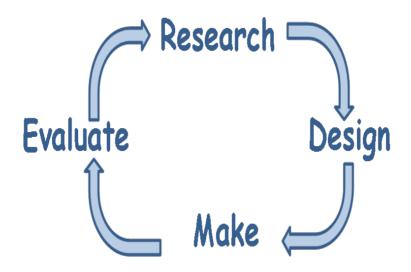


# Design & Technology Subject Leaders Resource File





#### **Design & Technology SL Resource File**

This, and subsequent resource files have been designed specifically to support the work of subject leaders in Primary Schools who have responsibility for any of the following subjects: Art & Design; Computing; Design & Technology; English; Geography; History; Mathematics; MfL; Music; PE; PSHE and Science.

Part A: Resources & NC Requirements Pages 4 - 6 Part B: A subject leaders audit: Design & Technology Pages 7 - 8 Part C: Progression in D&T: an exemplar Pages 9 - 11 Part D: Initial subject self-evaluation proforma Pages 12 Part E: Best practice as identified by Ofsted Pages 13 - 15 Part F: D&T - Good (in 'old' money) Pages 16 - 17 Part G: D&T: Quality of Education Pages 18 - 21 Pages 22 - 25 Part H: D&T: Quality of Education – an exemplar

Part I: Preparing for subject specific deep dive: D&T Pages 26

Annex 1: D&T – Outstanding (in 'old' money) Pages 27 - 28

Annex 2: Meeting the needs of pupils with SEND

The structure of each resource file follows the same format:

Pages 29 - 37

To support the work of a subject leader, there is a subject specific work-book for you to keep a record of all of the actions you have taken as well as the impact / outcome of those actions.



## Design & Technology Subject Leaders Work Book





# Part A: Resources & NC Requirements Links

https://www.data.org.uk/for-education/primary/

(Membership: School £139 / annum – Individual: £47 / annum)

The National Association of Educators in Art & Design

http://www.nsead.org/home/index.aspx

The Educational Technology Association

https://www.naace.co.uk/

#### Resources

Support materials for D&T subject leaders:

https://www.data.org.uk/resource-shop/primary/subject-leader-support/?o=#pager

#### The Design & Technology Association

- The Really Useful Primary Design and Technology Book (Routledge)
- Teaching Design and Technology Creatively (Learning to Teach in the Primary School Series) (Routledge)
- Mastering Primary Design and Technology (Mastering Primary Teaching) (Bloomsbury Academic)

Through the study of Design and Technology pupils learn to think and intervene creatively to solve problems. Pupils are expected to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.

Wherever possible learning in D&T will be linked to other subjects e.g. mathematics, science, (STEM), computing and art. Pupils will also reflect upon and evaluate past and present features of D&T. They will consider its uses and its effectiveness.

Pupils will design, making and evaluate a range of products to solve real and relevant problems. They will be expected to select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.



Design and technology programmes of study: key stages 1 and 2 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/239041/PRI MARY\_national\_curriculum\_-Design and technology.pdf

#### **Purpose of study**

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

#### **Aims**

The national curriculum for design and technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.

#### Subject content Key stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

When designing and making, pupils should be taught to:

#### Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

#### Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

#### **Evaluate**

- explore and evaluate a range of existing products July 2020
- evaluate their ideas and products against design criteria

#### Technical knowledge

 build structures, exploring how they can be made stronger, stiffer and more stable explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

#### Key stage 2

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. When designing and making, pupils should be taught to:

#### Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross- sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

#### Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

#### **Evaluate**

- investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to
- improve their work understand how key events and individuals in design and technology have helped shape the world

#### **Technical knowledge**

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.



Part B; Subject leaders audit: Design & Technology

Task	Notes	Completed	Date
Am I clear about the N.C. Aims for		-	
Design & Technology?			
Have I checked out the subject			
association website to identify			
resources for:			
* Me, as the subject leader			
* Teachers / assistants			
Have I completed an audit of my			
own K, S & U against these			
aims?			
Have I identified sources to			
support me in my own subject			
knowledge?			
Have I written a statement of			
Intent for Design & Technology?			
In writing the statement of Intent,			
did I refer to paragraph 179 of D-			
D Resource 1?			
Re: Para: 179, do I have a written			
response for each of the 5 bullet			
points?			
Has this statement been			
approved by HT / SLT / all staff?			
Have I developed a monitoring			
calendar so that I am able to			
build up an accurate and up-to-			
date overview of the www/ebi in			
T, L & A for Design &			
Technology?			
Have I clarified with my line			
manager what good / better T, L			
& A in Design & Technology			
'looks' like? (and hence what is			
not yet 'good' enough)			
Supplementary questions:			
Supplementary questions:			
How long have I been the subject leader for Design & Technology,			
and what support (CPD) have I			
and what support (CFD) have I			

received either internally or externally?		
What resources do I use to		
support me as a subject leader?		
How have I designed the Design		
& Technology curriculum?		
What am I trying to achieve		
through the Design & Technology		
curriculum?		
What scheme of learning does		
the school follow (published or		
your own)?		
How is this subject taught, and		
why?		
How do children progress in this		
subject from one year to the		
next? (Remember that <b>progress</b>		
is knowing more, remembering		
more and being able to do		
more.)		
How do you ensure that pupils		
retain their subject knowledge?		
How do you ensure that pupils		
with SEND (as well as those		
entitled to Pupil Premium) benefit		
from the curriculum in this		
subject?		
What would you expect an		
inspector to see when they visit		
Design & Technology lessons		
and speak to the pupils?		
How do teachers clarify any		
misconceptions by pupils?		
What links are made between		
Design & Technology and other		
subjects does – can you give an		
example of where this works		
particularly well?		
Can you tell of any examples		
where you have supported other		
teachers / assistants in subject X		
and the impact that this has had		
on their teaching / pupils'		
learning?		



Part C: Progression in Design & Technology – an exemplar

Aims	practical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly	skills in order to design and make high- quality	evaluate and test their	Understand and apply the principles of nutrition and learn how to cook.
EYFS	an object to represent something else even though they are not similar.	complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park.  Explore different materials freely, to develop their ideas about how to use them and what to make.	Develop their own ideas and then decide which materials to use to express them.  Join different materials and explore different textures.	
a	Pupils generate ideas for purposeful designs and recognise characteristics of familiar products. They explain what they are making and which tools they are using.	describe what they want	They talk about their own and other people's work in simple terms and describe how a product works.	
b	Pupils generate ideas based on their	They plan what to do next based on their	They recognise	

	investigations of products. They use models, pictures and words to describe their designs.	experience of working with materials and components. They select appropriate tools, techniques and materials, explaining their choices. They assemble, join and combine materials and components in a variety of ways to make functional products.	suggest things they could do better in the	
С	Pupils generate ideas and recognise that their designs have to meet a range of different needs and users. They clarify ideas when asked and use words, labelled sketches and models to communicate the details of their designs.	techniques to make their functional products.	After reflecting on the design and make process and their products, they identify some improvements.	
d	issues into account as they respond to briefs. They communicate alternative ideas using words, labelled	They use some ideas from others' designing to inform their own work. They produce step-bystep plans and then select and work with a range of tools and equipment. They apply their knowledge and understanding of materials, ingredients and components, and work with them with some accuracy, paying attention to quality of finish and to function.	They identify what is working well and what could be improved to overcome technical problems. They reflect on their designs as they develop, recognising the significance of knowledge and previous experience.	
е	drawing on and using various sources of information. They clarify their ideas through discussion,	They show that they are aware of constraints as they apply knowledge and understanding of materials, ingredients and techniques. They use understanding of	They check their work as it develops, solve technical problems and show some evidence of	

showing understa	nding others' desig	ning as thev	creativity as	
of aesthetic and	develop their		•	
economic dimens	ions. work from the	•	their approach	
They respond to b	oriefs detailed plan		in the light of	
	nding them where a		progress.	
of how culture and			They test and	
society are reflect	ed in of tools, mate	erials,	evaluate their	
familiar products	when ingredients, e	equipment,	products,	
developing and	components	and	showing that	
communicating th	eir processes wi	ith some	they	
own ideas.	precision.		understand	
			the situations	
			in which the	
			products will	
			function.	



#### Part D: Initial subject self-evaluation proforma Date:

This is a basic self-evaluation proforma in order for the subject leader to gain a brief overview of strengths and areas for improvement possibly prior to undertaking a more comprehensive review and monitoring process.

Summary:
The key strengths in:
Teaching, learning & assessment in Design & Technology are:
The ICT / Computing Design & Technology are:
The main areas we need to develop in:
Teaching, learning & assessment in Design & Technology are:
The Design & Technology Curriculum are:

.....

Signed:

Date: .....



#### Part E: Best practice as identified by Ofsted

The last time Ofsted reported specifically on Design & Technology<sup>1</sup>(2012), they stated that: Schools should:

- ensure that teachers have regular high-quality training to teach pupils how to use ICT in D&T, particularly control systems, and to enable older pupils to use tools and equipment safely
- improve the use of assessment of pupils' progress in D&T, ensuring that
  pupils know how well they are doing and what they should do to move on to
  the next level.

#### Good teaching was characterised by:

- detailed lesson planning which made good use of available time, met pupils' needs and developed their learning
- adapting work to offer suitable challenge to all groups of pupils, including the more able effective use of resources to support learning and particularly to support pupils' investigations, testing and analysis of products
- questioning to challenge pupils' thinking, particularly about the function of products and the needs of users
- well-managed discussion in lessons to include all pupils' views teachers' high expectations, and accurate use and modelling of subject specific terms and technical language
- inclusive approaches that met the needs of individual pupils, including those
  with special educational needs and/or disabilities and those at early stages of
  learning English as an additional language maintaining interest and relevance
  by linking D&T tasks to pupils' interests, establishing real contexts for their
  work, and building upon their knowledge and skills in other subjects.

#### **Best Practice examples**

**A:** Excellent planning by Reception class staff enabled children to work independently to make banana bread. Staff developed a production line and each stage of the recipe was broken down into simple written and visual steps. As children came to each stage, they acted on the instructions: for example weighing ingredients, cracking and mixing eggs, mashing bananas and, finally, ensuring that their mixture was poured carefully into the tray ready for baking. Adult supervision was unobtrusive, but readily available to provide further support if needed, and at critical points in the process.

**B:** There was a strong sense of purpose in the way children worked in the Nursery and in the products they made, although this often evolved as children thought about what they were doing and were influenced by the excellent resources. For example, one girl made a shelter, which became a home, and later evolved into a bat cave to

<sup>&</sup>lt;sup>1</sup> Meeting technological challenges? Design and technology in schools 2007–10 (2011)

Copyright Andy Phillips (September 2024)

match her Batman outfit. As its purpose changed, she made small adjustments to the structure she had created.

**C:** The brief was simple: 'Provide your animal with a home with food and water, a sleeping area and an area for exercise. There must be a door that opens and closes securely to keep your animal safe.' Pupils' thinking was informed by investigation into the needs of their chosen animal and the technical problem of making the home secure. Their efforts resulted in good homes for snakes, elephants, guinea pigs and rabbits. While the possibility of escape by some animals remained a concern in some models, most children had solved this with an effective fastening device.

**D:** Pupils in Year 5 who create moving toys gain a very clear insight into components such as slider, follower and shaft in cam systems. They understand the functions of circular, eccentric, drop and pear- shaped cams. In Year 6, pupils gain a very good understanding of simple elements of parallel and series circuits and gear ratios. They use kits to model the work before developing their controllable vehicles, some of which have pulleys arranged to give suitable gearing and a parallel circuit to work both motor and lights. They are able to put this work into a wider perspective as they visit the nearby farm tractor museum to study transmission systems.

**E:** Year 2 pupils were making cushion covers using batik and a sewing machine. They were dependent on the adults around them for support because of health and safety issues, but had no previous experience of batik to inform the design of their covers. This meant that they developed intricate pictures drawn in wax that did not work well. Similarly, pupils in Year 3 made puppets using Modroc.3 They were expected to design them having never used Modroc before. In addition, they had no opportunity to practise with it, so the success of the finish was less than it should have been. Pupils and teachers were content with work that did not sufficiently build on past standards. So, for example, the quality of junk modelling in Year 4 had not advanced much further than when the pupils were in the Reception classes. Although measuring skills were encouraged, particularly in Years 4–6, the quality of finish of a lot of the work was undermined by inaccurate measuring. For example, when Year 5 pupils were constructing greenhouses to grow seeds, many of the materials cut to cover the wooden frames were ill-fitting because of simple measuring mistakes.

**F:** A Year 2 class considered how a Roman soldier might move, the situations he might encounter and what this meant in terms of developing the criteria for a fastening device to hold his cloak securely. A wide range of teaching and learning strategies were evident in each classroom. Well focused questioning, imaginative use of role play, and good use of products and collections of artefacts helped pupils analyse how products work and supported their excellent designing and making. Pupils' responses to teachers' efforts were unequivocal as they were securely developing independence and becoming reflective learners: 'It's fun, we enjoy designing and making.' 'It is difficult to get your product just right, like you imagine it to be. I am learning to plan deeply each stage of making. As you get older, you make more decisions about materials.'

**G:** Pupils were provided with an impressive array of bread products from the local bakers and from larger supermarkets which cater for a more culturally diverse population than is present in this rural village community. Breads were selected on the basis of different methods of production. The pupils were exposed to a rich range of tastes, textures, smells and shapes of bread during the tasting session. They used all their senses to support their investigations and produce a very wide range of Copyright Andy Phillips (September 2024)

14 Licensed to the Hounslow Education Partnership (HEP) for use in HEP member schools only.

descriptive words to illustrate their experiences. All pupils accurately used the star chart method (to test and rank in order) to identify the bread with the best characteristics of taste, texture, smell and costs. The experience of a volunteer grandparent was used to extend pupils' learning further. She explained about the range of bread products available when she was their age and her experience more recently. They were amazed that today was the first time in her long life that she had seen such a wide range of breads.

**H:** Working in groups, pupils were challenged to develop and improve the functionality of the bridges they were building. The focus on function arose from the earlier class discussion and evaluation. Pupils applied their earlier knowledge in a focused way to explore, test and answer the following key questions as the lessons proceeded.

- What type of mechanism will open and close the bridge?
- When making the prototype bridge, how you can strengthen the bridge so that it will hold a greater weight?
- What type of support between the two beams will make your bridge sturdier?
- What materials would be used when making a real beam bridge?

I: Key Stage 1 pupils had produced individual plans to support them in making a fruit salad. Working in pairs, they tasted them and analysed the results to find the most popular, flavoursome salad. The teacher's assessment record identified the things that all pupils could do, with annotations next to each pupil's name identifying the strengths demonstrated. They showed for example that: 'Nathan is now confident in planning'; 'Rebecca has a good understanding now of what a pictogram is and how it is constructed'; 'Andrew was very good at talking about where fruits come from and gave excellent instructions when working with a partner'. The lesson plan also set out the next challenge for each of these pupils.

**J:** Pupils in Years 5 and 6 were commissioned by the company to develop new packaging. As part of an initial investigation, 10 pupils visited the company site with a teaching assistant to find out more about the company and its existing product range. A video conference link between the school and the company was established for the lesson. Pupils in school listened attentively and watched how a mock-up package is scaled up to the actual size. Factory staff explained how CAD and CAM are used. Pupils asked good, well-focused questions: for example 'What training do people have to use the machines?' Is the factory designed in a specific way to aid production'? 'Can you give us some examples of products you have made?' A lot of information was given in response and teachers had already wisely planned to record it so that pupils could review it later. Pupils watching in school asked for close-ups of the products, and for digital photographs to be taken. The video conference made a good contribution to pupils' learning.



# Part F: Design & Technology: Quality of Education – Good (in old money<sup>2</sup>)

Ofsted produced this guidance to support their subject specific reviews (Ei above)

#### **Achievement**

- Pupils understand the working characteristics and properties of the materials they are using and why one material, ingredient or component is better suited to a job than another.
- Pupils work with increasing independence in developing their work, and demonstrate resilience in solving design problems and technical challenges.
- Pupils understand how to carry out high-quality tests before attempting to improve their products and realise their plans accurately and safely.
- The suitability for users is embedded in all aspects of their designing and making.
- Pupils analyse and use their research effectively to support their designing and to test the effectiveness of their products.
- Pupils apply their knowledge of science and mathematics to inform their designing and making.
- They talk confidently about their technological ideas, and present information and plans effectively by writing, drawing and using annotated sketches.

#### **Teaching**

- Teachers are enthusiastic about the subject and communicate the value of D&T to pupils well.
- Pupils with different starting points to make equally good progress, due to teachers having a confident level of specialist expertise and using this effectively to plan purposeful lessons and schemes of work. Teachers use questioning and manage discussions skilfully to check pupils' understanding and to challenge their thinking.
- Practical skills and designing strategies are taught effectively to make potentially difficult concepts and skills accessible for all pupils, and promote good learning across all aspects of D&T.
- Pupils take responsibility, persevere with design problems, and are supported and challenged to be innovative and creative.

<sup>&</sup>lt;sup>2</sup> Taken from the Subject Specific Guidance (Ofsted 2013)

 Teachers make effective use of support staff and plan and manage time and resources such as tools and CAD/CAM equipment effectively, so that pupils' learning proceeds at a good pace.

#### Curriculum

- Opportunities are secure for pupils throughout the school to design and make products in response to real problems for real clients.
- The curriculum is well resourced, coherently planned and is responsive to pupils' prior learning, including for pupils transferring from primary to secondary schools.
- Curriculum planning ensures that pupils have extensive opportunities to develop their understanding of how products are made in industry and to learn how to make more than one product, component or batch of products. Links with other subjects in the school strengthen pupils' achievement in D&T.
- Opportunities to promote pupils' SMSC development are planned and delivered systematically.
   A broad range of designing and making clubs, competitions, visits and visitors enriches and enhances pupils' learning.

#### Leadership & management

- Leaders have a clear vision for the subject that is well informed by current developments in D&T and communicated effectively to staff, pupils and parents.
- Subject reviews, self-evaluation and improvement planning are clearly focused on raising standards and improving the provision for D&T.
- Pupils' and parents'/carers' feedback is used regularly to improve and develop D&T, to keep it relevant and accessible to all.
- There is a shared common purpose among those involved in teaching D&T with good opportunities to share and to refresh practice through regular subject training.
- Good planning ensures that accommodation, resources and safe working practices support learning effectively.
   The subject makes a good contribution to whole- school priorities, including literacy and numeracy policies.



#### Part G: Design & Technology: Quality of Education (Good)

This template includes the current criteria for the Quality of Education judgment of 'Good' along with columns for the SL / SLT to insert where they perceive is a best-fit with the 'old' subject specific criteria along with their own internal evidence. As such it serves two purposes, one as a CPD activity to consider the match between the 'old' subject specific criteria and then 'new' criteria and secondly to benchmark / evaluate the school's provision against this.

INTENT		
NEW HANDBOOK	EVIDENCE	OLD SUBJECT CRITERIA
Leaders adopt or construct a curriculum that is ambitious and designed to give all pupils, particularly disadvantaged pupils and including pupils with SEND, the knowledge and cultural capital they need to succeed in life. This is either the national curriculum or a curriculum of comparable breadth and ambition. [If this is not yet fully the case, it is clear from leaders' actions that they are in the process of bringing this about.]		
The school's curriculum is coherently planned and sequenced towards cumulatively sufficient knowledge and skills for future learning and employment. [If this is not yet fully the case, it is clear from leaders' actions that		

The curriculum is successfully adapted, designed or developed to be ambitious and meet the needs of pupils with SEND, developing their knowledge, skills and abilities to apply what they know and can do with increasing fluency and independence. [If this is not yet fully the case, it is clear from leaders' actions that they are in the process of bringing this	they are in the process of bringing this about.]	
labout 1	adapted, designed or developed to be ambitious and meet the needs of pupils with SEND, developing their knowledge, skills and abilities to apply what they know and can do with increasing fluency and independence. [If this is not yet fully the case, it is clear from leaders' actions that they are	

IMPLEMENTATION		
New Handbook	Evidence	Old Subject Criteria
Teachers have good knowledge of the subject(s) and courses they teach. Leaders provide effective support for those teaching outside their main areas of expertise.		
Teachers present subject matter clearly, promoting appropriate discussion about the subject matter being taught. They check pupils' understanding systematically, identify misconceptions accurately and provide clear, direct feedback. In so doing, they respond and adapt their teaching as necessary without unnecessarily elaborate or individualised approaches.		
Over the course of study, teaching is designed to help pupils to remember long term the content they have been taught and to integrate new knowledge into larger ideas.		
Teachers and leaders use assessment well, for example to help pupils embed and use knowledge fluently, or to check understanding and inform teaching. Leaders understand the limitations of assessment and do not use it in		

a way that creates unnecessary		
burdens on staff or pupils.		
Teachers create an environment		
that focuses on pupils. The		
textbooks and other teaching		
materials that teachers select – in a		
way that does not create		
unnecessary workload for staff –		
reflect the school's ambitious		
intentions for the course of study.		
These materials clearly support the		
intent of a coherently planned		
curriculum, sequenced towards		
cumulatively sufficient knowledge		
and skills for future learning and		
employment.		
The work given to pupils is		
demanding and matches the aims		
of the curriculum in being		
coherently planned and sequenced		
towards cumulatively sufficient		
knowledge.		
Reading is prioritised to allow pupils		
to access the full curriculum offer.		
A rigorous and sequential approach		
to the reading curriculum develops		
pupils' fluency, confidence and		
enjoyment in reading. At all stages,		
reading attainment is assessed and		
gaps are addressed quickly and		
effectively for all pupils. Reading		
books connect closely to the		
phonics knowledge pupils are		
taught when they are learning to		
read.		
The sharp focus on ensuring that		
younger children gain phonics		
knowledge and language		
comprehension necessary to read,		
and the skills to communicate,		
gives them the foundations for		
future learning.		
Teachers ensure that their own		
speaking, listening, writing and		
reading of English support pupils in		
developing their language and		
vocabulary well.		
	-	

IMPACT		
New Handbook	Evidence	Old Subject Criteria

Pupils develop detailed knowledge and skills across the curriculum and, as a result, achieve well. This is reflected in results from national tests and examinations that meet government expectations, or in the qualifications obtained.	
Pupils are ready for the next stage of education, employment or training. They have the knowledge and skills they need and, where relevant, they gain qualifications that allow them to go on to destinations that meet their interests and aspirations and the intention of their course of study. Pupils with SEND achieve the best possible outcomes.	
Pupils' work across the curriculum is of good quality.	
Pupils read widely and often, with fluency and comprehension appropriate to their age. They are able to apply mathematical knowledge, concepts and procedures appropriately for their age.	



Part H: Design & Technology: Quality of Education (exemplar) This is the authors initial interpretation of a best-fit between the old and the new.

INTENT				
New Handbook	Evidence	Old Subject Criteria		
Leaders adopt or construct a curriculum that is ambitious and designed to give all pupils, particularly disadvantaged pupils and including pupils with SEND, the knowledge and cultural capital they need to succeed in life. This is either the national curriculum or a curriculum of comparable breadth and ambition. [If this is not yet fully the case, it is clear from leaders' actions that they are in the process of bringing this about.]		The curriculum is well resourced, coherently planned and is responsive to pupils' prior learning, including for pupils transferring from primary to secondary schools.  Curriculum planning ensures that pupils have extensive opportunities to develop their understanding of how products are made in industry and to learn how to make more than one product, component or batch of products. Opportunities are secure for pupils throughout the school to design and make products in response to real problems for real clients.		
The school's curriculum is coherently planned and sequenced towards cumulatively sufficient knowledge and skills for future learning and employment. [If this is not yet fully the case, it is clear from leaders' actions that they are in the process of bringing this about.]  The curriculum is successfully adapted, designed or developed to be ambitious and meet the needs of punils		The curriculum is well resourced, coherently planned and is responsive to pupils' prior learning, including for pupils transferring from primary to secondary schools.		
and meet the needs of pupils with SEND, developing their knowledge, skills and abilities to apply what they know and can do with increasing fluency and independence. [If this is not yet fully the case, it is		Links with other subjects in the school strengthen pupils' achievement in D&T.		

Copyright Andy Phillips (September 2024)

only.

Licensed to the Hounslow Education Partnership (HEP) for use in HEP member schools

clear from leaders' actions	
that they are in the process of	
bringing this about.]	

IMPLEMENTATION		
NEW HANDBOOK	EVIDENCE	OLD SUBJECT CRITERIA
Teachers have good knowledge of the subject(s) and courses they teach. Leaders provide effective support for those teaching outside their main areas of expertise.		Teachers are enthusiastic about the subject and communicate the value of D&T to pupils well. Teachers use questioning and manage discussions skilfully to check pupils' understanding and to challenge their thinking.
Teachers present subject matter clearly, promoting appropriate discussion about the subject matter being taught. They check pupils' understanding systematically, identify misconceptions accurately and provide clear, direct feedback. In so doing, they respond and adapt their teaching as necessary without unnecessarily elaborate or individualised approaches.		Teachers are enthusiastic about the subject and communicate the value of D&T to pupils well. Teachers use questioning and manage discussions skilfully to check pupils' understanding and to challenge their thinking.
Over the course of study, teaching is designed to help pupils to remember long term the content they have been taught and to integrate new knowledge into larger ideas.		Pupils with different starting points make equally good progress, due to teachers having a confident level of specialist expertise and using this effectively to plan purposeful lessons and schemes of work.
Teachers and leaders use assessment well, for example to help pupils embed and use knowledge fluently, or to check understanding and inform teaching. Leaders understand the limitations of assessment and do not use it in a way that creates		Teachers use questioning and manage discussions skilfully to check pupils' understanding and to challenge their thinking. Pupils with different starting points make equally good progress, due to teachers having a confident level of specialist expertise and using

unnecessary workload for staff – reflect the school's ambitious intentions for the course of study. These materials clearly support the intent of a coherently planned curriculum, sequenced towards cumulatively sufficient knowledge and skills for future learning and employment.  The work given to pupils is demanding and matches the aims of the curriculum in being coherently planned and sequenced towards cumulatively sufficient knowledge.  The work given to pupils is demanding and matches the aims of the curriculum in being coherently planned and sequenced towards cumulatively sufficient knowledge.  of support staff and plan and manage time and resources such as tools and CAD/CAM equipment effectively, so that		
Teachers create an environment that focuses on pupils. The textbooks and other teaching materials that teachers select – in a way that does not create unnecessary workload for staff – reflect the school's ambitious intentions for the course of study. These materials clearly support the intent of a coherently planned curriculum, sequenced towards cumulatively sufficient knowledge and skills for future learning and employment.  Pupils take responsibility, persevere with design problems, and are supported and challenged to be innovative and creative. Teachers make effective use of support staff and plan and sequenced towards cumulatively sufficient knowledge.  Pupils take responsibility, persevere with design problems, and are supported and challenged to be innovative and creative. Teachers make effective use of support staff and plan and manage time and resources such as tools and CAD/CAM equipment effectively, so that pupils learning proceeds at a good pace.  Reading is prioritised to allow pupils to access the full curriculum offer.  A rigorous and sequential approach to the reading curriculum develops pupils' fluency, confidence and enjoyment in reading, At all stages, reading attainment is assessed and gaps are addressed quickly and effectively for all pupils. Reading books connect closely to the phonics knowledge pupils are taught when they are learning to read.  The sharp focus on ensuring that younger children gain phonics knowledge and	· ·	•
Teachers create an environment that focuses on pupils. The textbooks and other teaching materials that teachers select – in a way that does not create unnecessary workload for staff – reflect the school's ambitious intentions for the course of study. These materials clearly support the intent of a coherently planned curriculum, sequenced towards cumulatively sufficient knowledge and skills for future learning and employment.  The work given to pupils is demanding and matches the aims of the curriculum in being coherently planned sequenced towards cumulatively sufficient knowledge.  The work given to pupils is demanding and matches the aims of the curriculum in being coherently planned sequenced towards cumulatively sufficient knowledge.  Reading is prioritised to allow pupils to access the full curriculum offer.  A rigorous and sequential approach to the reading curriculum develops pupils fluency, confidence and enjoyment in reading, At all stages, reading attainment is assessed and gaps are addressed quickly and effectively for all pupils.  Reading books connect closely to the phonics knowledge pupils are taught when they are learning to read.  The sharp focus on ensuring that younger children gain phonics knowledge and	or pupils.	purposeful lessons and
environment that focuses on pupils. The textbooks and other teaching materials that teachers select – in a way that does not create unnecessary workload for staff – reflect the school's ambitious intentions for the course of study. These materials clearly support the intent of a coherently planned curriculum, sequenced towards cumulatively sufficient knowledge and skills for future learning and employment.  Pupils take responsibility, persevere with design problems, and are supported and challenged to be innovative and creative. Teachers make effective use of support staff and plan and manage time and resources such as tools and CAD/CAM equipment effectively, so that the pupils later responsibility, persevere with design problems, and are supported and challenged to be innovative and creative. Teachers make effective use of support staff and plan and manage time and resources such as tools and CAD/CAM equipment effectively, so that good pace.  Reading is prioritised to allow pupils to access the full curriculum offer.  A rigorous and sequential approach to the reading curriculum develops pupils fluency, confidence and enjoyment in reading. At all stages, reading attainment is assessed and gaps are addressed quickly and effectively for all pupils. Reading books connect closely to the phonics knowledge pupils are taught when they are learning to read.  The sharp focus on ensuring that younger children gain phonics knowledge and		schemes of work.
Pupils take responsibility, persevere with design problems, and are supported and challenged to be innovative and creative. Teachers make effective use of support staff and plan and manage time and resources such as tools and CAD/CAM equipment effectively, so that pupils to access the full curriculum develops pupils' fluency, confidence and enjoyment in reading. At all stages, reading attainment is assessed and gaps are addressed quickly and effectively for all pupils. Reading books connect closely to the phonics knowledge and	environment that focuses on pupils. The textbooks and other teaching materials that teachers select – in a way that does not create unnecessary workload for staff – reflect the school's ambitious intentions for the course of study. These materials clearly support the intent of a coherently planned curriculum, sequenced towards cumulatively sufficient knowledge and skills for future learning and	such as tools and CAD/CAM equipment effectively, so that pupils' learning proceeds at a
Reading is prioritised to allow pupils to access the full curriculum offer.  A rigorous and sequential approach to the reading curriculum develops pupils' fluency, confidence and enjoyment in reading. At all stages, reading attainment is assessed and gaps are addressed quickly and effectively for all pupils.  Reading books connect closely to the phonics knowledge pupils are taught when they are learning to read.  The sharp focus on ensuring that younger children gain phonics knowledge and	The work given to pupils is demanding and matches the aims of the curriculum in being coherently planned and sequenced towards cumulatively sufficient	persevere with design problems, and are supported and challenged to be innovative and creative.  Teachers make effective use of support staff and plan and manage time and resources such as tools and CAD/CAM equipment effectively, so that pupils' learning proceeds at a
A rigorous and sequential approach to the reading curriculum develops pupils' fluency, confidence and enjoyment in reading. At all stages, reading attainment is assessed and gaps are addressed quickly and effectively for all pupils. Reading books connect closely to the phonics knowledge pupils are taught when they are learning to read.  The sharp focus on ensuring that younger children gain phonics knowledge and	pupils to access the full	
	approach to the reading curriculum develops pupils' fluency, confidence and enjoyment in reading. At all stages, reading attainment is assessed and gaps are addressed quickly and effectively for all pupils. Reading books connect closely to the phonics knowledge pupils are taught when they are learning to read.  The sharp focus on ensuring that younger children gain phonics knowledge and	

necessary to read, and the skills to communicate, gives them the foundations for future learning.	
Teachers ensure that their own speaking, listening, writing and reading of English support pupils in developing their language and vocabulary well.	

IMPACT		
NEW HANDBOOK	EVIDENCE	OLD SUBJECT CRITERIA
Pupils develop detailed knowledge and skills across the curriculum and, as a result, achieve well. This is reflected in results from national tests and examinations that meet government expectations, or in the qualifications obtained.		Pupils understand the working characteristics and properties of the materials they are using and why one material, ingredient or component is better suited to a job than another.  Pupils work with increasing independence in developing their work, and demonstrate resilience in solving design problems and technical challenges.  Pupils understand how to carry out high-quality tests before attempting to improve their products and realise their plans accurately and safely.
Pupils are ready for the next stage of education, employment or training. They have the knowledge and skills they need and, where relevant, they gain qualifications that allow them to go on to destinations that meet their interests and aspirations and the intention of their course of study. Pupils with SEND achieve the best possible outcomes.		They talk confidently about their technological ideas, and present information and plans effectively by writing, drawing and using annotated sketches. Pupils analyse and use their research effectively to support their designing and to test the effectiveness of their products.
Pupils' work across the curriculum is of good quality.		Pupils analyse and use their research effectively to support their designing and to test the effectiveness of their products.

Pupils read widely and often, with fluency and comprehension appropriate to their age. They are able to apply mathematical knowledge, concepts and procedures appropriately for their age.		Pupils apply their knowledge of science and mathematics to inform their designing and making.
--	--	--



# Part I: Preparing for a subject specific deep-dive: Design & Technology

#### Resources (to have at hand)

- Design & Technology self-evaluation report o Design & Technology development (action) plan
- Long / medium term planning, including your progression map (skills; knowledge) o Examples of pupil's work across year groups (at least from say EY / KS1 / KS2), including sequential learning

**Suggested questions** (When responding to any questions, try not to focus solely on 'describing' what you / colleagues have been engaged in, BUT: what has been the impact / outcome of any actions.)

- Do you use and follow the National Curriculum? If not, what else do you have in place? If so, how do you track the coverage?
- Would you say that there is anything creative about your curriculum?
- What are the key characteristics of a good 'designer' / 'technologist"? How do you plan to develop these traits?
- What subject specific CPD have you had within the last three years?
- How do you keep up-to-date regarding recent subject specific developments?
- How do you plan for different groups of pupils to achieve within Design & Technology? How is this monitored?
- Are pupils aware of cross-curricular links with other subjects? Can you give me an example?
- Do you plan any topics with other subjects to ensure that some teaching methods are the same e.g. with the mathematics curriculum?
- How do you track and monitor the way the curriculum is covered?
- What assessment system do you have in place to track progress is being made as pupils move through the school?
- How areas of your Design and Technology curriculum are you most pleased with? Why is this?

- Which areas of your Design and Technology curriculum are you developing? Why is this?
- How do you know that pupils are making progress that is at least 'good' in Design and Technology?



# Annex 1: Design & Technology – Outstanding (in 'old' money<sup>33</sup>) Ofsted produced this guidance to support their subject specific reviews (Eiii above)

#### **Achievement**

- Pupils respond ambitiously to an increasingly complex range of designing and making assignments, showing significant levels of originality and take creative risks to produce innovative ideas and prototypes.
- Pupils demonstrate excellent attitudes to learning and independent working.
   They use time efficiently and work constructively and productively with others.
- Pupils carry out research, show initiative, and ask questions to develop an
  exceptionally detailed knowledge of users' needs and the context for their
  work.
- Pupils know about the responsibilities of designers and makers to work ethically, use finite materials carefully and safely, and use this to inform their own work.
- Pupils have a secure and increasing knowledge of which tools, equipment and materials to use to make their products, building upon their previous experience and understanding of relevant scientific and mathematical concepts.
- They manage risks exceptionally well in order to safely and hygienically manufacture products. Pupils have passion for the subject and know of, and keep up to date with, new technological innovations in materials or products or systems.
- In secondary schools, an above-average proportion of students are likely to continue to study D&T at the next stage of their education.

#### **Teaching**

- Teachers' enthusiasm for the subject is infectious. They communicate their high expectations and passion for D&T to pupils extremely effectively.
- Teaching benefits from high levels of expertise both in terms of teachers' upto-date specialist knowledge and their understanding of effective learning in D&T.
- Pupils build on earlier concepts to develop a personal understanding of what 'good design' means as a result of teachers using their own work and that of professional designers to inspire and challenge pupils to recognise the features of high-quality design and manufacture.
- Pupils explain their ideas and concepts clearly, use technical language confidently and deliver high- quality presentations to clients and team members. This is because teachers employ a very wide range of innovative

<sup>&</sup>lt;sup>3</sup> Ofsted, Dec 2013 July 2020

- and imaginative resources and teaching strategies to stimulate pupils' active participation in their learning.
- Opportunities for pupils to develop and demonstrate their initiative and independence and take responsibility for their learning are thoughtfully planned and, over time, secure outstanding progress across all aspects of D&T.

#### Curriculum

- The imaginative and stimulating D&T curriculum is skillfully designed to match the full range of pupils' needs and goes beyond the limits of the National Curriculum or examination specification.
- The curriculum is enriched and enhanced in meaningful ways through excellent links forged with other agencies, industry and the wider community.
- Pupils are extremely well informed about their current work, future projects and courses. In secondary schools, they are helped to understand the value of the subject to future careers in STEM or creative industries.
- Where appropriate, curriculum plans promote pupils' knowledge of current and new technologies and speculate about the issues and moral aspects that need to be considered when designing and making. Access to, and use of, resources are exceptionally well planned and enable pupils to create innovative functional solutions to real problems.
- Links with other subjects in the school are highly productive in strengthening pupils' learning in D&T. Rigorous curriculum planning ensures that the subject makes an outstanding contribution to pupils' social, moral, spiritual and cultural development.

#### Leadership & management

- Leadership is informed by a high level of subject expertise and vision. There
  is a strong track record of initiating educational innovation in the subject.
  Subject reviews, self-evaluation and improvement planning promote
  continuous development in D&T and wider school improvement.
- D&T leaders, and a widely shared subject vision, inspire confidence and whole-hearted commitment from pupils, parents and colleagues.
   The subject makes an excellent contribution to whole-school priorities, including consistent application of literacy and numeracy policies.
- Leadership and teaching benefit from high-quality professional development in D&T.
- The subject has a high profile and is at the cutting edge of initiatives within the school.
   Accommodation, resources and working practices are well planned, safe and significantly support learning.
- Partnerships with the wider community and communication with parents about how they can support their children's learning in D&T are excellent.



#### Annex 2: Meeting the needs of pupils with SEND

#### Notes taken from

Teacher Handbook SEND – Embedding inclusive practice (January 2024) (https://nasen.org.uk/resources/teacher-handbook-send)

#### Planning inclusive lessons

- In the first instance the purpose, process and products of the lesson (the learning journey/intent) need to be clearly articulated to learners and time taken to ensure all learners understand the journey ahead.
- Connection making can reduce a learner's fear of the unknown and can make them more ready to engage in the learning.
- Always present connections in a clear manner, verbally and visually; some learners will likely require a scaffold, for example a visual representation or key vocabulary, in their books that they can refer to at the start of each lesson.
- As all foundation subjects are often only an hour or so a week (out of 25 hours of lessons), some learners are likely to need a reminder of what they are learning about at the start of a lesson, and where it sits within the learning sequence as well as where it sits in relation to other relevant subject specific contexts and knowledge that it is building upon, prior to a whole-class retrieval starter activity.

When planning inclusive lessons, teachers need to consider how they can enable pupils to engage with the new learning:

- Are you connecting previous learning are there prior skills or knowledge that learners can build on in this unit of study?
- Are there key words whose meanings they need to be able to understand in order to be able to engage with the core concepts being taught?
- Are there pre-requisite skills or knowledge that are required to be successful, e.g. in **History**: do pupils need a clear understanding of the difference between primary & secondary sources?

#### Task:

- Have you identified the key subject specific words for each of the topics that pupils will learn during each year and how/when are these made available to pupils?
- What subject specific skills will pupils need to know and understand prior to the start of each new topic? And how will you ensure that pupils will be able to practice these?
- Explicit instruction needs to be carefully planned for learners with SEND.
- New material needs to be delivered in small steps, with teachers considering how much information is presented at any one time.

- All new material should be presented both verbally and visually (dual-coded) wherever possible.
- High-interest, engaging materials such as images or short documentary clips can provide a strong start to a lesson, e.g. in **Geography** a short clip of an erupting volcano can help learners begin to understand the impact of an eruption the surrounding area.

#### Task:

- Have you identified for each topic 'high-interest, engaging materials' that will be accessible to all pupils?
- Less confident learners will benefit from having access to content of a time period prior to reading as this can motivate and support them when working through what may for them be challenging texts.

#### Task:

• How do you make available to all pupils resources to support them prior to the introduction of each new topic?

#### Modelling and scaffolding are key components of an inclusive lesson.

- Learners benefit from seeing the teacher model the application of for e.g. in Art & Design of skills in connection with subject content and watching a teacher perform 'live' research and live writing.
- A teacher / assistant 'thinking aloud' whilst modelling writing tasks can support learners when they progress to independent practice.
- Modelling should be a planned part of every lesson, with further modelling and/or scaffolding as needed when identified through formative assessment in a lesson.
- Given that for almost all foundation subjects, lessons are usually spread apart over a week/fortnight, it is crucial that new learning is recapped at the start of the following lesson. Teachers should also ensure, wherever possible, to address any misconceptions within that lesson. Misconceptions that are observed through marking between lessons can be addressed through short videos uploaded on a virtual classroom between lessons and/or at the start of the next lesson.
- For some learners with additional learning needs, misconceptions can become embedded in their understanding, impacting further progression. It is therefore vital that misconceptions are addressed directly at the earliest possible stage. It will often be beneficial to address these misconceptions in small groups or with individuals to check understanding.

#### Task:

 Have you identified what 'may be' the common misconceptions that teachers and assistants need to be aware of prior to the start of each new topic? (e.g. in Geography it's not uncommon for pupils to be clear about the differences between: ocean; sea & channel. In Science, it is frequently: permeable; porous; pervious & absorbant.)

## Teaching strategies that can support learners in answering whole-class questions in lessons are:

 Additional processing time, e.g. provide questions to learners in advance of the discussion • Visual prompts

- Co-constructing answers with peers, e.g. Think Pair Share
- Pre-teaching content ahead of the lesson
- Mixed-ability groupings
- Communication aids
- Sentence frames and/or sentence starters with explicit reference to language function (specific to Scientific skills, e.g. hypothesising, summarising, evidencing).

#### **Strategies to Scaffold Learning**

How to support learners who struggle to access lessons because of literacy difficulties?

- Encourage oracy; talking about writing first and unpicking tricky words results in better understanding and written fluency. Think, Pair, Share tasks are essential, and enabling learners with SEND to succeed here by seating them near a student who is more confident with speaking would be an asset.
- Provide sentence starters and key word banks, ideally as a generic 'literacy mat' which can be used alongside knowledge organisers to embed common styles of geographical writing.
- As evaluation is a key skill it should be built into all topics. This is often
  challenging for pupils, especially those with SEND. Showing learners how to
  evaluate using models, guided examples on a visualiser, and guided reading
  are very helpful. Using an evaluation prompt, such as the one below, can be
  very useful to enable the students to apply their own ideas to the evaluation.
- Remember that Historical; Geographical & Scientific literacy is often high level. Consider your own use of tier 2 and 3 language in explanations; make links to everyday language and ensure your use of tier 2 and 3 language is accessible. Regularly check understanding of learners with SEND through questioning.
- Provide visual aids to enable learners to identify, for e.g. in Art & Design: artists and their work, as well as to identify equipment and media; Design & Technology the tools and techniques they will be expected to use / perform; Geography rivers around the world; different building styles and materials / rural and urban environments; History images of where in the world specific events took place and of the people involved.
- Use frequent modelling to show learners how to structure sentences but keep it achievable; it is better to model an imperfect answer and ask the learner to suggest improvements than to model an unachievably high-quality response. This is especially important when preparing for assessments and giving feedback, so learners clearly understand how they can achieve an excellent answer and improve their own.
- Using extended guided reading in lessons is an essential way of enabling all learners, and especially those with SEND, to access the content effectively. Articles should be adapted where necessary, and often it is more effective to write pieces bespoke for the topic you are doing. The process of delivering these in class is also important to get right, and there is an example of a Highly Intentional Process below, Figure 1, page 4. (Figure 2 on page 5 is a task for the subject leader to complete)

Figure 1: Highly Intentional Process - Guided reading in Geography Lessons

Lessons			
HIP stage	Activity	Rationale/ notes	Sample Language
0: Homework to learn vocabulary (1 week before the reading)	In the week before the reading is used, set a homework assignment where the vulnerable students (or all of the students) are given a copy of the key vocabulary to learn. This should also be shared with the EAL/SEN/Literacy coordinators and TAs where relevant	This reduces the cognitive load for the students when the reading happens in class, and enables them to have a deeper understanding of the text as it is read	This homework is important so that we can make the most of the reading time next week. It will also enable you to tackle the task we do following the reading and succeed with this.
1: Pre-teach vocabulary (1-3 mins max - be careful not to spend too long)	Using the glossary, which is found at the start of the article, Select up to 5 pieces of tier 2 or 3 vocabulary from the article. Teach it directly, giving a simple definition and one or two sentences using the word. Ensure that you make the pronunciation of the word clear. Some teachers may want the class to repeat the words back to them this will depend on your class dynamic.	Teach briskly - limit the number of questions. Word choice and definitions must be preprepared - it is very difficult to make up on the spot and retain clarity.	This word is Say it back to me (my turn your turn) It means It might be used like this (example 1) Or like this (example 2)
2: Preview the article (1-3 mins max - be careful not to spend too long)	Explain to the students what the article will be about, and what content it will cover. Teachers should also explain WHY the article is being read - this is important metacognitively - and could be related to why the knowledge is important, but also what they will be using the knowledge for afterwards (eg extended writing/comprehension questions)	Helps students feel secure before reading, and be more likely to understand Head off any likely misconceptions re particularly difficult words, ideas or concepts	We are going to learn from an article about Some of the things it will help us to understand are Look out for the section about Basically, this means that
3: Teacher reads (approx 15 mins but will vary)	Teacher reads from the article with enthusiasm and clarity. Teacher uses this stage to inspire the class: invite questions, explain things, check understanding. As you read each paragraph, scroll through the visual prompts on the board. Do explain these but not for more than 15 seconds to try not to break the flow of the reading too much. Depending on the class, their confidence and your feeling, you may also want to try 'jump in' reading. This is when the teacher pauses on a word of note (often those in the glossary) and the whole class repeats it out loud. If going on to do extended writing, the students should highlight sections which are relevant to the question they will be answering. If doing comprehension questions, this is not needed as questions will be numbered to match paragraphs and students should have to look and re-read sections to find answer.	Allows teachers to teach and inspire Provides another opportunity to check and address misconceptions The jump in reading can aid in concentration and tracking, and also enhance the ability of students in their pronunciation of the more challenging and relevant key terms	Now's your chance to check that you understand, and ask any questions you may have.

Figure 2: Highly Intentional Process - Guided reading in xxxxxx Lessons

(This is a task for you to complete)

(This is a task for you to complete)				
HIP stage	Activity	Rationale/ notes	Sample	
			Language	
0: Homework to learn vocabulary (1 week before the reading)	In the week before the reading is used, set a homework assignment where the vulnerable students (or all of the students) are given a copy of the key vocabulary to learn. This should also be shared with the EAL/SEN/Literacy coordinators and TAs where relevant	This reduces the cognitive load for the students when the reading happens in class, and enables them to have a deeper understanding of the text as it is read	This homework is important so that we can make the most of the reading time next week. It will also enable you to tackle the task we do following the reading and succeed with this.	
1: Pre-teach vocabulary (1-3 mins max - be careful not to spend too long)				
2: Preview the article (1-3 mins max - be careful not to spend too long)				
3: Teacher reads (approx 15 mins but will vary)				

#### How can I support learners who struggle to retain vocabulary?

- Print knowledge organisers including word banks and visual supports for learners with SEND who need them as a reference in every lesson.
- Use retrieval practice at the start of lessons to revisit key words, identify and repeatedly focus on the most important tier 3 vocabulary. Use oracy strategies; learners are more likely to retain words between lessons if they are able use them verbally in sentences. This will include questioning to probe learners to retrieve the correct word.
- Ask learners to highlight where they have used key vocabulary in their sentences in order to recognise and reinforce this skill.

#### Task:

 Have you identified key vocabulary / terms for each topic and do all pupils have access to these before and during lessons?

## How can I support learners who struggle to access lessons because of numeracy difficulties?

- Work with colleagues to embed geographical numeracy in the curriculum, so that learners come to expect it as part of geography lessons, e.g. mean, median, mode, range and interquartile range
- Work with colleagues in the maths department to ascertain how and when
  mathematical skills and concepts are taught. If there are resources learners
  use to scaffold their learning in maths, ensure they have access to them in
  geography as well.
- Allow the use of calculators. As they are always permitted in geography exams, they should also be available in lessons.

#### Task:

 Have you worked alongside the subject leader for Mathematics to identify where learning in the subject you lead can support pupils numeracy?

## How can I support learners who need additional time to develop conceptual understanding?

- What will hold learners back if they don't understand it? Identify what the 'threshold concepts' in each topic are, e.g. democracy; evaluation; analysis & composition and refer to these concepts in some way during every lesson.
- Give examples of the same concept in different contexts. Try to personalise
  this or use examples from the news/ media/local area, at least something that
  is 'relevant' to the pupils. This is a vital part of effective teaching, with
  teachers regularly referring to recent events to engage the learners, and
  encourage them to go and seek out information themselves independently.
- Plan specific hinge questions you will ask learners, to ensure you can
  evaluate the extent to which each learner is understanding. Probe learners to
  go beyond three-word responses to questions.
- Anticipate misconceptions and when they arise in lessons, challenge them quickly; include them in your explanations.
- Ensure that all resources are uploaded for all lessons and homework and revision onto a suitable electronic platform, e.g. Google Classroom, and clearly labelled so that learners, support staff and families can access these remotely and at any time. This will enable learners to recap work and concepts where they need to and want to.

#### Task:

Have you identified in advance of a topic the key questions which you will
want to ask of pupils – questions that address not only: who; what; where;
when; why and how as well as: similarities / differences; cause & effect; rank
in order of importance; synthesise your responses, etc

#### How can I support learners who struggle with attention?

- Plan seating arrangements carefully. Consider the use of proximity for learners who need prompting. Also, ensure learners are sat away from distractions - these could be environmental, e.g. windows next to a playground, or relational, e.g. peers.
- Share the big picture of the lesson but also show examples of the outcome so that learners can visualise what the overall aim is.
- Chunk lessons into distinct episodes of explanation, modelling, practice, feedback, etc. so that learners have a structure to expect. Represent these parts of the lesson on a visual timetable, which you refer to throughout the lesson.
- Plan in active breaks and opportunities for learners to move during lessons.
- Use behaviour-specific praise to reinforce effort and focus.

#### Task:

 Re: a visual of the outcome expected of pupils – do you have / are you starting to build up examples from 'past' pupils as to what a 'good' example would be to share with pupils?

#### How can I support learners who struggle with change and transition?

- Predictable classroom routines are vital, with well-planned and structured lessons with clear expectations.
- Build trust through positive interactions and praise.

#### How can I support learners who struggle with fine motor skills?

- Consider using frames or adhesives (e.g. in Art & Design and Design & Technology), masking tape) that hold down learners' work to surfaces in cases where learners may struggle to hold a resource in place. Provide learners with larger scale materials to work on and gradually decrease the scale as they acquire greater control.
- Encourage learners to experiment with different media, for e.g. in Art &
   Design when drawing offer chunkier graphite sticks as well as soft 'B' range
   pencils. Similarly, offer a range of painting application media some learners
   may prefer a sponge to a brush or may even use their fingers at times.
- Plan each lesson well in advance, to consider points where learners may struggle and allow for adult guidance accordingly. Use of scissors can be a source of frustration for some learners and wider-handled or easy grip scissors can be a useful aid.
- Engaging in art and design activity is great for helping build fine motor skills for all children. Learners will enjoy and benefit from using malleable media such as clay or air dough.

## How can I support learners who need additional time to develop conceptual understanding?

- Provide opportunities for small group learning either before (pre-teach) or during the lesson. This will support learners and allow time to ask questions or explore resources alongside adult intervention. These opportunities are part of the repetition process needed to maximise capacity to build up conceptual understanding.
- Take time to model and demonstrate each element of a process, allowing learners to develop their understanding through a step by-step approach.
   This will benefit all learners as it allows for an active participatory approach.
- Showing outcomes from the previous lesson's work can be a useful memory aid.
- Have visual aids in the form of worked examples that the learners can have to hand when completing independent tasks.

#### Task:

• Do you have / are you building up a bank of examples of 'finished' work to share with pupils, so that they can visualise the learning process / journey?

#### How can I support learners who struggle with attention?

- Starting off each lesson with a 'hook' a question or image which inspires
  curiosity can help engage learners. This is most effective when two to three
  questions are displayed, at varying levels of complexity, with learners invited
  to choose and engage with one of the questions. It could be helpful if the
  hook has a link to their own context so that learners have a concrete
  reference point.
- A 'chunked' approach alongside cognitive shifts can aid attention and focus. For example, after having read independently for a set amount of time, learners can then discuss in small groups before writing an answer to a set question in their books. Having a dual-coded lesson plan with known images for the different parts of the lesson and time allocated can support learners in engaging in each component of the lesson.
- Develop tasks that keep pupils engaged in their learning, e.g. if showing a video clip, provide learners with phrases to listen for or key questions to answer.

#### Task

Do pupils have access to a resource (e.g. pen / pencil / paper) when observing a video / images which has key words / questions (e.g. who: what; where; when; why and how) to focus their notes?