Principles for Lesson Design

Overview

Designing lessons should be considered as a *process* rather than a *product*. Much of this complex, layered process is inherently invisible as it requires hard thinking. Individual lesson plans are the product of this thinking and design process – they provide a useful tool that can be used as an aide-memoire by you and as the basis for professional discussion between you and your mentors. As you become more experienced you will find the process develops in terms of the speed with which you can design a lesson (or sequence of lessons). Additionally, your understanding of how to incorporate the different facets of planning (e.g. adaptive teaching, inclusion, conceptual understanding etc.) will become more holistic.

The *Five Principles for Lesson Design* are framed as questions that you ask yourself as you move around the design process.
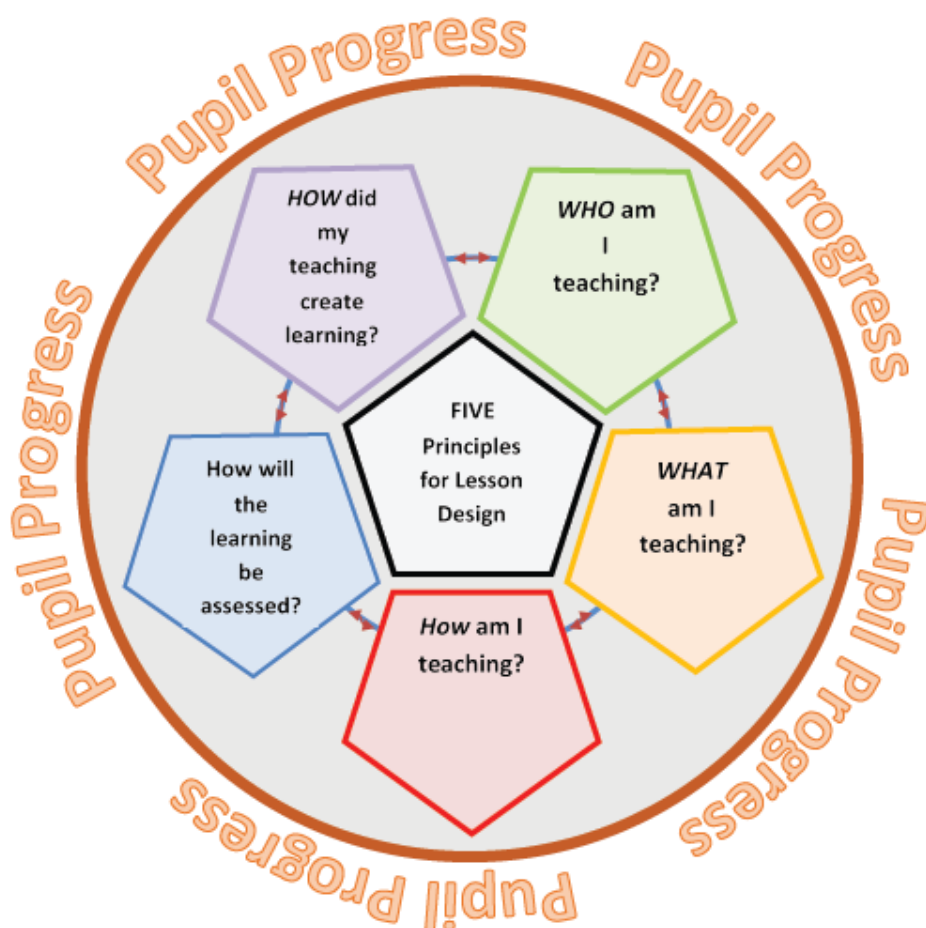
The *Guidance for Lesson Design* that follows is posed in a question format to prompt the hard thinking required. Although this is written sequentially there is no suggestion that lesson planning is a linear process – far from it. Choose your starting point and move between the sections as required.

Guidance for Lesson Design

Who am I teaching? (BM2) (HPL2)

- What do I know about my pupils? Consider age, SEND, Most Able, Pupil Premium, EAL, and pupil level assessment data.
- What do my pupils already know (prior knowledge)? How do I find this out?

> **Evidence of your impact on pupil progress over time**
>
> Collect pupil data prior to the lesson to show the starting point. This data needs to reflect the skills, knowledge and understanding that the pupils currently have related to the intended learning outcomes of the lessons you are planning. Examples of where to access this data are: via department tracking systems, through discussions with class teachers and/or TAs, by looking through pupils' exercise books, using your own observations of the class, discussions with the pupils themselves or via previous formative assessments.

What am I teaching? (HPL7) (SKP1) (SKP2)

- Have I read the long term and medium-term plans used by my school?

> The **long-term plan** could be the National Curriculum Programme of Study, a GCSE specification or a departmental overview of the curriculum.
>
> The **medium-term plan** could be the departmental '**schemes of work**'.
>
> Some schools may also have short term plans which are a '**unit of work**' or a sequence of lessons.

- What do I know and what do I need to know about the topic I will be teaching? Can I script a basic "I do" that models the task as a core part of the lesson (embed new vocabulary and concrete to concept)? How will the pupils' learning be assessed (summatively)?

> This is about your own subject knowledge – i.e. do I need to go and research/read/learn an aspect of the curriculum before I can continue planning?

- How do I apply my new or expert subject knowledge to help me interpret the scheme of work? What do we mean by *interpreting* the scheme of work……..

What do I need to teach Year 9 this week? → **What am I teaching Year 9 on Tuesday?** → **What do I want them to learn?** → **How do I frame a suitable *learning objective*?**

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For more guidance on framing *Learning Objectives* and *Learning Outcomes* see Wright, T. (2017) Chapter 5 and Unit 1: Structuring Learning in Pedagogy and Practice: Teaching and Learning in Secondary Schools.

> ***Evidence of your impact on pupil progress over time***
>
> Your planning documents should show clearly what you want the pupils to learn. Sometimes there may be gaps in your own knowledge – this is normal. Subject Knowledge Audits can demonstrate how you have improved your own subject knowledge in preparation for teaching. Lesson observation feedback can focus on how your subject knowledge has impacted upon pupils' engagement and enjoyment leading to them meeting the learning outcomes.

Consider explaining and modelling ITAP strategies such as 'zoom in, zoom out', and 'Why' first strategy.

How am I teaching? (HPL4) (HPL6) (HPL10)

- What teaching models and/or strategies do I think will work best? These may be subject specific.
- What learning tasks match my chosen model/strategy?
- Are these tasks appropriate for my pupils (go back to ***Who* am I teaching**? if needed).
- How can I break the structure into chunks -starter, modelling, explanations, scaffolds? Perhaps use scaffolded modelling, worked examples and/or live modelling.

> It is important to stand back at several points during the lesson design process – this is a good point to do that. Have a break and then reassess what you have done so far.

- How does my chosen structure ensure a clear purpose and process for learning?
- What do I need to plan to do or say in between tasks to make the learning explicit? *Thinking this through and even drafting a script will support you with assessing learning later.*
- Do I really understand why I am asking the pupils to do these tasks?

> ***Evidence of your impact on pupil progress over time***
>
> Collect samples of pupils' work, including homework, and annotate to show how your teaching has helped pupils achieve the learning outcomes. Include examples of any interventions you made, for example, changing seating plans, providing revision sessions, use of praise, contact with parents etc. It is useful to take photographs of this 'evidence' to share with your mentor.

How will the learning be assessed? (HPL3, HPL8)

- What are your key questions? Will these questions target specific pupils?
- What responses do you expect pupils to give to your questions and tasks?
- Can you, by considering possible responses, pre-empt possible misconceptions and how you will deal with them – perhaps use I do, we do, you do/backward fading?
- As pupils engage with the tasks how do you manage your teacher presence to: eavesdrop, circulate between groups, live mark and intervene etc. all of which will allow you to gauge understanding and progress?
- How will you seek feedback on the tasks set e.g brief final mini-assessment, an exit task, plenary or targeted questions linked to the lesson objectives?

As you become more experienced you will, at this point in your lessons, be able to react flexibly to unforeseen responses. This is 'Refection **IN** Action' – see Cowan, J. (2006) & Brockbank, A. and McGill, I. (2007).

Evidence of your impact on pupil progress over time

Your annotated and amended planning will demonstrate how you have responded to the pupils' needs identified via formative assessments. Examples of your marking of pupils' work and how this was acted on by pupils showing improvements demonstrates the impact of your written feedback. Pupils' self and peer assessment can be used to compare with your view of their progress. Again, keep photographic evidence to share with your mentor.

How **did my teaching create learning?** (HPL9)

- Did pupils achieve the intended learning through the tasks set?
- How do I know? What evidence do I have?
- Think about the pupils learning behaviours – how did your teaching enable this?
- Relate back to your personal targets (from your Weekly Review or otherwise) and consider to what extent you have met or evidenced them.

Time for another coffee….

By rehearsing your explanation of your progress with your personal teaching targets you are developing the reflective behaviours required to move forward in time for your next Weekly Review meeting with your mentor and to plan your next lesson. This is 'Reflection **ON** Action' – see Cowan, J. (2006) & Brockbank, A. and McGill, I. (2007).

Evidence of your impact on pupil progress over time

Your own lesson evaluation is an essential part of your evidence here. Also, the lesson observation notes from formal observations and the post lesson conversation. Evidence of pupils reflecting on their own learning can be included. Over time test/exam results will support your impact on pupil progress (however, tests are 'noisy' measures of attainment and should not be the only evidence offered). Video clips of a lesson, or lessons, can show individual pupils at the start, middle and end of a sequence of lessons. You could also use audio recordings to 'voice' your evidence.

Further reading:

Rosenshine, B. (2012) Principles of Instruction: Research-based strategies that all teachers should know. American Educator, 12–20. https://doi.org/10.1111/j.1467-8535.2005.00507.x

Sweller, J. (2016). Working Memory, Long-term Memory, and Instructional Design. Journal of Applied Research in Memory and Cognition, 5(4), 360–367. http://doi.org/10.1016/j.jarmac.2015.12.002.

Recording the Planning Process: Examples

Who am I teaching?

The set number indicates the way students are grouped and possible prior attainment. Clear links are also made to prior learning and to future learning.

LESSON PLAN OUTLINE (Mathematics)

What am I teaching?

Learning Objectives are taken from the Scheme of Work. Intended Learning Outcomes are what students are expected to be able to do when the tasks are completed.

Date	Year/Class	Time	Title of lesson/theme
	Year 7 Set 3A	2.30-3.30	Calculating Angles

Learning Objectives	Intended learning outcomes:
• Continue to estimate angles and use a protractor to measure them; • Distinguish between acute and obtuse angles; • Use the sum of angles at a point and on a straight line	• Recall definitions of angles learnt so far in this topic. • Apply previous knowledge learnt to find unknown angles in right angles, straight lines and around a point.

Lesson Objectives for Trainee *(with reference to the Progression Booklet)*

- **Have clear rules and routines for behaviour in classrooms with a focus on timings during the lesson. (BM4)**
- **Formatively assess students' progress in the lesson through the use of whiteboards and self-assessment. (A2)**

How did my teaching create learning?

Trainee's targets are clear and specific. A 'best fit' approach is taken to link targets to the progression booklet.

Links to previous lesson/prior learning:	Links to next lesson/future learning:
Students have already learnt all the knowledge they will need for this lesson, such as how many degrees are in a right angle, straight line, whether an angle is acute or obtuse and should know how to measure angles.	In the next lessons students will be recalling triangle properties and finding unknown angles in a triangle. They will apply their knowledge of angles to compass turns. Future learning after this topic will include knowledge of alternate and corresponding angles, identifying quadrilaterals, find the sum or interior angles, bearings and trigonometry.

Timing	Teacher Activity	Pupil Activity	Assessment for Learning	Challenge and Support
2.30-2.45	**Starter (15 minutes):** Students given a card sort and directed to the example on the board. They will be told they must estimate the angle first, before deciding which angle measurement to apply. **Homework notice:** Students will be reminded that the homework for this week is to revise for their test on the 11th March. They will be told that their books will be collected today and will be available for them to collect tomorrow.	Students will need to find an angle and match it to its name (acute, obtuse, etc), record an estimate of the angle and finally match the actual measurement of the angle. They will work in pairs for this activity.	The angles will be on the board for students to offer what other cards they matched it with.	Students have definition in their books to refer back to. **Extension:** How much further does the angle need to turn to produce a full turn?
2.45-2.55	**Whiteboard assessment (10 minutes):** 2 questions of estimating angles, multiple choice answers followed by one of each of the following, calculating at a point, in a straight line and in a right angle.	Students will keep answers to themselves until asked to show. Students will offer the reasoning behind why they choose answers.	Teacher formatively assessing as students offer answers on their boards.	Students may offer blank boards if unsure of the answer. Those able will extend by offering their reasoning.
2.55-2.15	**Consolidation (20 minutes):** Who has the smallest slice of cake? Students will be given nine problems and will need to find out which is the smallest angle from all of their answers. **Extension:** Wedges of cheese problem. Students will be shown 7 different sized wedges of cheese. They will need to	Students must also show their workings on this worksheet so that the teacher can understand what methods they are using when marking this. Once marked this sheet will be stuck into books.	Answers will be given for students to self-assess. They must decide which problems they want to be discussed as a whole class in the plenary.	The teacher will be available to assist students. There is usually a classroom assistant is this lesson who is not available today. Particular students will be

How am I teaching?

The lesson has been clearly structured into timed stages. Tasks are clearly related to the learning outcomes and include paired and solo working.

How will the learning be assessed?

3 points have been identified in the lesson when learning will be assessed. Using mini whiteboards allows the teacher to gauge understanding and students also self-assess via marking their own work.

Who am I teaching?

This column clearly details how different students can be supported and challenged.

How will the learning be assessed?

Students are given a choice to ensure motivation remains high. This choice is linked to the plenary task.

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Timing	Teacher Activity	Pupil Activity	Assessment for Learning	Challenge and Support
2.15-2.25	find two wedges that they can use to make new angles of cheese. **Plenary (10 minutes):** Students will be told that three of the consolidation questions may be gone through as a class. Once this is completed all students will be asked who had the smallest slice of cake.	Students will highlight questions which were found difficult. If no students offer a question to go through the teacher will highlight the last one and ask for a student's		highlighted for assistance first. If there are still no questions which students wish to go through then the extension activity given previously will be used as a class.
2.25-2.30	**Packing away (5 minutes)** students will then be asked questions such as 'How much do I need to ass to 30 to get 90', etc.	will need to hand in their books, return protractors, white boards, glue, etc. Once they are packed away they are ... down quietly.		

How will the learning be assessed?

The Plenary task allows misunderstandings to be discussed and the final 'answer' to be revealed.

How did my teaching create learning?

Linking Teacher Activity in parallel to Pupil Activity helps the teacher to consider how the tasks and their explanations, questioning etc. have supported learning.

Resources		
Resources assumed to be in the classroom: White boards, pens and cloths, card sort, cake worksheet, cheese extension, glue.		
Homework/Independent Learning (*as applicable and in line with school/department policy*)		
Collected in and reminder of revision homework set.		

Lesson Plan (ENGLISH)

LESSON PLAN for class: 7P1		55 (P1)	Your Name:

Size and nature of group: 30 pupils, 10 boys/ 20 girls, lots of movement by teacher to keep them engaged

Context and background of work: Pupils have made predictions of the novel based on the title and front cover illustrations.

Other notes: 1 SEN (ERD) – Dyslexic tendencies, yellow background, chunking of text, 1PP GE

Overall learning objectives	**Learning Objectives:** of Animal Farm

Learning Outcomes: All Pupils will have read Chapter 1 of *Animal Farm* and completed a table analyzing characters from chapter 1.

Some pupils would have made inferences about these characters based on Orwell's descriptions- these inferences could either be plot or character based.

Your developmental objectives (referenced to the curriculum threads in the progression booklet)	**(AT1 & AT2)Adaptive Teaching**- supporting lower attaining pupils and stretching G& T **(BM4 & BM5) Expectations**- rooted mutual respect for peers.

Lesson Stage	Objective	Activity (indicate necessary adaptive teaching)	Evaluation Methods

Starter	**Pupils to develop some ideas about what is means to have a leader.** **Resources:** Pupils' exercise books	Talk about expectations regarding manners and reading books- few shuffles of the seating plan Check everyone has equipment. Make a note of who doesn't- LL and HA forgot RB last lesson. Starter: In pairs discuss 'Should we be have a one headmaster who leads the school?' Examples Play devil's advocate! **Pupils who were quiet last less** EM RD, AL, AM, UZ, AM, LU, LUC, AN- try and target these	Class feedback- challenge ideas presented by class by giving them scenarios that could occur either with or without leadership.

> **Who am I teaching?** Thinking about how you will personalise the learning and the progress of all pupils over time.

> **How will the learning be assessed?** This will look different at different points of the lesson and will allow you to focus on certain individuals. This also helps you to consider how to adapt teaching to suit the needs of the learner.

Transition	We are finally going to begin reading Animal Farm but as we are reading the first chapter I want you to keep in mind the past two lessons with myself and Mrs T. As we are reading I am going to be stopping at certain points to talk through what's happening, what are first impressions are and any language or structural features that might occur. We should always be thinking like this but keep this in mind as we read the first chapter.

> **How am I teaching?** Thinking about transitions and how you will offer the commentary to link one activity to the next will prompt you to consider the lesson from the learner's point of view. How do the pupils learn?

Main Activity	**Pupils to read and engage with Chapter 1.**	Class rea... *Farm.* Stop at '…was already snoring.'- 'First impressions of Mr Jones?'

	Have an understanding of how Orwell sets the scene and presents certain characters **Understand how Orwell uses language and structural techniques for a purpose.**	Stop at 'Comrades'- 'What is a comrade?' 'Why would the animals call each other comrades?' 'What does this show about their relationship towards each other?' Stop at repetition of 'No' in speech 'Why have I stopped? What has ~~...~~ted me?'- 'Why has Orwell	Questioning throughout the reading to engage pupils and get them to develop their ideas. Questions moving from simple recall to more complex: Lower ability Higher abilit Higher abilit

What am I teaching? The guidance from the scheme of work will be inextricably linked with a consideration as to how you will do this. These three columns have a clear relationship: Understanding of chapter 1, questions to check understanding during reading and assessing their response.

How am I teaching? Thinking about the strategies for teaching will sometimes overlap with how you are assessing.

Subject terminology

Repetition

Rhetorical questions

Stop at 'All animals are equal.'- 'What type of sentence is this?' 'Why has Orwell used a short sentence here?'

PERSUASIVE WRITING TECHNIQUES- point them out as much as possible without disturbing the flow of the reading.

Resources:

Animal Farm- Chapter 1

Pupils' exercise books

Transition	Talk through what we have just read. How does Orwell set the scene? What are we thinking? What do we think about the animals in comparison to the humans? Who do we think is going to be significant in the novel? Now we are going to look closely at how Orwell presents and develops characters in the first chapter of the novel by completing a grid in our books.		
Developmental Activity	**Pupils will complete character profiles which will help with their understanding of how Orwell develops characters.** **Some pupils will make predictions and inferences based on Orwell's language.**	Character development and analysis. Pupils will complete a table in their books on how Orwell develops characters in the first chapter and give evidence from the novel to support this. Target: JT, TF, GM	**G&T**: some pupils will be able to make inferences about these characters- these inferences could be about their personality, actions or could be in relation to plot predictions for this character. **Support**: writing frame given to pupils who need longer to process and who are struggling in the class
Transition	Recap what has happened in the chapter- 'What do you think the most important part of Chapter 1 is with moving the novel forward?'		

How will the learning be assessed?
Sometimes you will be engaging the pupils in this thought process through questioning, reviewing and recapping.

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Plenary	Evaluation of lesson objectives	Activity: #OldMajor
	Resources:	Pupils will need to write a tweet that summarises Old Major's speech without using the maxim 'Four legs, two legs bad'.
	PowerPoint slide	
	Old Major's tweet sheet	Ask three volunteers to read out their tweets. I will type these on the board- class vote (retweet) their favourite one. House point for the pupil who has the most 'retweets'.
		REMIND PUPILS HM

How will the learning be assessed? The pupils responses to a well thought out plenary will give you further insight into their progress and help you to plan for the next lesson.

How did my teaching create learning? Thinking about an appropriate plenary will engage you with this question and ensure that you evaluate the lesson at this stage of the planning. Does your plan facilitate the learning you expect?

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