh: Curriculum conversations between subject and senior leaders. John Catt Educational.
- Myatt, M. and Tomsett, J. (2022) Primary Huh: Curriculum conversations with subject leaders in primary schools. John Catt Educational.

- Myatt, M. and Tomsett, J. (2022) Primary Huh 2: Primary curriculum leadership conversations. John Catt Educational.
- Enser, M. and Enser, Z., 2021. The CPD Curriculum: Creating conditions for growth. Crown House Publishing Ltd.
- Didau, D. (2020) Intelligent Accountability: Creating the conditions for teachers to thrive. John Catt Educational.
- Bambrick-Santoyo, P. (2016) Get Better Faster: A 90–Day Plan for Coaching New Teachers. Jossey-Bass.
- Tomsett, J. and Uttley, J. (2020) Putting Staff First: A blueprint for revitalising our schools. John Catt Educational.
- Sharma, L. (2020) Curriculum to Classroom: A Handbook to Prompt Thinking Around Primary Curriculum Design and Delivery. John Catt Educational.
- Blatchford, R. (2019) The Primary Curriculum Leader's Handbook. John Catt Educational.
- Kennedy, M., 2016. Parsing the practice. Journal of Teacher Education, 67(1), pp.6-17

Cognitive Psychology

- Didau, D., 2016. What every teacher needs to know about psychology. John Catt Educational.
- Dehaene, S., 2021. How we learn: Why brains learn better than any machine... for now. Penguin.
- Caviglioli, O., 2019. Dual coding for teachers. John Catt Educational.
- Weinstein, Y., Sumeracki, M. and Caviglioli, O., 2018. Understanding how we learn: A visual guide. Routledge.
- Sweller, J., van Merriënboer, J.J. and Paas, F., 2019. Cognitive architecture and instructional design: 20 years later. Educational Psychology Review, 31(2), pp.261-292.
- Dunlosky, J., Rawson, K.A., Marsh, E.J., Nathan, M.J. and Willingham, D.T., 2013. Improving students' learning with effective learning techniques: Promising directions from cognitive and educational psychology. Psychological Science in the public interest, 14(1), pp.4-58.
- Willingham, D.T., 2021. Why don't students like school?: A cognitive scientist answers questions about how the mind works and what it means for the classroom. John Wiley & Sons.

- Kirschner, P.A. and Hendrick, C., 2020. How learning happens: Seminal works in educational psychology and what they mean in practice. Routledge.
- Lovell, O. (2020) Sweller's Cognitive Load Theory in Action. John Catt Educational.
- Hausmann, R. (2020) Cognitive Science for Educators. John Catt Educational.
- Brown, P., Roediger, H. and McDaniel, M. (2014) Make It Stick: The Science of Successful Learning. Harvard University Press.
- Agarwal, P. and Bain, P. (2019) Powerful Teaching: Unleash the Science of Learning. Jossey-Bass.

Pedagogy

- Christodoulou, D. (2014). Seven myths about education. 1st ed. London: Routledge.
- Sherrington, T. and Caviglioli, O., 2020. Teaching walkthrus. Melton, Woodbridge, UK: John Catt Educational Ltd.
- Boxer, A. ed., 2020. researchED Guide to Explicit & Direct Instruction: An evidence-informed guide for teachers. John Catt Educational.
- Lemov, D., 2021. Teach Like a Champion 3.0: 63 Techniques that Put Students on the Path to College. John Wiley & Sons.
- Fletcher-Wood, H., 2018. Responsive teaching: cognitive science and formative assessment in practice. Routledge.
- McCrea, P. (2015) Lean Lesson Planning: A practical approach to doing less and achieving more in the classroom: 1 (High Impact Teaching). CreateSpace Independent Publishing Platform
- McCrea, P. (2017) Memorable Teaching: Leveraging memory to build deep and durable learning in the classroom: 2 (High Impact Teaching) CreateSpace Independent Publishing Platform
- McCrea, P. (2020) Motivated Teaching: Harnessing the science of motivation to boost attention and effort in the classroom: 3 (High Impact Teaching) CreateSpace Independent Publishing Platform
- Rosenshine, B., 2012. Principles of instruction: Research-based strategies that all teachers should know. American educator, 36(1), p.12.
- Sherrington, T., 2020. Rosenshine's Principles in Action. John Catt Educational.

- Sherrington, T., 2020. Learning Rainforest: Great Teaching in Real Classrooms. John Catt Educational.
- Archer, A.L. and Hughes, C.A. (2010) Explicit instruction: Effective and efficient teaching. Guilford Publications.
- Coe, R., Rauch, C.J., Kime, S. and Singleton, D. (2020) Great Teaching Toolkit: Evidence Review. Evidence Based Education.
- Hendrick, C. and MacPherson, R. (2017) What Does This Look Like In The Classroom? Bridging The Gap Between Research And Practice. John Catt Educational.
- Hattie, J. (2012) Visible Learning for Teachers: Maximizing Impact on Learning. Routledge.
- Nuthall, G. (2007) The Hidden Lives of Learners. NZCER Press.
- Enser, M. and Enser, Z. (2020) Fiorella & Mayer's Generative Learning in Action. John Catt Educational.
- Clark, R.E. (1989) When teaching kills learning: Research on mathemathantics. Learning and instruction: European research in an international context, 2, pp.1-22.

Assessment

- Fordham, M. (2017). 'Decoupling formative and summative assessment' [online] Clio et cetera. Available at: https://clioetcetera.com/2017/11/02/decoupling-summative-and-formative-assessment/ [Accessed 11th September 2020]
- Jones. K. (2022). Retrieval Practice: Primary: A guide for primary teachers and leaders. Suffolk. John Catt.
- Wiliam, D. (2014) Principled Assessment Design. London: SSAT
- Christodoulou, D. (2017) Making good progress?: The future of assessment for learning. Oxford University Press-Children.
- Wiliam, D. (2011) Embedded formative assessment. Solution tree press.
- Selfridge, R. (2018) Databusting for schools: How to use and interpret education data. Sage.
- Pembroke, J. and Selfridge, R. (2022) Dataproof Your School: How to use assessment data effectively. Dataproof Your School, pp.1-100.
- Donarski, S. (2020) The researchED Guide to Assessment: An evidence-informed guide for teachers. John Catt Educational.
- Chiles, M. (2020) The CRAFT of Assessment. John Catt Educational.

- Black, P., Harrison, C., Lee, C., Marshall, B. and Wiliam, D. (2004) Working inside the black box: Assessment for learning in the classroom. Phi delta kappan, 86(1), pp. 8-21.

English

- Such, C. (2021). The Art and Science of Teaching Primary Reading. London. SAGE
- Willingham, D.T., 2017. The reading mind: A cognitive approach to understanding how the mind reads. John Wiley & Sons.
- Lemov, D., Driggs, C. and Woolway, E., 2016. Reading reconsidered: A practical guide to rigorous literacy instruction. John Wiley & Sons.
- Dehaene, S. (2009) Reading in the Brain: The New Science of How We Read. Penguin.
- Mortimore, K. (2020) Disciplinary Literacy and Explicit Vocabulary Teaching: A whole school approach to closing the attainment gap. John Catt Educational.
- Graves, M. (2016) The Vocabulary Book: Learning and Instruction (Language and Literacy Series). Teachers College Press; 2nd edition.
- Beck, I., McKeown, M. and Kucan, L. (2013) Bringing Words to Life: Robust Vocabulary Instruction. Guilford Press.
- Hirsch, E.D. (2006) The Knowledge Deficit: Closing the Shocking Education Gap for American Children. Houghton Mifflin.
- Quigley, A., 2022. Closing the Writing Gap. Routledge.
- Quigley, A., 2020. Closing the Reading Gap. Routledge.
- Quigley, A., 2018. Closing the Vocabulary Gap. Routledge.
- Hochman, J. and Wexler, N. (2017) The Writing Revolution: A Guide to Advancing Thinking Through Writing in All Subjects and Grades. Jossey-Bass.
- Didau, D. (2021) Making Meaning in English: Exploring the Role of Knowledge in the English Curriculum. Routledge.
- Murphy, J. (2019) The researchED Guide to Literacy. John Catt Educational.
- Didau, D. (2014) The Secret of Literacy: Making the implicit explicit. Independent Thinking Press an imprint of Crown House Publishing.
- Grabe, W. and Stoller, F. (2019) Teaching and Researching Reading (Applied Linguistics in Action). Routledge.

- Clements, J. and Tobin, M. (2021) Understanding and Teaching Primary English: Theory Into Practice. SAGE.
- Gamble, N. (2019) Exploring Children's Literature: Reading for Knowledge, Understanding and Pleasure. SAGE.

Behaviour

- Bennett, T. (2017). Creating a culture: how school leaders can optimise behaviour.
- Bennett, T. (2020) Running the Room: The Teacher's Guide to Behaviour. John Catt.
- Strickland, S. (2022) The Behaviour Manual: An Educator's Guidebook. John Catt.
- Hook, P and Vass, A. (2011) Behaviour Management Pocketbook: 2nd Edition. Teachers' Pocketbooks.
- Bennett, T. (2010) The Behaviour Guru: Behaviour Management Solutions for Teachers. Continuum.
- EEF,. (2019). Improving behaviour in schools
- Gneezy, U., Meier, S. and Rey-Biel, P., 2011. When and why incentives (don't) work to modify behaviour. Journal of economic perspectives, 25(4), pp.191-210.
- Rubie‐Davies, C., Hattie, J. and Hamilton, R., 2006. Expecting the best for students: Teacher expectations and academic outcomes. British Journal of Educational Psychology, 76(3), pp.429-444.
- Sherwood, C. (2017) Expectations explained: The key role high expectations play in student outcomes.
- The Reducing Behavior Problems in the Elementary School Classroom report (Institute of Education Sciences, 2008)
- Department of Education,. (2018). Mental health and behaviour in schools
- Bottiani et al, (2017). Belonging, behaviour and inclusion in schools
- Department of Education,. (2020). SEND Code of Practice
- Sobel, D,. (2019). The Inclusive classroom. Bloomsbury
- Young Minds,. 2018. Impact Report
- Department of Education,. (2018) Behaviour and Discipline in school Behaviour and discipline in schools 2018)

- Dix, P. (2016). How to write an outstanding behaviour policy. Pivotal Education.
- Webb, J. (2021) The Metacognition Handbook: A Practical Guide for Teachers and School Leaders. John Catt Educational.

Culture

- Davis,. B. (2003) Rethinking Strategy and Strategic Leadership in Schools. University of Hull.
- Garratt, B. (2003) Developing Strategic Thought. London: McGraw-Hill
- ASCL. Guidance Paper: Leadership of strategic improvement planning and self evaluation.
- Bush,.T & Glover,.D. (2012). Distributed leadership in action: leading high-performing leadership teams in English schools. University of Warwick.
- The Key for School Leaders. (2017) Developing the leadership team.
- Garrett, M., et al. (2001) What Makes Professional Development Effective, AERF Winter, Vol 38 (4), 915–945.
- McLaughlin, M. W., & Talbert, J. E. (2006). Building school-based teacher learning communities: Professional strategies to improve student achievement. New York: Teachers College Press.
- Cunningham, M. (2021) Creating the right conditions for professional learning.
- Weston, D., et all (2021). A culture of improvement Reviewing the research on teacher working conditions. Teacher Development Trust
- DuFour,. R & Mattos, M. (2013). How Do Principals Really Improve Schools? Educational Leadership, v70 n7 p34-40.
- Lewis, A. (2017). Holding to Account.
- Covey, S. (2003). The Speed of Trust. Simon & Schuster UK.
- Birbalsingh, K. (2020) Michaela: The Power of Culture: The Michaela Way. John Catt Educational.

Coaching

- Sherrington, T., 2020. *Teaching WalkThrus: Five-step guides to instructional coaching*. John Catt Educational.

- Bambrick-Santoyo, P., 2016. *Get better faster: A 90-day plan for coaching new teachers*. John Wiley & Sons.
- Morgan, E. (2021) Is commenting on 'pace' useful observation feedback? Available at: https://morgsedu.uk/2021/11/04/is-commenting-on-pace-useful-observation-feedback/
- Kline, N. (2002) Time to Think: Listening to Ignite the Human Mind. Cassell.
- Stanier, M.B., 2016. *The coaching habit: Say less, ask more & change the way you lead forever*. Box of Crayons Press.
- Coleman, D., 1996. Emotional Intelligence Bloomsbury Publ. *Plc. London*.
- Watts, G. and Morgan, K. (2016) The Coach's Casebook: Mastering the twelve traits that trap us. Independently published.
- Hackman, J.R. (2002) Leading Teams: Setting the Stage for Great Performances. Harvard Business Review Press.
- Ripley, A.(2022) High Conflict: Why We Get Trapped and How We Get Out. Simon & Schuster.
- Scott, K. (2019) Radical Candor: How to Get What You Want by Saying What You Mean. Pan.
- Bradford, D. and Robin, C. (2022) Connect: Building Exceptional Relationships with Family, Friends and Colleagues. Penguin Life.

Josh Goodrich blogs on coaching:

- https://steplab.co/resources/essays/BPav00-5/What-Do-We-Mean-When-We-Talk-About-Instructional-Coaching
- https://steplab.co/resources/essays/BPre9-a7/How-Can-We-Make-Coaching-Work-For-Both-Novices-And-Experts
- https://steplab.co/resources/essays/BP20i3bl/Towards-Responsive-Coaching
- https://steplab.co/resources/essays/BP28izik/Responsive-Coaching-In-Action
- https://steplab.co/resources/essays/BPai_u1n/Coaching-and-Diagnosis-Part-1
- https://steplab.co/resources/essays/BPq-6jaj/Coaching-and-Diagnosis-Part-2
- https://steplab.co/resources/essays/BPwg5d3n/Coaching-4-Implementation-Challenges-And-How-To-Defuse-Them

Curriculum talks:

https://www.youtube.com/watch?v=RAhVhlaNQlc&t=143s Research Ed Home 2020, J Hutchinson '7 Distinctions Every Subject Leader Should Know About' (22 April 2020)

https://www.youtube.com/watch?v=mbCSHMhZS1A Research Ed Home 2020, J Tomsett 'Core or Hinterland? Who owns the enacted curriculum?' (6 June 2020)

https://www.youtube.com/watch?v=mgBSWAfZPKU Research Ed Home 2020, P Cordingly 'Developing great leadership of CPDL and curriculum development' (8 June 2020)

https://www.youtube.com/watch?v=XH4EaqAno3I Chiltern TSA, S Lock 'Curriculum: The 3Is' (10 June 2020)

https://researched.org.uk/sessions/ruth-ashbee-the-dos-and-donts-of-curriculum-leadership/ Research Ed Home 2020, R Ashbee, 'The Dos and Don'ts of Curriculum Leadership' (June 2020)

https://researched.org.uk/sessions/mary-myatt-curriculum-conversations/ Research Ed Home 2020, M Myatt, 'Curriculum conversations: 10 elements' (June 2020)

12. Curriculum Terminology

Cognitive load theory	Cognitive Load Theory was developed by John Sweller in 1988. 'Cognitive load' refers to the amount of information our working memory can hold at any given time and places emphasis on the limitations of working memory. Because of these limitations, Sweller suggests that instructional methods should be used to reduce cognitive load. Teachers should use instructional methods such as drawing on prior knowledge, chunking new information and working in small steps to reduce cognitive load. When information is novel, the cognitive load is higher. When information is familiar, or a skill is automatic, cognitive load will be lower. **See also working memory and long-term memory.**
Core knowledge	Core knowledge refers to the knowledge that children must be taught and must remember at the end of a unit. This knowledge will be built on in future units and is foundational to the development of their schema around a topic, concept, time etc. **See also hinterland knowledge.**
Cumulative knowledge	Cumulative knowledge is knowledge that gradually expands over time as pupils learn more about an idea or concept. For example, pupils learn about the term Empire with the Romans and then expand on this with the British Empire and so on. Their knowledge builds cumulatively. **See also hierarchal knowledge.**
Declarative knowledge	Declarative knowledge refers to the 'knowing what' of a subject – the facts, dates, events etc. It is called declarative as it is often easy to recall. One instance of being taught a piece of declarative knowledge could be enough to remember it forever (although we know it is more likely if revisited a lot over time). Declarative knowledge links closely to substantive knowledge. **See also procedural knowledge.**
Disciplinary knowledge	In the words of Christine Counsell, disciplinary knowledge is, "a curricular term for what pupils learn about how that knowledge was established, its degree of certainty and how it continues to be revised by scholars, artists or professional practice. It is that part of the subject where pupils understand each discipline as a tradition of enquiry with its own distinctive pursuit of truth. For each subject is just that: a product and an account of an ongoing truth quest, whether through empirical testing in science, argumentation in philosophy/history, logic in mathematics or beauty in the arts. It describes that part of the curriculum where pupils learn about the conditions under which valid claims can be made, and associated conventions such as what constitutes

	evidence or argument in that subject." **See also substantive knowledge.**
Bauersfeld (1979) three levels of curriculum	The **intended** curriculum: the curriculum prescribed by the National Curriculum or equivalent - the specified topics, ideas, content students should learn. The **implemented** curriculum: the resources, the textbooks, the schemes of learning, the lesson plans. The **enacted** curriculum: how the intended and implemented curriculum translate into learning within the classroom, between teacher and pupil.
Fingertip knowledge	Knowledge which pupils need to have at their fingertips – the knowledge they should be able to recall quickly when needed.
Hierarchical knowledge	This refers to knowledge that cannot be understood until the preceding knowledge necessary is understood. For example, pupils need to understand times tables before they can look at long multiplication. **See also cumulative knowledge.**
Hinterland knowledge	Any knowledge that sits outside the core knowledge taught. Christine Counsell defines it as, "the little examples, the stories, the illustrations, the richness, the dwelling on this but not that, and the times when you as a teacher go off-piste with your passion." **See also core knowledge.**
Long-term memory	Long-term memory is where information is stored and retrieved from. As far as we know, it has no limit. Not all information we take in will be stored in long-term memory. Considering the limitations of working memory and using strategies such as retrieval practice can aid the encoding of information to long-term memory over time. **See also working memory and retrieval practice.**
Pedagogical content knowledge	Pedagogical Content Knowledge (PCK) was developed by Schulman in the 1980s. PCK refers to the knowledge teachers need to teach that specific subject or subject knowledge effectively. For example, when teaching a foreign language, a lot of verbal discussion, conversation and repetition would be employed to teach vocabulary and grammar successfully. In maths, a teacher may employ worked examples and a gradual removal of a scaffold to build understanding.
Poor proxies for learning	A term coined by Coe (2015). Poor proxies for learning are observable behaviours that **do not** indicate learning has occurred, as learning is invisible and happens over time, rather than being something that is immediately observable after instruction.
Powerful knowledge	This is knowledge that "is powerful because it provides the best understanding of the natural and social worlds that we have and helps us go beyond our individual experiences" (Young, 2013).
Procedural knowledge	Procedural knowledge refers to the 'knowing how' – being able to perform a skill or technique. For example, how to perform the steps of a long division in maths. As Daniel Willingham states, "Factual

	knowledge must precede skill". Students must be taught the facts around a procedure first before they will be able to apply the procedure itself. It is believed that performing one instance of a procedure is not enough to commit it to long-term memory and that this knowledge is built up over time through repeated rehearsal. **See also declarative knowledge.**
Retrieval practice	Retrieval practice is "a strategy in which calling information to mind subsequently enhances and boosts learning." (Agarwal et al, 2020). Heavily supported by research, retrieval practice is useful for encoding knowledge and for boosting the retention of knowledge in long-term memory. **See also long-term memory.**
Schema (singular) **Schemata (plural)**	A schema is the "structure for representing generic concepts stored in memory" and they "represent knowledge at all levels of abstraction" (Rumelhart, 1978). It is the framework that organises pieces of knowledge and the connections between them in long-term memory. A pupil that has a well-developed schema will find it easier to learn and understand related information, because they have the prior knowledge that enables them to think effectively. A schema grows as new knowledge is stored in long-term memory. **See also long-term memory.**
Second-order concepts	These concepts help to shape and organise the knowledge in a subject. In history curriculum for example, there are many examples of second-order concepts: such as continuity and change, cause and consequence, similarity, difference and significance. **See substantive concepts.**
Sequencing	Sequencing refers to the order in which knowledge is placed throughout the curriculum and presented to pupils. Effective sequencing maps out knowledge in a way so that a curriculum builds on the prior knowledge that was learnt in previous year groups or units.
Substantive Concepts	Substantive concepts form the knowledge or 'substance' in a subject. They can be highly specific and contextualised (e.g. Nazism) or generalised across a subject (e.g. Empire). As these concepts can recur frequently, they are easier to remember than less frequent knowledge. Therefore, we should make pupils aware of these, so that they are more likely to look for them and spot them in the future. **See second-order concepts.**
Substantive knowledge	The factual knowledge established by an academic discipline. Christine Counsell defines substantive knowledge as, "Substantive knowledge is the content that teachers teach as established fact – whether common convention, concept or warranted account of reality. You might want pupils to know of crotchets, percentages, the Treaty of Waitangi, Debussy or prokaryotic cells. In calling this

	'substantive', we are treating the material presented as givens." **See also disciplinary knowledge.**
The curriculum is the progression model	The curriculum is sequenced to set out the journey that pupils go on to get better at a subject. If the pupils learn the knowledge set out in the curriculum, they will be making progress within the subject.
Working memory	Working memory is where information is processed. Working memory either takes in information from our environment or from long-term memory. If something has not been processed in working memory, then it cannot be stored in long-term memory. Working memory is limited – with the upper limit believed to be around 4 items. **See also long-term memory and cognitive load theory.**

Bibliography

- Agarwal, P.K., Roediger, H.L., McDaniel, M.A. and McDermott, K.B. (2020) How to use retrieval practice to improve learning. *Saint Louis, MO: Washington University in St. Louis*.
- Ashbee, R. (2021). The Curriculum: Theory, Culture and Subject Specialisms London: Routledge
- Bauersfeld, H. (1979). Research related to the mathematical learning process. In I. International Commission on Mathematical (Ed.), New trends in mathematics teaching (Vol. IV, pp. 199– 213). Paris: UNESCO.
- Bourdieu, Pierre (1984) *Distinction,* Routledge.
- Godfrey, D., Brown, C. and Stoll, L., 2017. Leading for innovation and evidence-informed improvement. Bloomsbury.
- Coe, R. (2015) What Makes Great Teaching? Presentation at IB World Regional Conference. Available at: https://www.ibo.org/globalassets/new-structure/conferences/2015/pdfs/robert-coe.pdf
- Coe, R., Aloisi, C., Higgins, S. and Major, L.E., 2014. What makes great teaching? review of the underpinning research.
- Counsell, C. (2018) Taking Curriculum Seriously. Available at: https://my.chartered.college/impact_article/taking-curriculum-seriously/
- Crane, B. (2001). Revolutionising school-based research. *Forum*, 43(2), 54–55.
- Department for Education (2014) Early years foundation stage (EYFS) statutory framework. DfE.
- Ericsson, A. and Pool, R., 2016. *Peak: Secrets from the new science of expertise*. Random House.
- Harris A (2004) Distributed leadership and school improvement. Leading or misleading? *Educational Management Administration and Leadership* 32(1): 11–24.
- Muller, J.Z., 2019. The tyranny of metrics. In *The Tyranny of Metrics*. Princeton University Press.
- Murphy, R. and Machin, S. (2011) Improving the impact of teachers on pupil achievement in the UK-Interim findings. *UK: The Sutton Trust*.
- OFSTED (2019) Education Inspection Framework. OFSTED.
- O'Leary, M. (2020). Classroom observation, Routledge, London.
- Papay, J.P. and Kraft, M.A. (2015) Productivity returns to experience in the teacher labor market: Methodological challenges and new evidence on long-term career improvement. *Journal of Public Economics*, *130*, pp.105-119.
- Rosenshine, B., 2012. Principles of instruction: Research-based strategies that all teachers should know. American educator, 36(1), p.12.
- Rumelhart, D.E., 1978. The building blocks of cognition. *Theorical issues in reading comprehension. Hillsadale: NJ: Lawrence Erlbaum*.

- Sealy, C. (2017) The 3D Curriculum That Promotes Remembering. Available at: https://primarytimery.com/2017/10/28/the-3d-curriculum-that-promotes-remembering/
- Wiliam, D. (2019) 'NE710 Planning for Learning - Examples of Decision-Driven Data Collection' for STEM Learning YouTube Channel. Video available at: https://www.youtube.com/watch?v=1MMDLZxJz0k&ab_channel=STEMLearning
- Wood, J., Joe, J.N., Cantrell, S., Tocci, C.M., Holtzman, S.L. and Archer, J., 2014. Building Trust in Observations: A Blueprint for Improving Systems to Support Great Teaching. Policy and Practice Brief. MET Project. *Bill & Melinda Gates Foundation*.
- Young, M. (2013) p. 196 Powerful knowledge: an analytically useful concept or just a "sexy sounding term"? A response to John Beck's "Powerful knowledge, esoteric knowledge, curriculum knowledge". Cambridge Journal of Education, 43, pp. 195–198.

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