



Halley Primary School

Including all learners and achieving great things

Tools to support formative assessment

This document provides staff with a range of tools to support and further develop their own practice in relation to formative assessment.

Formative assessment will be further developed during 2016-2017 to ensure greater consistency in practise across the school. This document will be reviewed in June 2017.

May 2016

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Classroom Culture and Ethos

Strategies and techniques have very little impact if the culture of the classroom does not support the philosophy or ethos of key principles.

What seems to matter most:

- o How teachers and pupils view ability and consequently their learning potential.
- o What teachers and pupils think the ideal learning culture/environment should consist of, and effective strategies to create and sustain that learning culture.

The route to developing a 'smarter' brain is practice and input. We are all born with different aptitudes for certain subjects or skills, based on our genetic heritage – a reason so many of us, at an early stage, write off certain subjects when we compare ourselves to others who are more naturally adept.

It is important that children know that with varying amounts of **time, effort, practice and input** they can all reach a given level of proficiency.

A crucial component of the learning culture in the classroom is to continually talk with pupils about how the brain grows, how you can grow your abilities through practice, the gift of being able to learn from one another – tapping our different strengths, and the fact that we are all born with different strengths.



"Motivation is the most important factor in determining whether to succeed in the long run. What I mean by that is not only the desire to achieve, but also the love of learning, the love of challenge and the ability to thrive on obstacles. These are the greatest gifts we can give our students"
(Dweck, 2006)



What are the implications for planning and activities?

Research (e.g. Dweck, 1975; Weiner, 1984; Weiner, Heckhausen and Meyer, 1972) shows pupils differ in whether they regard successes and failures as the result of certain factors

	Successes	Failures
Boys	Attribute to ability	Attribute to lack of effort
Girls	Attribute to effort	Attribute to lack of ability
		Likely to suffer from low confidence, which if continues, results in 'learned helplessness' (girls especially)

- What matters most, in terms of motivation, is whether we see ability as 'fixed' (an entity learner) or 'growth' (an incremental learner)
 - **Fixed mindset:** will only tackle tasks which they know, in advance, they will succeed at
 - **Growth mindset:** not only tackle difficult tasks, but thrive on them. The way learners need to feel about themselves and their abilities to be successful learners
- Our Aim: develop a growth mindset – for ourselves, for all adults involved in working with children, for parents and all our pupils

Characteristics of fixed and growth mindsets

Fixed mindset (performance orientated)	Growth mindset (learning orientated)
<i>Intelligence is static</i> <i>I must look clever!</i>	<i>Intelligence is expandable</i> <i>I want to learn more!</i>
Avoids challenges	Embraces challenges
Gives up easily	Persists in the face of setbacks
Sees effort as pointless	Sees effort as the way
Ignores useful criticism	Learns from criticism
	
Likely to plateau early and achieve less than full potential	Reaches ever-higher levels of achievement

The 'fixed' mindset

Characteristics of a 'fixed' mindset	Repercussions
My intelligence is a fixed trait – I have a certain amount of it and that's it	I worry about how much intelligence I have and it makes me interested in looking and feeling as if I have enough. I must look clever and, at all costs, not look stupid
I feel clever when things are easy, where I put in little effort and I outperform my peers	Effort, difficulty, setbacks or higher performing peers call my intelligence into question, even if I have high confidence in my intelligence, so I feel stupid
I need easy successes to feel clever	Challenges are a threat to my self-esteem, so I won't engage with them
I don't want to have my inadequacies and errors revealed	I will withdraw from valuable learning opportunities if I think this might happen
Even if I feel I'm doing well initially, I won't be able to cope with a problem or obstacle	I readily disengage from tasks when obstacles occur

The 'growth' mindset

Characteristics of a 'growth' mindset	Repercussions
Intelligence is something I can increase through my own efforts	I am keen to work hard and learn as much as I can
I acknowledge that there are differences between people in how much they know and how quickly they master things	I believe that everyone, with effort and guidance, can increase their intelligence abilities.
I love to learn something new	I will readily sacrifice opportunities to look clever in favour of opportunities to learn something new
I am excited by challenge	Even if I have low confidence in my intelligence, I throw myself into difficult tasks – and stick with them. I set myself goals and strategies to reach them
I feel clever when ...	I am fully engaged with a new task, exerting effort to master something, stretching my skills and putting my knowledge to good use (e.g. helping other pupils learn)

	Fixed	Mixed	Growth
Taking on challenges	You don't really take on challenges on your own. You feel that challenges are to be avoided.	You might take on challenges when you have some previous experience with success in a related challenge.	You look forward to challenge and have long-range plans for new challenges.
Learning from mistakes	You see mistakes as failures, as proof that the task is beyond reach. You may hide mistakes or lie about them.	You may accept mistakes as temporary setbacks, but lack strategies to apply what you learned from the mistakes in order to succeed.	You see mistakes as temporary setbacks, something to be overcome. You reflect about what you learned and apply that learning when revisiting the task.
Accepting feedback and criticism	You feel threatened by feedback and may avoid it altogether. Criticism and constructive feedback are seen as a reason to quit.	You may be motivated by feedback if it is not overly critical or threatening. Who is giving feedback, the level of difficulty of the task, or their persona feelings might all be factors in your motivation.	You invite and are motivated by feedback and criticism. You apply new strategies as a result of feedback. You think of feedback as being a supportive element in the learning process
Practise and applying strategies	You do not practise and avoid practising when you can. You do not have any strategies for strategies accomplishing the learning goals or tasks, or you apply ineffective strategies.	You practise, but a big setback can make you want to quit. You are more willing to practise things you are already considered good at. You are open to being given a strategy to meet a challenge, but you rarely apply your own strategies unless it is something you are already good at.	You enjoy the process of practising and see it as part of the process of getting good at something. You may create your own practise or study plans. You fluidly use many strategies, think of some of your own strategies and ask others about their strategies
Perseverance and focus	You have little persistence on learning goals and tasks. You give up at the first sign of a struggle.	You may persevere with prompting and support. Unless you are provided with strategies for overcoming obstacles, you will stop or give up.	You 'stick to it' and have stamina for the task(s). You keep working confidently until the task is complete.
Asking questions	You do not ask questions or do questions not know which questions to ask, but you can usually say you 'don't get it' if asked.	You might ask questions about a portion of the task that you feel you can do. If you perceive it to be out of your ability, you probably won't ask questions.	You ask specific questions, ask questions about your own thinking and challenge the text, the task, and the teacher.
Taking risks	You do not take risks, and if something is hard you give in blank or copied work, if anything at all. You are not engaged in the process/task.	You will take risks if the task is already familiar to you. If not, you will resort to copying or giving in partially completed work.	You begin tasks confidently, risk making errors and openly share the work you produce.

The mindsets continuum (Mindsetworks Inc. www.mindsetworks.com)

Strategies for developing a growth mindset culture

Intelligence

Ordering celebrities:

Ask children to arrange these famous people in order of intelligence:

Albert Einstein, J.K. Rowling, David Cameron, David Beckham, ... from One Direction (or similar)

- Interesting to see how many different definitions of intelligence emerge
- Common criteria include academic achievement, making money, getting a long way from where you started, a subject excellence, social skills, and impact on society
- Children gradually realise that intelligence can mean many things
- Emphasis needs to be on the fact that intelligence is not just academic

Current mindsets

Children agree or disagree with the statements:

1. *I like school work that I'll learn from, even if I make a lot of mistakes*
2. *I would feel really good if I were the only one who could answer the teacher's questions*
3. *An important reason for doing my school work is because I like to learn new things*
4. *It's very important to me that I don't look stupid in class*
5. *I like school work best when it really makes me think*
6. *It's important to me that other children in my class think that I'm good at my work*
7. *An important reason why I do my work is because I want to get better at it.*
8. *An important reason for doing my school work is so that I don't embarrass myself.*
9. *I do my school work because I'm interested in it*
10. *I want to do better than other children in my class*

Note: this is probably more appropriate for older children

Making mindsets accessible

'YouTube' clip 'Famous Failures'.

- *He wasn't able to speak until he was 4 years old and his teachers said he would 'never amount to much' (Albert Einstein, theoretical physicist and Nobel Prize winner)*
- *Was demoted from her job as a news anchor because she 'wasn't fit for television' (Oprah Winfrey, host of a multi-award-winning talk-show and the most influential woman in the world)*
- *Fired from a newspaper for 'lacking imagination' and 'having no original ideas' (Walt Disney, creator of Mickey Mouse and winner of 30 Academy Awards)*
- Gives a clear message that you can grow your intelligence

Using books

- *The Dot*, by Peter Reynolds, tells of a child who believes she can't draw, but her teacher tells her to 'make a mark and see where it goes'
- *Rosie Revere Engineer*, by Andrea Beaty, tells of a child who invents something that fails
- *Ryan and the Spy* and *the Superhero Secret*, by Jason Rago, talks about hard work and practice being the keys to success
- *Cinderspy*, by Diana B Thompson, is a non-traditional take on Cinderella in which she problem solves her life

'YET'

- Adding the word yet e.g. children responding with "I don't know yet"

Learning Journals

- For children to write their thoughts at the ends of lessons as they related to the mindsets
- By looking at their comments, teachers gain insight into what causes distress, how resilient they are, any patterns in their thinking and whether confidence develops over time.

Praise language:

The most significant aspect for the teacher in developing a growth mind set culture is to use praise language which focuses on achievement and effort, and to use encouraging growth mindset mantras which reinforce the message

- *Well done! You're learning to (this is particularly important, because it implies that learning is a continuum rather than a job done and finished with)*
- *Good – it's making you think – that's how you know your brain is growing!*
- *Every time you practices, you're making the connections in your brain stronger*
- *You're good at things you like because you spend a lot of time doing them*
- *If you could already do it or it was easy, you wouldn't be learning anything*
- *Your skills have really improved. Do you remember how much harder this was last week/last year?*
- *You kept going – well done!*
- *Don't say no – have a go!*
- *You mean you don't know yet.*

Learning Powers

Meta-cognition is the term used to describe learning about learning, or what learning consists of. The Sutton Trust research gives its potential gain of 8 months and 'high impact for low cost' as its verdict.

The growth mindset gives children the appropriate attitude and self-belief, but meta-cognition gives them the tools to be able to talk about and understand their learning, giving them a shared language and understanding.

Hattie (2009) makes some interesting points about the nature of learning:

- That it is not as simple as surface learning, requiring more specific goals and deep learning necessitating more investigative learning

Learning dispositions

Disposition	Characteristics
Concentrate	manage distractions Get lost in the task Do one thing at a time break things down plan and think it through draw diagrams, jot down thoughts or things which make you think
Don't give up	work hard practice lots keep going try new strategies ask for help start again take a brain break
Be cooperative	listen to others say when you don't understand be kind when you disagree explain things to help others be tolerant
Be curious	ask questions notice things look for pattern and connections think of possible reasons research ask 'what if ...?'
Have a go	have a growth mindset don't worry if it goes wrong learn from mistakes be excited to try new things
Use your imagination	be creative let your imagination go think up new ideas and questions
Keep improving	keep reviewing your work identify your best bits improve one thing first try to be better than last time don't compare yourself to others, only yourself take small steps
Enjoy learning	feel proud of all your achievements feel your neurons connecting imagine your intelligence growing by the minute use what you have learnt in real life know you can do it if you have input and you practice

How to develop children's learning dispositions

- Aim for a 'split screen' approach, where the focused learning power has equal status to the knowledge or skill learning objective of the lesson.
- Attach a 'character' to each of the eight categories.
- Write a story for the character in which the various elements are explored.
- Use this story to introduce the particular learning power to the class.
- Focus on one story per week, displaying the characters and their breakdown of skills until all categories are known.
- At that point the 'split screen' becomes meaningful.

Learning Intentions & Success Criteria

'If learners are to take more responsibility for their own learning, then they need to know what they are going to learn, how they will recognise when they have succeeded and why they should learn it in the first place.'

- (An Intro to AfL, Learning Unlimited, 2004)

I need to develop **meaningful learning intentions**

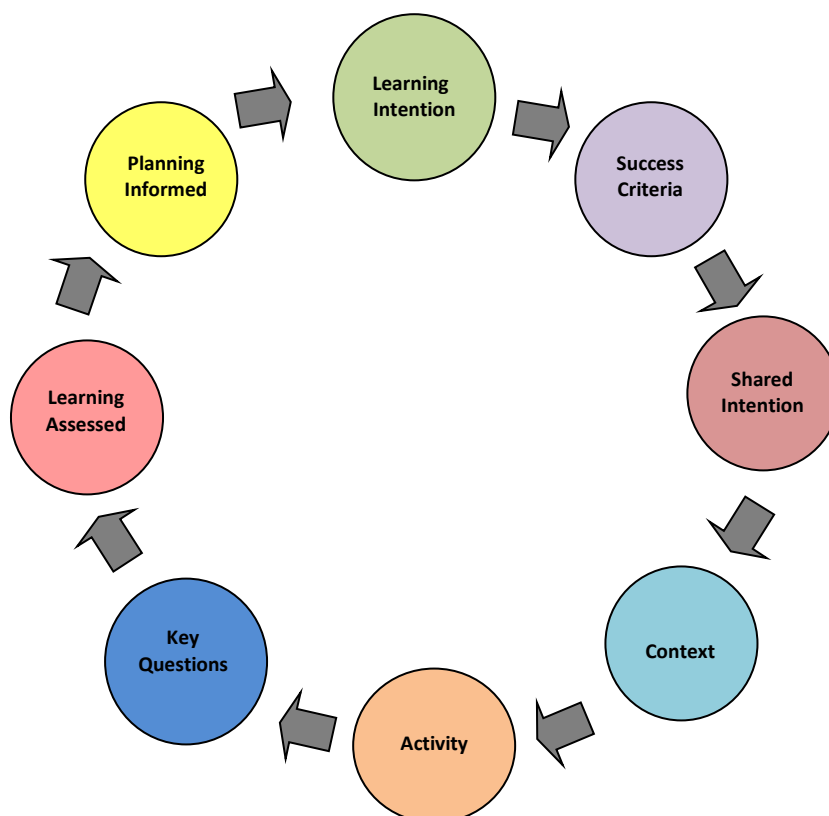
Definition:

- a clear statement of what it is intended that children will have learnt during a lesson
- Identify new learning
- Focus on transferable skills

'A learning intention describes what pupils should **know, understand** or **be able to do** by the end of the lesson or series of lessons.@ (Learning Unlimited, 2004)

Learning Intentions: *"I am learning to ..."*

- Include in weekly planning
- Share with the children in child speak
- Display visually in the classroom
- Clear and focused
- Assess learning against intention



What are Learning Intentions?

The starting point for the teacher's or teacher and pupil's *planning* although the starting point of the *lesson* is often to capture interest first before the learning intention is made clear, which establishes prior knowledge and understanding

Focuses the teacher:

- What do I want the children to learn?
- How do I articulate that?
- What would be a good way of learning it?
- What do I think a range of excellent finished products would look like?

Focuses the children:

- To be able to recognise how much they already know about it
- Anchors them in the learning
- Encourages self-assessment

Bits and applications

- Since the introduction of the National Curriculum there has really only been one way of thinking about Learning Intentions: skills, concepts and knowledge
- There are only two kinds of Learning Intentions:
 - The **'bits'** that need to be taught and learnt (skills, concepts and knowledge)
 - **'applications'** of those **'bits'**

	Bits	Applications
English	1. To create a story opening where suspense is developed 2. To use the time connectives in instructional writing	1. To write a short horror story 2. To write instructions
Mathematics	1. To use repeated addition to solve division problems	1. To solve division problems using any method
Science	2. To identify variables 3. To identify anomalies in data	2. To plan a fair test 3. To evaluate a fair test

	Bits	Applications
Counting / Place value	1. To be able to recognise familiar multiples (2s, 5s, 10s) 2. To be able to recognise odd and even numbers 3. To partition a number into 10s and units (TU)	To sort numbers in different ways and explain reasoning
Calculations	1. To use repeated addition to solve division problems 2. To understand the idea of a remainder	To solve division problems in context
Shape, space and measures	1. To know how to measure accurately to the nearest centimetre 2. To accurately describe the properties of 2D shapes 3. To identify acute, obtuse and right angles in 2D shapes	To draw 2D shapes accurately

Key messages

LI should be about the learning taking place/occurring

- LI are either '**bits**' or '**applications**' of '**bits**'
- Never confuse context with the learning

Confused and clarified learning intentions:

Confused Learning Intention	Clarifies Learning Intention	Context
To be able to write instructions on how to change a bicycle wheel	To write instructions with time connectives	To change a bicycle tyre
To produce and analyse a questionnaire about film going habits	To construct and analyse questionnaire data	Film going habits
To describe a friend	To create effective characterisation	Describe a friend
To design a fair test to find out what conditions a wood louse prefers	To plan a fair test	Preferred habitat of wood lice
To be able to write a version of Little Red Riding Hood	To write a version of a traditional text	Little Red Riding Hood
To measure objects around the classroom	To measure accurately to the nearest centimetre	Measuring the length of objects in the classroom
To count animals we saw at the farm	To be able to count a set of objects	Using photos from visit to farm
To calculate the duration of bus journeys	To calculate time difference	Using bus timetables

I need to generate **success criteria**

'... success criteria summarise the key steps or ingredients the student needs in order to fulfil the learning intention – the main thing to do, include or focus on.' (Shirley Clarke)

What are success criteria?

- Useful breakdown of the learning sequence
- Provide a framework for a formative dialogue – with peers or adults – which enables children to:
 - Know what the learning intention means
 - Know the steps involved with a closed objective (e.g. to find percentages of whole numbers) or the elements of a particular writing form (e.g. a newspaper report)
 - Know the possible ingredients for an open learning intention (e.g. a ghost story opening)
 - Identify where success has been achieved and where help might be needed
 - Be clear about where improvements can be made
 - Discuss strategies for improvement
 - Reflect on progress

Success criteria suggest ways to achieve a learning intention:

- A sequence of instructions
- A recipe of ingredients
- A list of "Remember to" prompts
- A list of "top tips" for younger children (EYFS)
- A visual aide memoir

Effective success criteria:

- are **linked** to the learning intention;
- are specific to an activity;
- are **discussed and agreed** with pupils prior to undertaking the activity;
- must be visible so children can look up and check during the lesson.
- provide a **scaffold** and focus for pupils while engaged in the activity; and
- are used as the basis for **feedback** and peer-/self-assessment.

Different types of success criteria:

- *'Product' success criteria* are unhelpful e.g. 'your answers will be correct'. They focus on end points or products. They are what the teacher wants and don't indicate for the children how the learning objective will be fulfilled. 'I'll know it when I see it' approach that leads to being reactive rather than proactive.
- *'Process' success criteria* are helpful. They explain *how* the learning objective will be achieved. Children are actively engaged in the process of learning. They act as an aide-memoire of necessary ingredients.

Process not product

Learning Intention:

I am learning to identify odd and even numbers

Product Success Criteria:

I have been successful if my answers will be correct

Process Success Criteria:

I have been successful if

- Look at the last digit in the number to check the pattern
- Divide the number in two to check

Process not product

Learning Intention:

I am learning to write an effective characterisation

Product Success Criteria:

I have been successful if someone who reads it will feel they really know the person

Process Success Criteria:

I have been successful if I include all or some, with examples:

- Hobbies and interests
- Attitude to others
- What makes that person a friend

Effective Process Success Criteria

<u>Effective criteria will:</u>	<u>Effective use will be when pupils:</u>
• Be written to support understanding • Include examples • Be short • Be clearly laid out and visible • Relate to the learning and not the task	• Know their purpose • Use as and when they need to, either to: ○ support learning ○ act as a reminder • Use as a check

Success criteria for open and closed learning intentions

- Learning intentions tend to be either open or closed
- Type impacts on the success criteria

I have been successful if I ...

- *can ...*
- *remember to ... (closed learning objectives)*
- *choose from ... (open choice ingredients)*

(Top Tips EYFS)

For closed learning intentions, success criteria are:

- often in chronological order
- are always compulsory (e.g. the steps in a mathematical algorithm or the ingredients needed for instructional writing)

For open learning intentions, success criteria are:

- can be compulsory elements, such as the aspects needed in a fair test, or
- might be things that you *could* include (e.g. the possible elements in a good characterisation)

Writing a Success criteria

FS Numeracy

Subject	Learning Intention	Context	Success Criteria
Numeracy Reception	I am learning to count a set of objects reliably	Farm animals	I have been successful if I remember to: • Count one by one • Move each one as I count it • Put them back in line to check

KS2 Numeracy

Subject	Learning Intention	Context	Success Criteria
Numeracy Year 3	I am learning to measure accurately to the nearest centimetre and record	Practical measuring	I have been successful if I remember to: • Start from zero • Round up or down • Record the unit

KS1 Literacy

Subject	Learning Intention	Context	Success Criteria
Literacy Year 2	I am learning to write instructions	Making jelly	I have been successful if I can: • Write everything in the correct order • Use bullet points, numbers etc. • Use a verb to start each sentence • Use the scaffold sheet

KS2 Literacy

Subject	Learning Intention	Context	Success Criteria
Literacy Year 5	I am learning to write complex sentences	The Jungle Book	I have been successful if I can: • Use appropriate connectives • Include main and subordinate clauses • Vary the position of sub-clause for effect

KS2 Literacy

Subject	Learning Intention	Context	Success Criteria
Literacy	I am learning to write a complete story	Given title	I have been successful if I include: • An effective opening • An effective ending • Characterisation • Series of related events • Use of powerful adjectives, verbs similes and metaphors • Check grammar, punctuation, spelling

I need to develop strategies for children to **co-construct & generate success criteria**

- Success criteria generated by children have maximum impact
- A range of techniques can be used to get children to generate success criteria (see below)
- Using techniques to generate success criteria also helps children to understand what excellence looks like for the learning intention in focus

Impact of co-constructed success criteria is that:

- Children become more independent
- Children have more ownership over their learning and ongoing assessment
- Children can decide criteria for which help is needed
- There is higher achievement when children have seen good examples and can follow or choose from the success criteria they have generated
- Older children can teach younger children (or peers) more effectively
- Higher achievers can teach lower achievers more effectively

Strategies used to co-construct criteria include:

Prove it

- Especially effective for younger children
- Ask 'can you ... (e.g. count these cubes?)
- To the answer 'yes', ask children to **prove it**, by saying what they would need to do first, then next and so on

Showing excellent, different examples of the same skill

- Show three examples & identify the features that they share
e.g. show class three examples of word problems and their solutions. Each having key words highlighted, a diagram and some calculations – children identify these criteria and apply them
- Share a finished piece of work by a child (demonstrating the learning intention) and work with talk partner to identify the features/what makes it successful in relation to the learning intention

Demonstrating a technique or skill

- Demonstrating at the visualiser *e.g. a particular art technique, or a specific skill such as looking up words in a dictionary*, with teacher thinking out loud throughout to help children identify the steps or ingredients of the skill
- Repeated asking children '*what did I just do?*' as a way of gathering the criteria
- Asking older children to compile their own criteria during the demonstration

Demonstrating good and bad

- Useful in PE, music and art
- Practical demonstration of how to do a skill well and how to do it badly to help identify key features

Doing it wrong

- Demonstrate how *not* to do the task in hand, inviting children to correct and draw up criteria as they go along (especially good for mathematics with closed elements)
- Children call out as you demonstrate incorrectly and tell you what you are doing wrong and what should be done instead

Showing a wrong example

- Show class a really bad example and ask children to offer advice & ways to improve thus generating the success criteria (*e.g. a bad example of how to film someone*)
- *NB. Showing children just a bad example of writing can be unsuccessful and time-consuming as a way of getting them to (a) create success criteria and/or (b) improve the writing. Showing them an excellent and a bad example, by contrast, is extremely successful in modelling good writing and seeing how improvements can be made*

Working it through

- Working through a task and helping children to pull out the elements
e.g. analysing a bar graph and discussing what helped children to interpret it, is a good way of pulling out its elements

Recounting a practical experience

- Take part in a practical activity and then explain to a partner. Use the discussions to analyse the activity and generate the success criteria
e.g. children are asked to play a playground game and then explain how the game was played to a partner. Their discussion are then analysed as a class (they had used time connectives, ordering steps and so on) and instruction success criteria are generated with examples

Incomplete surprise letter or invitation

- Provide a surprise that is incomplete (*e.g. an invitation*), children instinctively want to include the missing elements, which amount to the success criteria

Jigsaw the pieces

- Good for literacy
- Cut up the pieces of *e.g. an excellent newspaper report, an invitation, a letter or a persuasive letter* and invite children to reassemble them
- Children are involved in analysis of the content matter – this leads to the generation of the ingredients, and also gives an example of what a good one looks like

Success criteria bingo

- Revisit previously given or generated success criteria, ask children to quickly write the given criteria from memory on a blank bingo card grid.
- Have criteria hidden behind coloured shapes on the IWB
- Choose children, one at a time, to choose a shape, read out the revealed criterion and give an example of its meaning – every child who has written that criterion crosses it out
- The explanation of the criterion each time is the crux of the learning, cementing the understanding of the criteria

Reordering given success criteria after practical experience

- Following practical experience present children with success criteria that need to be put in order so children have previous experience to hook the criteria on

Eavesdropping talk partners

- Ask children to decide the success criteria for a learning intention (using talk partners or small groups)
- Walk around, jotting down their ideas to gather success criteria
- Share to finalise success criteria

Sloppy success criteria

- Especially good for mathematics: present a calculation with errors, presented alongside the 'sloppy' success criteria – the success criteria have been followed correctly, so what is wrong?
- Children analyse the steps, the errors and put right the success criteria

Learning intentions and success criteria are only as good as the teacher's understanding of what it is 'specifically' they want the children to learn. If this is unclear or not known, learning intentions will be muddled and success criteria unhelpful. Teacher's subject

Final thoughts

- Process success criteria is more powerful than product success criteria.
- Need to plan success criteria in advance.
- Identifying success criteria leads to more focused learning activities.
- Success criteria can be generic for all children with access to same learning intention, they may sometimes be differentiated.
- Success criteria should be generated by children to give them ownership.
- Quality comes from teaching model and feedback not success criteria.
- Using Learning Intentions and Success Criteria:
 - create more self-motivated pupils;
 - empowers pupils to become independent learners;
 - improves understanding; and
 - can help focus feedback.
- In order to judge the quality of a child's achievement, the teacher must have a clear understanding of the learning intention.
- Children must also understand the learning intention and the definition of quality held by the teacher in order to have any chance of fulfilling them.

- Success criteria are a breakdown of the learning intentions and enable monitoring of progress and self-assessment.
- Although knowledge learning intentions are important, only skill-based intentions are
 - usefully linked with success criteria, helping children to internalise the elements of the
 - skill so that they can be transferred to any subject or context.
- Success criteria are more effectively if they are decontextualized and a true reflection of what the teacher wants children to learn.
- Success criteria for closed learning intentions are compulsory elements, often in chronological order.
- The more open the learning intention, the broader the success criteria.
- Co-constructed success criteria, between children and adults, are more effective than those simply given.
- Using success criteria enables children to be more independent, to identify successes and improvement needs, to facilitate self- and peer assessment and to track their inclusion, if closed.

Questioning

What makes 'good' and 'outstanding' questioning?

	Outstanding	Good
Questioning	Teachers systematically and effectively check pupils' understanding where they may need to intervene and doing so with notable impact on the quality of learning	Teacher regularly listen astutely to, carefully observe and skilfully question groups of pupils and individuals during lessons in order to reshape tasks and explanations to improve learning
Concepts, misconceptions and adapts lesson	The work for each individual pupil is adapted in the light of any misconceptions that are brought to light through questioning or checks on work	Lessons are adapted in response to misconceptions that are brought to light through questioning or checks on pupils work
The teacher facilitates focused opportunities for the use of purposeful talk	Criterion for good plus: Evidence of pupils questioning each other and adults in order to move on their learning. Evidence of pupils using taught language structures independently as part of a dialogue.	Pupils given time to formulate and refine responses. Talk, both pupil to pupil and pupil to adult, involves full responses relevant to the subject. Some evidence of pupils responding to each other by building on previous contributions. Appropriate language structures are taught, modelled and rehearsed during the lesson.

The importance of questioning

- We use questions for a wide range of reasons, for example to motivate, to assess, and to promote reflection, analysis or enquiry

Questioning is a crucial skill for teachers because it is:

- The most common form of interaction between teacher and pupil
- An element of virtually every type and model of lesson
- A key method of providing appropriate challenge for all pupils
- An important influence on the extent of progress made
- The most immediate and accessible way for a teacher to assess learning
-

Basic Questioning Techniques

Pausing	Allowing time for everyone to reflect and consider a answer before giving one person the opportunity to answer.
Phrasing	Ensuring clarity within the language used. Questions will also contain hints and cues appropriate to the audience.
Focus	You may start with abroad question which is then followed by specific questions relating to the lesson objective.
Direction and Re-direction	Answers may be only partially or incorrectly answered this provides an opportunity for others to contribute until answer is full or correct. This promotes a collaborative approach to forming viewpoints and opinions

Distribution	Approach ensures increased participation especially within larger groups settings. Consideration has to be to levels of ability within large group situations.
Prompting	A hint or prompt introduced as appropriate so that pupils are supported in their responses.

How to use **questioning to facilitate learning**

- Include key questions in planning
- Consider their purpose and how they will move learning forward

The **purpose of questioning** is ..

- to interest, engage and challenge pupils
- to check on prior knowledge
- to stimulate recall and use of existing knowledge and experience in order to create new understanding and meaning
- to focus thinking on key concepts and issues
- to extend pupils' thinking from the concrete and factual to the analytical and evaluative
- to lead pupils through a planned sequence which progressively establishes key understandings
- to promote reasoning, problem solving, evaluation and the formulation of hypothesis
- to promote pupils' thinking about the way they have learned

Effective questioning:

- reinforces and revisits the learning intention
- includes 'staging' questions to draw pupils towards key understanding or to increase the level of challenge in a lesson as it proceeds
- involves all pupils
- promotes justification and reasoning
- creates an atmosphere of trust where pupil' opinions and ideas are valued
- shows connections between previous and new learning
- encourages pupils to speculate and hypothesise
- encourages pupils to ask as well as to 'receive' questions
- encourages pupils to listen and respond to each other as well as to the teacher

Through questioning the adult can:

- focus attention
- arouse interest
- stimulate thinking
- find out what children know
- review, revise or recall learning
- invite everyone to engage in discussion
- engage individuals such as more able or those who may be reticent in offering a response
- probe children's understanding
- diagnose difficulties and misconceptions
- stimulate curiosity and invite children's questions
- get children to explain, predict or give reasons
- help children express what they think, believe or know
- help children make the learning explicit
- help children apply their learning

How to improve questioning

3 categories of questions		
Category	Purpose	Example
Managerial questions – behaviour and task	To do with running the class	<i>Have you got your pencils?</i>
Information/closed questions	To test recall of knowledge	<i>How many sides does a triangle have?</i>
Higher-order/open questions	To make children do more than remember	<i>What is music?</i>

A good question poses intellectual challenge helping children to move on to more advanced levels of development.

Poor questions may limit, diminish or dismiss thinking. If questions are confused, unclear, too complex or too simple, they produce unproductive responses

Questions that are too closed or narrow often are really just asking children to guess what the adult is thinking. When too easy, they can be of tradition stimulus-response: 'what is this?', 'What is that?' When too hard, they may result in the questioner answering the question: 'What is a frog?' 'An a ... am ... amph ... amphib ... amphibian!'

We should ask fewer but better, more demanding questions – and use alternatives to questions to stimulate thinking

The acid test of a question is: Does it provide a worthwhile challenge

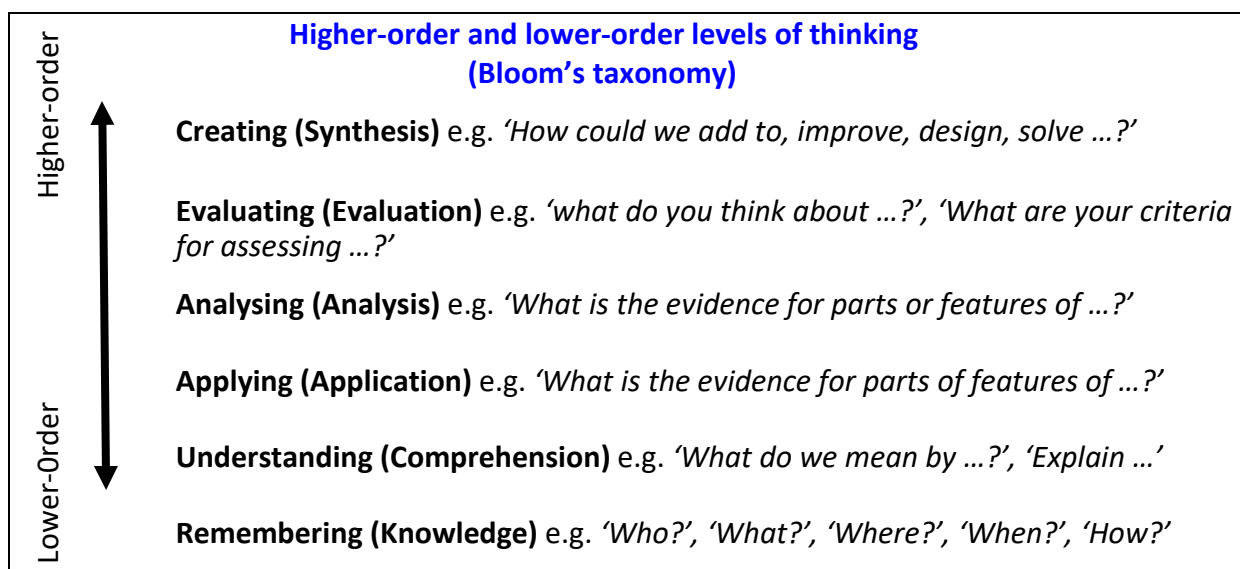
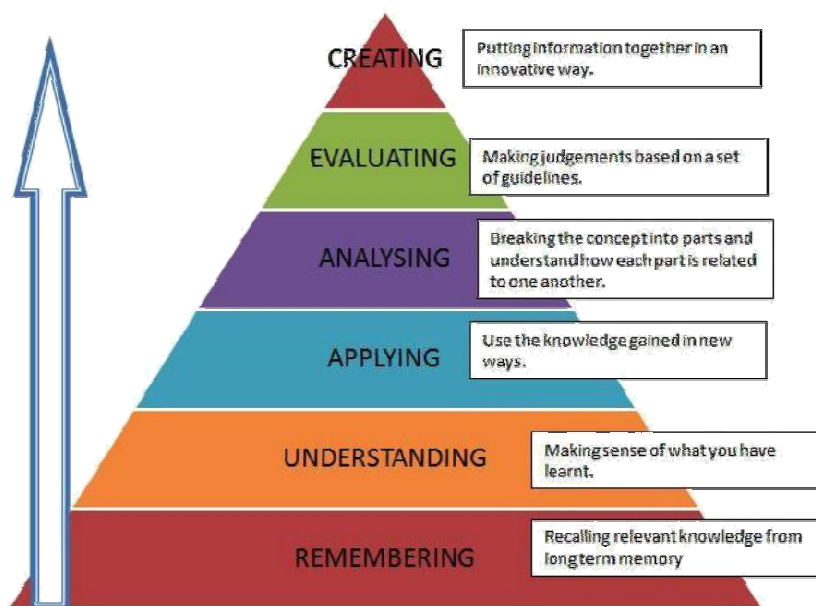
Questioning skills include:

- **sequencing a set of questions** – moving from literal to higher order (this is particularly supportive for EAL learners and some children with SEN);
- **pitching appropriately** – putting the questions clearly;
- **distributing questions** around the class – to the less forthcoming children as well as those who are more outgoing;
- **prompting and probing** – giving clues where necessary;
- **listening and responding in a positive way** – inviting children's questions;
- **challenging right as well as wrong or underdeveloped answers;**
- **using written questions effectively** – with key questions for further thinking.

Tactic or device	Benefits/gains
Consciously waiting for a pupil to think through an answer (before you break the silence)	Prompts depth of thought and increases levels of challenge
Using a planned mix of 'conscripts' and 'volunteers'	Enhances engagement and challenge for all
'phone a friend'	Encourages whole-class listening
'Hot-seating'	Encourages listening in detail and provides challenge
Previewing a question in advance	Signals the big concepts and learning of the lesson
Pair rehearsal (of an answer or a question)	Encourages interaction, engagement and depth
Eavesdropping and deploying specific targeted questions	Facilitates informed differentiation
'You are not allowed to answer this in less than 15 words'	Develops speaking and reasoning skills
Deliberately asking a child whom you know will provide only a partly formed answer (when asking difficult whole-class questions)	Excellent for building understanding from pupil-based language
Staging or sequencing questions with increasing level of challenge	The essence of purposeful questioning, moving pupils from existing knowledge or experience (often unsorted or unordered knowledge) to organised understanding, where patterns and meaning have been established
Using the 'no hands up' rule	Improves engagement and challenges all pupils to think
Providing signals to pupils about the kind of answer that would best fit the question being asked	Helps pupils to recognise the range of responses and to select appropriately

Using **Bloom's taxonomy** to develop questioning







Asking Thinking Questions

I can use the information:

to build new ideas

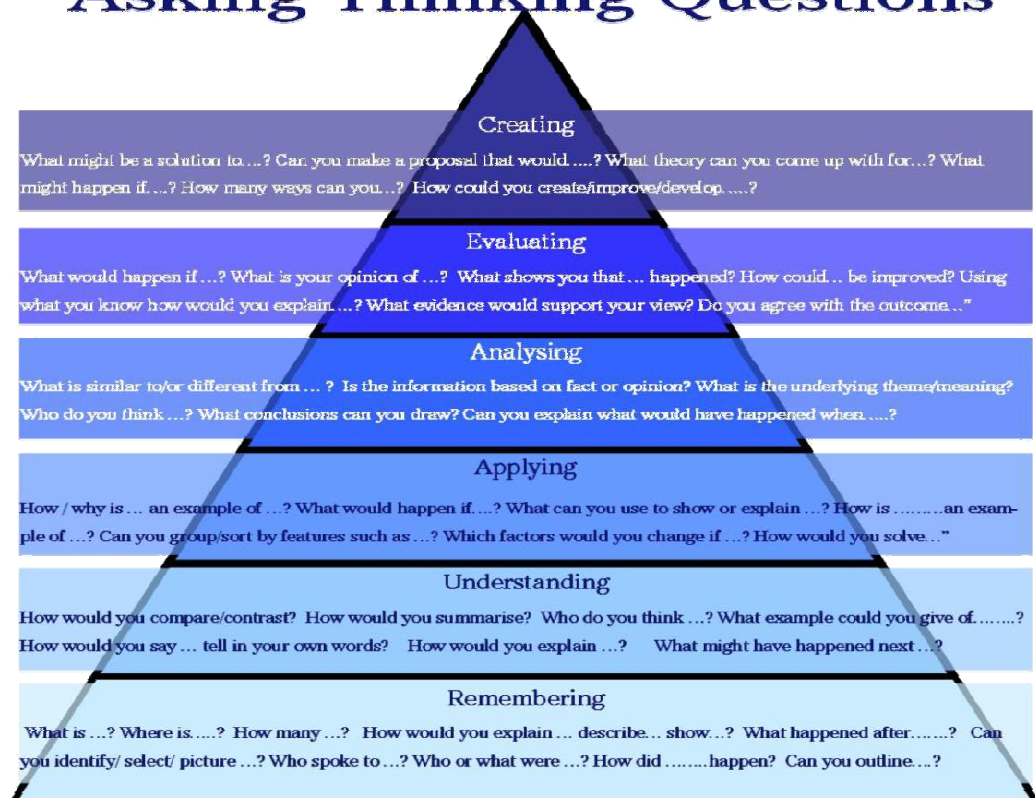
To express and back up my opinion

By breaking it down to understand it better

in a new way

to explain ideas

to remember facts



Planning your questions using Bloom's Taxonomy

	USEFUL VERBS	SAMPLE QUESTION STEMS	POTENTIAL ACTIVITIES OR PRODUCTS
Creating (Synthesis)	Create Invent Compose Predict Plan Construct Design Imagine Propose Devise Formulate	Can you design a ... to ...? Why not compose a song about...? Can you see a possible solution to...? If you had access to all resources how would you deal with...? Why don't you devise your own way to deal with...? What would happen if...? How many ways can you...? Can you create new and unusual uses for...? Can you write a new recipe for a tasty dish? can you develop a proposal which would...	Invent a machine to do a specific task. Design a building to house your study. Create a new product. Give it a name and plan a marketing campaign. Write about your feelings in relation to... Write a TV show, play, puppet show, role play, song or pantomime about...? Design a record, book, or magazine cover for...? Make up a new language code and write material using it. Sell an idea. Devise a way to... Compose a rhythm or put new words to a known melody.
Evaluating (Evaluation)	Judge Select Choose Decide Justify Debate Verify Argue Recommend Assess Discuss Rate Prioritise Determine	Is there a better solution to... Judge the value of... Can you defend your position about...? Do you think ... is a good or a bad thing? How would you have handled...? What changes to ... would you recommend? Do you believe? Are you a ... person? How would you feel if...? How effective are...? What do you think about...?	Prepare a list of criteria to judge a show. Indicate priority and ratings. Conduct a debate about an issue of special interest. Make a booklet about 5 rules you see as important. Convince others. Form a panel to discuss views, e.g. "Learning at School." Write a letter to ... advising on changes needed at... Write a half yearly report. Prepare a case to present your view about...

Analysing (Analysis)	Analyse Distinguish Examine Compare Contrast Investigate Categorise Identify Explain Separate Advertise	Which events could have happened...? I ... happened, what might the ending have been? How was this similar to...? What was the underlying theme of...? What do you see as other possible outcomes? Why did ... changes occur? Can you compare your ... with that presented in...? Can you explain what must have happened when...? How is ... similar to ...? What are some of the problems of...? Can you distinguish between...? What were some of the motives behind...? What was the turning point in the game? What was the problem with...?	Design a questionnaire to gather Write a commercial to sell a new product. Conduct an investigation to produce information to support a view. Make a flow chart to show the critical stages. Construct a graph to illustrate selected information. Make a jigsaw puzzle. Make a family tree showing relationships. Put on a play about the study area. Write a biography of the study Prepare a report about the area of study. Arrange a party. Make all the arrangements and record the steps needed. Review a work of art in terms of form, colour and texture.
Applying (Application)	Solve Show Use Illustrate Construct Complete Examine Classify	Do you know another instance where...? Could this have happened in...? Can you group by characteristics such as...? What factors would you change if...? Can you apply the method used to some experience of your own...? What questions would you ask of...? From the information given, can you develop a set of instructions about...? Would this information be useful if you had a ...?	Construct a model to demonstrate how it will work. Make a diorama to illustrate an important event. Make a scrapbook about the areas of study. Make a paper-mache map to include relevant information about an event. Take a collection of photographs to demonstrate a particular point. Make up a puzzle game using the ideas from the study area. Make a clay model of an item in the material. Design a market strategy for your project using a known strategy as a model. Dress a doll in national costume. Paint a mural using the same materials. Write a textbook about... for others.
Understanding (Comprehension)	Explain Interpret Outline Discuss Distinguish Predict Restate Translate	Can you write in your own words...? Can you write a brief outline...? What do you think could have happened next...? Who do you think...? What was the main idea...? Who was the key character...? Can you distinguish between...? What differences exist between...? Can you provide an example of what you mean...?	Cut out or draw pictures to show a particular event. Illustrate what you think the main idea was. Make a cartoon strip showing the sequence of events. Write and perform a play based on the story. Retell the story in your words. Paint a picture of some aspect you like. Write a summary report of an event. Prepare a flow chart to illustrate the sequence of events Make a colouring book.
Remembering (Knowledge)	Tell List Describe Relate Locate Write Find State	Name What happened after...? How many...? Who was it that...? Can you name the...? Describe what happened at...? Who spoke to...? Can you tell why...? Find the meaning of...? What is...? Which is true or false...?	Make a list of the main events.. Make a timeline of events. Make a facts chart. Write a list of any pieces of information you can remember. List all the in the story. Make a chart showing... Make an acrostic. Recite a poem.

Example questions using Bloom's taxonomy Goldilocks and the Three Bears	
Creating (Synthesis) Organising thoughts and ideas, what if..	Can you summarise the story? What do you think would have happened if the chair hadn't broken? Do you know any other similar stories? How are they similar? What kind of story do you think this is? What do you think Goldilocks learned from this event?
Evaluating (Evaluation) Opinions, judgements and reflections	Did you like it? Why? What was effective about this story? How did it draw the reader in?
Analysing (Analysis) Compares and contrasts	What is the difference between the mother bear and the father bear? What sequence of events led to the chair breaking?
Applying (Application) Put yourself in the situation/convert the knowledge	Would you have acted like Goldilocks? Why did Goldilocks act in that way? Can you draw the bears' house? Show the bears reactions in your facial expressions.
Understanding (Comprehension) Understanding of what was read	Why did the bears growl? Why didn't Goldilocks' mother follow her? What does this story tell us about?
Remembering (Knowledge) Recall of specific information	What did Goldilocks do? When did the bears arrive? Where did she go?

PURPOSEFUL INTERVENTION

Taking an interest. Commenting descriptively.

This looks interesting/exciting. It looks as though

I noticed that you

When you did, did you notice that

I can see that

Making connections

Do you remember when

It reminds me of

Formulating a hypothesis

I wonder if

What do you think might happen if? Child or adult respond Let's try, and see.

I wonder what might happen next?

(Child or adult respond)

Analysis

How did you make that happen? What did you do?

Can you tell me.

What do you think might happen if you.....? Can you tell me

Evaluation

Which bit of that did you like doing best?

Why?

Could you do it any differently?

Tell me, Show me

Examples of open-ended questions

- Open-ended questions genuinely invite children to think

- *What do you think ...?*
- *How do you know that ...?*
- *What do you think that ...?*
- *Do you have a reason ...?*
- *How can you be sure ...?*
- *Is this always so ...?*
- *Is there another way/reason/idea ...?*
- *What if ...?/ What if ... does not ...?*
- *Where is there another example of this ...?*
- *What do you think happens next?*

Practical strategies for questioning in the classroom

Children write Questions	For example – • About what they would like to know on a new topic • To ask the teacher or other children in order to assess their learning • To demonstrate their learning/misconceptions/areas they would like to further explore The classroom could have a question box where children drop questions at the end of a lesson. Or, a plenary could involve children writing questions that the class then work on together, or forms the basis of the next lesson.	
Children ask Questions	Create opportunities for children to ask questions. This could be of their peers, of the teacher or as a means to develop discussion. A 'question box' for written questions offers a different means of communication for children. Allow time for children to ask questions about pieces of work. This helps open up assessment and eliminate ambiguity	
'Might'	When questioning, insert the word 'might' to give children greater opportunity to think and explore possible answers. e.g. What is meaning of democracy? What might the meaning of democracy be? The first infers a single answer known by the teacher whereas the second is inherently more open.	

Wait-time	Wait time allows children time to think and therefore to produce answers. Also, not everyone in the class thinks at the same speed or in the same way – waiting allows children to build their thoughts and explore what has been asked. 2 types of wait time – - Teacher speaks and then waits before taking student responses. - Student response ends and then teacher waits before responding. This gives the student space to elaborate or continue – or for another student to respond.	
Open vs closed	Closed questions can be useful however are not great at facilitating the use of abstract thinking skills, encouraging talking or eliciting much understanding. Open questions are more likely to do this and thus improve learning. e.g. Did you go out last night? What did you after school yesterday?	
Teacher Review	The teacher leads the review of the lesson or unit using questioning to elicit understanding from children. Focus could also fall upon the effectiveness of the lesson at facilitating learning – i.e. can children think of ways that it could be altered to improve their learning? The teacher could model review by evaluating the lesson in relation to their own objectives.	
Articulate then Answer	Give children the opportunity to articulate their thinking before answering – 30 seconds silent thinking before any answers - Brainstorm in pairs first for 2-3 minutes - Write some thoughts down before answering - Discuss with your neighbour first	
Scene-Setting	Set the scene for the lesson by using a big, open question or problem-solving task that requires abstract thinking skills. Anticipate responses and follow-up so as to work these through. E.g. A lesson on the Vietnam War could begin with the question – Do Americans think they fight wars, or win them?	
Tell your neighbour	Children 'tell their neighbour' as a means of articulating their thoughts. - Ask a question, give thinking time and then ask children to tell their neighbour their thoughts. - Tell children what the new topic is and then ask them to tell their neighbour everything they know about it.	
Idea Thoughts	When you have received an answer to a question, open up the thinking behind it by asking what others think about the idea. e.g. "What do others think about _____'s idea?"	
Bouncing	Bounce answers around the room to build on understanding and have children develop stronger reasoning out of misconceptions. E.g. "Jimmy, what do you think of Sandra's answer?" "Sandra, how could you develop Carl's answer to include more detail?" "Carl, how might you combine all we've heard into a single answer?"	
Wait and recap	Wait for children to draw out most of the key words you are asking for and then reframe the question – asking for a synthesis which recaps the whole discussion by joining all these words into a single coherent answer, paragraph etc.	
Incorrect Discussion	Use incorrect answers as a discussion point. Rather than dismissing something because it is wrong, or saying 'that's interesting' etc. Use the misconception in reasoning to draw the process out into the open.	

	This leads to improving on misconceived reasoning and an atmosphere in which it is OK to be Wrong.	
Devising Questions	Devise questions that – • Challenge common misconceptions • Create conflict that requires discussion • Explore ambiguity and encourage discussion and clarification	
Group Answers	Children work in small groups to agree on answers – when tests are returned or in other situations. The process of agreeing should include reasoning over the validity of the consensus answer, as well as reasoned negation of misconceptions or wrong answers.	
Invert the Question	Instead of asking a question that requires factual recall, invert it to request explicit reasoning. e.g. 'Is France a democracy?' becomes 'What does it mean for a country to be a democracy?'	
X and Y	Ask children why X is an example of Y e.g. Why is an apple an example of a fruit? Why is a fox an example of a mammal? Questioning in this way avoids factual recall and asks for the underlying reasoning to be made explicit.	
What is a 'good' question?	Discuss with children what makes a 'good' question. The process can explicitly show them the difference between open and closed questions. They can then come up with questions on a topic and decide which are best, and then move on to discuss and answer these.	
Hands Down	Tell pupils they should only raise their hand to ask a question, not to answer one. The teacher then chooses pupils to answer, therefore gaining information on whether everyone is learning. www.classtools.net – fruit machine programme on here where you can input names, save it and play it to choose pupils at random. Write names on lollipop sticks and pull out at random to answer. Write numbers on balls or counters that tally to register or seating position and re-use with every class.	
Good Question Stems	Why does...? What if...? How would you...? Could you explain...? What might...?	
Enquiry Question	Use an enquiry question to stimulate high-level thinking in the lesson or unit. e.g. How democratic is the United Kingdom? Why is our school so ethnically diverse?	

Potential pitfalls of questioning

It is easy to fall into the trap of:

- Asking too many questions
- Asking pupils questions to which they can respond with a simple yes or no answer
- Asking too many short-answer, recall based questions
- Asking bogus 'guess what I'm thinking' questions
- Starting all the questions with the same opening
- Pursuing red herrings
- Dealing ineffectively with incorrect answers or misconceptions
- Focusing on a small number of pupils and not involving the whole class
- Making the sequence of questions too rigid
- Not giving pupils time to reflect, or to pose their own questions
- Asking questions when another strategy might be more appropriate

Strategies to address misconceptions (arising from pupil responses to questions)

Opening it up	• Include the word 'do you think' in any question (e.g. how do you think an aeroplane stays up in the sky?) so that a response becomes an opinion rather than the wrong answer
Transfer	• Say 'That was the answer to another question I was going to ask!'
Gathering	• Does anyone agree? Disagree? Have a different opinion?
Stalling	• I think you/we might want to come back to that idea a little later
Returning to the same pupil	• Do you want to say something different now? I think I know where you were coming from before. You were put off/misled by the

Alternatives to questions

- Teachers ask a lot of questions – studies show that it may be more than 300 a day.
- Overusing a pattern of repetitive fixed questions (who?, what?, where?, why?) will result in children asking fewer questions themselves, giving short responses, rarely discussing with peers, volunteering few ideas and showing confusion.
- One way of resolving this is to use alternatives to questions

Using alternatives to routine questions can actively encourage thinking and dialogue. Ways to do this include:

Withhold judgement	• Respond in a non-evaluative fashion • Ask others to respond
Invite children to elaborate	• 'Say more about ...' • 'Would you say a little more about that.' • 'I am not sure I'm certain that I know what you mean by that'
Speculate about the subject	• 'I wonder what might happen if ...'
Make a suggestion	• 'You could try ...'
Reflect on the topic	• 'Perhaps we now have a way of tackling this next time you ...' • 'Let's bring this all together ...'
Offer extra information	• 'It might also be useful to know that ...' • 'I think that I have read that ...'
Reinforce useful suggestions	• 'I especially liked ... because ...'
Clarify ideas	• 'We can tell this is the case by ...'
Correct me if I'm wrong	• 'But I thought we had agreed that ...' • 'So now perhaps we all believe ...'
Echo comments/summarise	• 'So you think ...' • 'Anwar seems to be saying ...'
Cue alternative responses	• 'There is no one right answer' • 'What are the alternatives?' • 'Who's got a different point of view?'
Challenge children to provide reasons	• 'Give reasons why'
Make a challenging statement	• 'Supposing someone said ...'
Contribute your own thoughts or experience	• 'I think that ...' • 'Remember when ...'
Use 'think-pair-share'	• Allow thinking time • Discuss with a partner, then in a group • Pair children so they can discuss in their first language
Allow rehearsal of responses	• 'Try out the answer in your head' • 'Try out the answer on your partner'
Invite children's questions	• 'Would anyone like to ask ... a question about that?'
Use thinking aloud	• Model rhetorical questions • 'I don't quite understand'
Ask a child to invite a response	• 'Rufshana, will you ask someone else what they think?'
Don't ask for a show of hands	• Expect everyone to respond
Non-verbal interventions	• Eye contact, a nod or raised eyebrows to encourage extended responses, to challenge or even to express surprise

- Different children need different sorts of alternative.
- Often the 'puzzled listener' role will be effective if it reflects genuine interest and attention to the learner's answer. Strategies to support thinking and talking include **pause**, **prompt** and **praise**.

- **Pausing**

This includes allowing thinking time. Sometimes a minimal encouragement will prompt further thinking 'Hmm', 'Uh huh', 'Yes', 'OK', 'I see' non-verbal encouragement includes eye contact facial signals such as smiling, and body gestures

- **Prompting and probing**

This involves giving verbal encouragement e.g. checking whether we have understood what the child has said and giving opportunities for rethinking and stating an idea 'can you explain?', 'tell us again' Probing questions include: 'why do you think that ...?', 'how do you know ...?', 'what do you mean by ...?', 'what if ...?', 'is it possible that...?'

- **Praising**

This is giving positive feedback

Being specific and personal praise 'that's an interesting answer', 'I like the way you ...' can foster general participation by supporting the hesitant, rewarding risk-takers and valuing contributions.

Make use of follow up questions

- Make use of a range of questions to enable children to explain their thinking and understanding.

Question:

Q: Can you tell me why teddy won't fit in the box?

A: She's brown.

Follow up questions in response to children's answers:

(to move on the learning/enable children to explain their thinking, reasoning & understanding)

- "good observation – acknowledge what the child has said and then, hold the teddy next to the box/try and put it in the box ... "does it fit?", "why do you think?", "what could we put the bear in instead?" Have other sized containers/boxes for comparison

Question:

Q: How did the Little Red Hen feel when the frog didn't help her?

A: She was happy. (Incorrect answer – she was very sad.)

Follow up questions in response to children's answers:

(to move on the learning/enable children to explain their thinking, reasoning & understanding)

- "hmmm, can you show me the Little Red Hen in the book?"
- "Let's look at the expression on her face (use fingers to go around face and show facial expressions) again shall we?"
- Does anyone have any other opinions on this? How do you think she feels? Upset, disappointed.. etc.

Question:

Draw the children's attention to the jar labelled '4p each'.

Q: If Jade wants to buy one lollipop out of this jar how much money will she need? Identify that she will need coins. A: She will need money.

Follow up questions in response to children's answers:

(to move on the learning/enable children to explain their thinking, reasoning & understanding)

- *How much money?*
- *How do you know that?*
- *What coins could she use?*

Is there any other way to make 4p?

- *What if she gave the shopkeeper 5p/10p?*
- *How many ways are there to make 4p?*

Question:

Show them the number 37.

Q: What can you tell me about this number?

A: It is 37

Follow up questions in response to children's answers:

(to move on the learning/enable children to explain their thinking, reasoning & understanding)

- *How many tens and units are in 37?*
- *How do you know?*
- *How could you make 37?*
- *How many ways can you make 37?*

Question:

Q: Which word in the sentence is a verb?

A: Run. (Correct answer)

Follow up questions in response to children's answers:

(to move on the learning/enable children to explain their thinking, reasoning & understanding)

- *How do you know?*
- *Do you agree? Why? Why not?*
- *Are there other verbs that could be used instead? Which is your favourite? Why?*
- *How did they run? (Encourage use of adverbs)*
- *Can you make another sentence with 'run' in it?*

Question:

Q: An orange costs 49p. How much do 3 oranges cost?

A: £1.47

Follow up questions in response to children's answers:

(to move on the learning/enable children to explain their thinking, reasoning & understanding)

- *How did you work that out?*
- *Based on what you know, how would you explain what 4 oranges cost?*
- *What if 1 cost 41p? How would you the answer be different?*
- *How could you use your knowledge of the 5x table to help you answer the question?*
- *How did you work it out?*
- *What strategies did you use?*
- *Did anyone do it in a different way?*
- *There was a sale – 10% off – how much did it cost?*
- *How much change would you get from £10?*
- *For every 3 oranges you get 2 bananas. If you had 8 bananas, how many oranges did you buy?*

Question:

Q: What strategy did you use?

A: Multiplying.

Follow up questions in response to children's answers:

- *How could you check?*
- *What are the different ways you could check your answer?*
- *What would result if you divided instead?*

Question:

Q: What is the writer's main point in this argument?

A: That the motorway should not be built. (Correct answer)

Follow up questions in response to children's answers:

(to move on the learning/enable children to explain their thinking, reasoning & understanding)

- *How do you know?*
- *Is the writer convincing?*
- *Find in the text ...*
- *What would the argument be?*
- *Which verbs/adjectives help?*
- *Tell me more ...*
- *Do you think ...*
- *Can you tell me why you think this?*
- *How would you describe/explain the author's point of view?*

Question:

Q: What is the function of the diagram of the butterfly in the explanation text?

A: To make it less boring. (Incorrect – the answer is to give the reader a clear image of the different parts of the butterfly's body.)

Follow up questions in response to children's answers:

(to move on the learning/enable children to explain their thinking, reasoning & understanding)

- *Can you explain to me why you thought this?*
- *Are there any other functions of the diagram?*

Making use of the “Five templates for effective questions”

- Effective in creating a thinking classroom and in helping teachers to become more aware of the impact of their questioning
- The questions are used in different ways:
 - Sometimes at the beginning of a lesson to tune children in and reveal their understanding (e.g. *Statement: plants grow if you give them other liquids but not water. Do you agree or disagree?*)
 - Sometime at the beginning of a unit or week to begin an investigation or research (e.g. *Range of answers: Why did Henry VIII have six wives? He got fed up with them/he wanted a son and heir/he was pressed to produce a son by other people etc.*)

1: A range of answers

Impact:

- Develops thinking skills
- Improves reasoning skills
- Promotes discussion and explanation
- Reveals misconceptions
- Encourages debate

Ask a question and give a range of possible answers for children to discuss. Include definite 'yes' answers, definite 'no' answers and some ambiguous answers to enrich the discussion this template is not helpful when only one answer is correct and the rest are wrong because there is very little to discuss.

Examples:

“What do we need for life?”

Water, telephones, clothing, cars, shelter, food

“Who can remember what a streamlined shape looks like?”

Teacher draws five different shapes on the board and asked children to discuss which shapes were streamlined

“What is the setting for this poem?” (using the poem ‘The Train Ride’ with title omitted

Bus, train, bike, car, plane, boat

“Are these foodstuffs good for you?”

Chocolate, fruit, milk, meat, fat, sugar, salt, water, butter, margarine, rice, pudding, motor oil, black pudding

“Which words are verbs?”

Door, run, climb, comb, red, slide, spill, cycle, shout

“Which things are needed to plan a route?”

Compass, watch, map, GPS, trundle wheel, car, flag, atlas, globe

“Which of these do you need to enjoy a successful lesson?”

Listening, manners drink, pencil, book, determination, patience

“Which of these language features would you need to use if you were going to write a diary entry?”

Formal language, past tense, abbreviations, technical language, named people, present tense, informal language

“What makes a good school council member?”

A good reader, a chatter box, a clear speaker, a good listener, a good writer

“When something unexpected happens, how do you feel?”

Proud, worried, aggressive, anxious, jealous, happy

Or as a variation

Ask the children to come up with a range of answers (e.g. The Wolf disguised himself as grandma because ...). Ask for ‘right’, ‘wrong’ and ‘could be’ answers.

2: A statement

Impact:

- Encourages open discussion and debate
- Develops critical thinking
- Reveals misconceptions and understanding
- Gives pupils confidence in expressing their opinions

Simply turn a question into a statement, and ask whether pupils agree or disagree with the statement, and to give reasons. ‘Closed’ questions, with one right answer, are clearly not as effective as those which need explanation.

Examples:

“This is a picture shows a Viking. Do you agree or disagree?”

“Batteries go flat”

“Glass is an excellent material for making a shelter. Agree or disagree?”

"Is this statement always, sometimes or never true?:

- ***Multiples of 3 are always odd numbers***
- ***Odd numbers multiplied by even numbers have odd answers"***

"Wood is a good materials for making umbrellas because it is waterproof. Do you agree or disagree?"

"Plastic toys are better than metal toys. Agree or disagree?"

"Victorian children must have been very unhappy. Agree or disagree?"

"Two opposite sides of a dice add up to 8. Agree or disagree?"

"The moon is a source of light. Agree or disagree?"

"Guy Fawkes was a bad man. Agree or disagree?"

"Every school should have its own swimming pool. Agree or disagree?"

"All pupils should learn a foreign language. Agree or disagree?"

3: Right and wrong

Impact:

- Encourages problem solving
- Identifies the success criteria
- Stimulates curiosity and interest
- Assesses knowledge
- Reinforces previous learning
- Demands explanation

Two opposites are presented to pupils. They are told that one is 'right' and one is 'wrong', and they have to decide how we know this to be true

Examples:

"Why is this meal healthy and this one unhealthy?" (instead of asking "what would you find in a healthy meal?")

"Why does this toy move and this one not?"

"Why are these shapes quadrilaterals and not these?"

"why is a dandelion a weed when a daffodil is not?"

"Why is this calculation right and this one wrong?"

$$8 \div 0.5 = 16 \quad 8 \times 0.5 = 16$$

4: Starting from the answer or end

Impact:

- Promotes reasoning skills
- Elicits prior knowledge
- Reinforces and revisits learning objectives
- Children to identify the success criteria
- Good for assessment
- Inclusive, because all can come up with their own ideas and solutions at many levels

This involves giving pupils the 'answer' or endpoint at the beginning and asking what they think the question might have been, how they think the answer might have been arrived at or *why* they think it is correct. This changes the focus from the answer itself to discussing *reasons* for the answer

Examples:

"Play fair is the answer. What might the question have been?"

"Water, glass, the moon and shiny material can all do this. What might the question have been?"

"The answer is square. What might the question have been?"

"The answer is a map. What might the question have been?"

"The answer is a list. What might the question have been?"

"Here is my well-built house. What can you see?"

"The Romans invaded Britain? Why?"

"1066 was a very turbulent year. Why?"

"The prince kissed Sleeping Beauty and she woke up. What needs to be in place in the story before this happens?"

"Bricks are the best material for building and house. Why?"

5: An opposing standpoint

Impact:

- Improves debating skills
- Encourages reasoning skills
- Develops respect for other points of view
- Teachers get pupils to substantiate their opinions
- Encourages lateral thinking

This involves introducing a different point of view in the question, rather than conventional thinking

Examples:

Instead of asking "How did Cinderella feel about her stepmother?" ask "How could Cinderella have helped her stepmother become a better person?"

"Is it fair that some children in the world do not have what we have?"

"How would a bully justify their actions?"

"Why would some Celts think the Roman invasion was a good?"

"Should school uniform be a matter of choice?"

"Would it be okay if you hit someone if you thought they were going to hit you?"

"Should only girls be nurses?"

"Should children who hurt each other not be punished?"

"Should the mother do all the housework?"

Developing classroom dialogue

- We support learning more if more extended answers are sought.

Some dos and don'ts for extending classroom dialogue	
Do	Don't
• choose questions and topics that are likely to challenge children cognitively	• merely ask children to guess what you are thinking or to recall simple and predictable facts
• expect children to provide extended answers which will interest others in the class	• tolerate limited, short answers which are of little interest to other children
• give children time to formulate their ideas and views	• hope for high quality answers without offering preparation or thinking time
• provide models of the patterns of language and the subject vocabulary to be used	• expect children to formulate well thought out answers without the language to do so
• expect children to speak for all to hear	• routinely repeat or reformulate what children have said
• vary your responses to what children say; debate with children; tell and ask them things in order to extend the dialogue	• just ask questions
• signal whether you want children to offer to answer (hands up) or to prepare an answer in case you invite them to speak	• habitually use the competitive 'hands up' model of question and answer work
• when children give wrong answers ask them to explain their thinking and then resolve misunderstandings	• praise every answer whether it is right or wrong

Final thoughts: the implications for teaching

- Plan questions carefully
- Ensure that you make use of a range of questions
- Think about questioning in different ways ... different hooks
- Give children the question stems ... verbs ... that will enable them to question each other
- Allow time for good questioning and the chance for your high-quality questions to be answered
- Establish the expectation that all children are ready to answer (over the course of the week every child should have the opportunity to answer a range of questions)
- Make use of the language structures and model the language you expect children to use in their responses

Marking & Feedback on Learning

ADD MARKING AND FEEDBACK Policy once it has been reviewed ready for September 2016

What are the expectations?

Key questions:

- Is making and feedback up to date and in line with an effective school policy?
- Are responses to pupils' learning helping them make progress by identifying at least one key area for improvement?
- Are 'barriers to learning' being identified and then used to plan future learning?

Key question: Is marking and feedback up to date and in line with an effective school policy?

Inadequate	Requires Improvement	Good	Outstanding
• Feedback does not consistently comply with school policy • There are a number of consecutive pages that have no marks from the teacher • Too many pages have short responses such as 'well done' or 'see me'. • There are occasional examples of incorrect work being marked correct. • Marking is not up-to-date. • Not all learners know how well they have done and what they need to do to improve their work. • Learners' progress is being inhibited because of the inconsistencies in marking and feedback.	• Feedback is mainly compliant with school policy. • Although work is marked regularly, the remarks are mostly just responding with remarks of how well they have done, i.e., 'I am pleased with the effort you have put in,' etc. • There is little evidence that the marking links to improvement made or aids future improvement. • Marking tends to be inconsistent across different subjects. • Agreed aspects such as self-assessment and peer assessment have not been sustained for lengthy periods. • Although evidence of effective marking exists, there is a lack of consistency in its application.	• Feedback is compliant with school policy. • Books have been marked regularly. • The marking is consistent across the class. • There is good attention to linking the comments to the initial learning objectives the pupil had. • There is clear indication as to what needs addressing in the future. • Work is marked against the learning objective and success criteria and focused on learning outcomes. • Feedback to individuals is easy to follow and helpful in relation to improving future work. • Scrutiny of workbooks reveals that work has been accurately assessed. • Assessment information is being used well to inform planning and to focus on future improvement.	• Feedback provides exemplary evidence against school policy. • There is evidence of consistent adherence to a system that is supporting pupils' learning by indicating how they could improve their standard of work. • There are guided opportunities for pupils to improve on an aspect of their learning. • There is substantial evidence that pupils have been given the opportunity to address potential improvement at a later stage. • Written feedback provides excellent information regarding the level the learners are working at. • Written feedback is linked to clear, user-friendly statements that learners understand.

Key question: Are responses to pupils' learning helping them make progress by identifying at least one key area for improvement?

Inadequate	Requires Improvement	Good	Outstanding
• There is little evidence that marking or feedback is making a difference to the progress being made. • Work is not always appropriately and accurately marked with little evidence of	• The feedback provided does not make it clear how improvement can be achieved. • Written feedback does not always provide helpful comments on how well learners have done and how they can improve their	• Work is appropriately and accurately marked with evidence of the next stage of learning and/or misconceptions being identified. • Feedback addresses basic skill errors as well as the focus of the objective.	• There is evidence of excellent opportunities being provided for learners to evaluate how they have improved as a result of the feedback provided.

the next stage of learning and/or misconceptions being identified. • There are several examples of the same mistake being made with little evidence of sustained improvement or response to any remarks made by the teacher. • There is little evidence that learners are being provided with opportunities to reflect on previous learning learn from it. • Marking lacks focus and does not help the learner.	work and make progress towards personal targets. • Despite examples of feedback (in written format) given, there is inconsistent evidence of improvement overall. • Any improvement as a result of feedback is not always sustained for any length of time. • Impact on progress is therefore too often 'short term'. • There is limited evidence of self-assessment or peer marking.	• In most cases, there is considered and immediate response from pupils to the feedback received and future work shows that much of this has been sustained. • Due to the fact that the feedback directly relates to the year's objectives, it is clear that progress is being made towards the National Standard. • Assessment information is being used well to inform future planning and next stage of learning.	• As a result of this feedback there is very positive impact being made on the progress. • The intended improvement can be directly linked to the year objectives. • Where appropriate, peer marking is used most effectively. • Written feedback is linked to clear, user-friendly statements that learners understand. • There is an expectation that younger learners share ideas with talk/writing partners and consequently share opinion on each other's learning.
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Key question: Are 'barriers to learning' being identified and then used to plan future learning?			
Inadequate	Requires Improvement	Good	Outstanding
• There is little evidence of marking identifying any areas for improvement, let alone being diagnostic enough to identify barriers to learning. • Marking does not link to the focus of the learning. • Marking does not help learners know if they have been successful in meeting the objectives set. • There is no evidence that as a result of the previous learning adjustments have been made to any new learning planned or delivered • There is little evidence that the teacher is making use of the information held about learners' level of attainment when making remarks about work or when planning future learning	• Although work is marked on a regular basis there is not enough evidence that it is impacting on future learning. • Teachers are not consistently in using data to help assess learners' relative progress. • The lack of challenge in on-going work is as a result of a failure to identify precisely the next area of learning for individuals. • Targets are too generic and do not help to move on the learning • There is a lack of awareness of the main trends in the most recent summative assessments and as a result the sequence of intended learning in a set of books does not follow a logic pattern.	• There is evidence that the outcomes of marking are being used to make decisions about future learning. • There is good awareness of each learners' level of attainment and this helps to provide clarity about the next area of learning. • There are good links made about the attainment in reading, writing and mathematics and therefore work across the curriculum is planned with this in mind • Targets are appropriately linked to the identified barriers to learning for both writing and mathematics • Teacher subject knowledge is good enough to allow for appropriate diagnosis of the subject	• It is clear by looking at sequences of work in learners' books that you have made adjustments to your programme of learning to take full account of weaknesses and misconceptions that you have identified in previous work. • The misconceptions or mistakes made are linked directly to the outcomes from year group expectations which helps learners be focused on meeting the national standards. • It is evident that your subject knowledge is excellent and that you are able to provide the right level of support in future work, based on the errors identified in previous learning. • Marking is sharply diagnostic and constructive.

Self-evaluation and Peer-evaluation (pupils as owners of their own learning) (pupils as a resources for others)

This aspect of practice will be developed throughout 2016-2017 alongside all teaching staff.

Resources & References

Sources useful documents & resource materials:

Outstanding Formative Assessment, culture and practice, Shirley Clarke
Embedded Formative Assessment, Dylan William
Embedding Formative Assessment, Dylan William, Siobhan Leahy
The Formative Assessment Action Plan, Nancy Frey, Douglas Fisher
The Key, Assesment Conference materials, November 2015
Focus Education assessment document materials
LBTH Primary Learning and Achievement Team documents and resources

Final report of the Commission on Assessment without Levels, September 2015

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/461534/Commission_report.pdf

NAHT <http://www.naht.org.uk/welcome/news-and-media/key-topics/assessment/naht-assessment-framework-materials/>

KS1 & KS2 Interim Teacher assessment frameworks KS1 & KS2

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/461547/Interim_teacher_assessment_frameworks_at_the_end_of_key_stage_1_PDFA.pdf

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/473675/Interim_teacher_assessment_frameworks_at_the_end_of_key_stage_2_PDFA_V3.pdf

KS1 & KS2 Sample Test materials <https://www.gov.uk/government/collections/national-curriculum-assessments-2016-sample-materials>

Rising Stars resources

<http://www.risingstars-uk.com/>