

Overview

Wednesday, December 11, 2019
8:36 PM

Title

Prepare a portfolio (as though you were sharing with a mentor or student colleagues) which illustrates a critical reflection of progress made on the planning and implementation of three pedagogical principles.

Jessica Grace Llewellyn

1901281

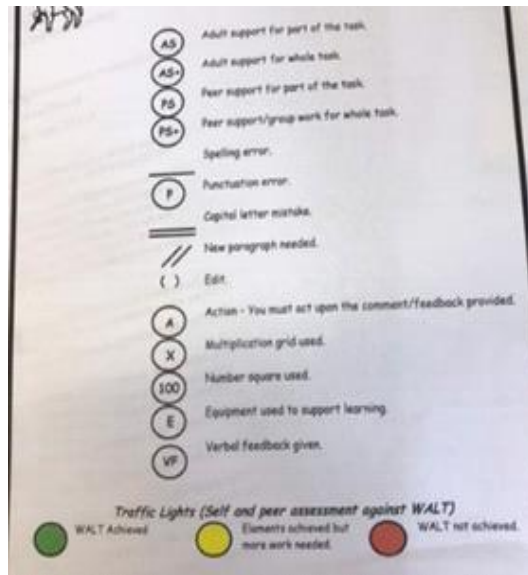
PGCE – Primary

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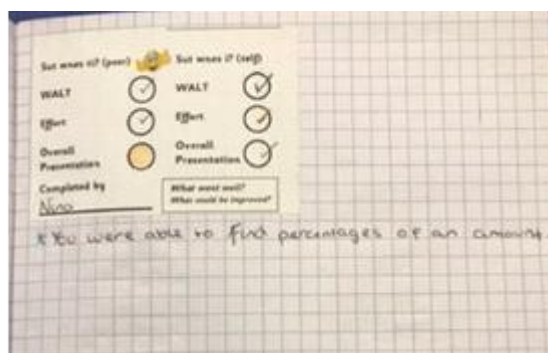
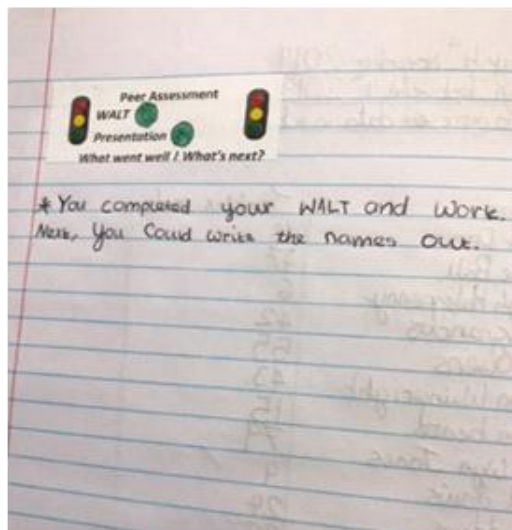
Assessment for Learning

Wednesday, December 11, 2019

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This was my PTE1 schools KS2 marking guidance. The Assessment for Learning criteria is explained through each symbol/abbreviation and the pupils in the classroom would employ the the traffic light self and peer assessment method most regularly in order to reflect on their work work and the work of their peers according to the specific WALT for each task.





These are three examples of various pieces of work carried out during my time on my PTE1, whereby the pupils in the class used the traffic light, comment and next steps AfL strategy in order to assess their own work and peer assess each other's work. As a Year 6 class they were well rehearsed in using this form of AfL and I noted that the differentiated tasks given out during a session were appropriate for each attainment level within the class therefore, the the outcomes of the traffic light assessment strategy were mainly positive and coloured or ticked green, which represented a high level of understanding for the task it referred to.

Lesson Plan – 1

Student-teacher	Jessica Llewellyn	Class:	Year 6
AoLE or Subject	Numeracy	Date:	4/11/19
Lesson Focus:	Data handling		
Meaningful links to Curriculum	Refining – (Element) – Differentiation – learning materials and experiences are used to provide appropriate challenges to every learner. Advancing – Four purposes for Learning – children are ambitious, capable learners who can explain the ideas and concepts they are learning about. Influencing – Challenge and Expectation – teacher communicates appropriate levels of C&E, which are reflected in the quality and achievement in their learning.		
Meaningful links to: Cross Curricular Responsibilities	Literacy (LNF) - (reading) locating, and using information through internet searches. Digital Competancy (DCF) – (Element) and information literacy – learners begin to create data sets with tables and charts (hwb).		

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Learning Objectives (focus on Learning- use accessible vocabulary):

The pupils will learn to:

To represent data using bar charts, to collect, record and present data.

Success Criteria (clearly linked to each Learning Objective and related to the process and/or product of learning)

Assessment of Pupils' Learning

Evidence

(What have the learners to say/write/do/produce – to demonstrate learning)

I can research and gather data off the internet.

Pupils are able to record information accurately.

I can draw a frequency table.

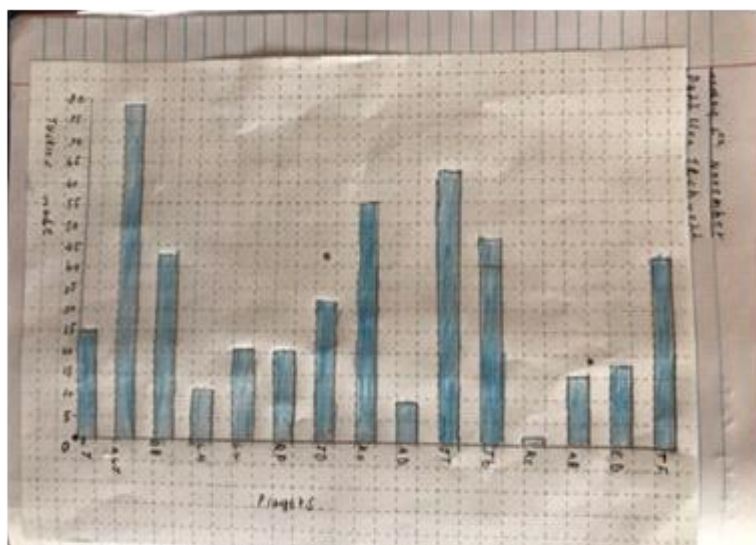
Pupils can draw a graph with an appropriate scale and labelling.

I can interpret that data and present in the form of a block graph.

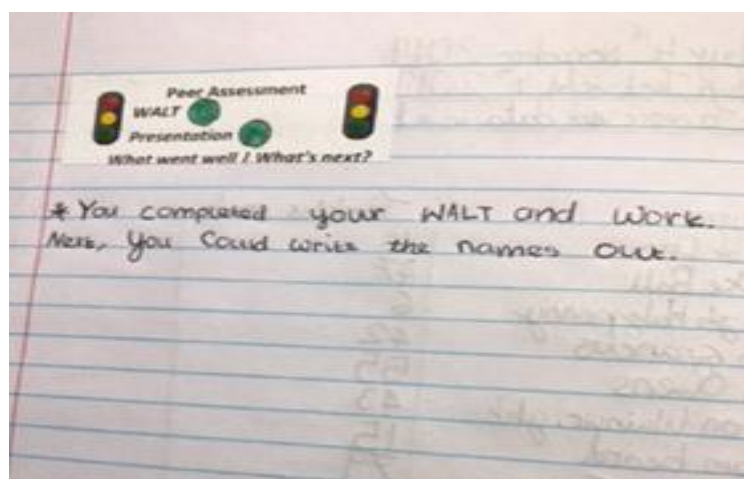
Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role – including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening phase (with links to prior learning)	State WALT and ensure equipment is readily available. Initial discussion of the in the Rugby World Cup, to give a context for the activity, (discuss final, Wales' general knowledge about RWC results, nicknames, etc.) Refer to previous learning in constructing bar graphs. AFL – fist of five strategy at appropriate moments to ensure understanding.	To write WALT and date in book and await further instructions. To support other children with logging in difficulties.	White board, marker pen - (pre- (pre- write the preferred website for the research) Chrome books, topic exercise books, pens, pencils, rulers, rubbers.

	Identify digital leaders to distribute Chrome books and support logging in on the Chrome books if necessary.		
Teaching Core Learning	Recap on layout of graph, e.g. title, labelling, point of origin, axis and scale. MA – research 15 players from the squad. A – research 15 players LA – research 8 players Time limit for research on Chrome books – approx. 20 minutes All groups produce a frequency chart. MA – to consider appropriate scale. A – with teachers support, decide on an appropriate scale. LA – scale drawn on graph provided. Extension activities . For groups to write questions to interrogate the graphs (e.g. most tackles, least tackles, difference between the most and the least) MA – 4/5 questions A – 3 questions LA – 2 questions	Pupils will research and collate information. Produce a graph according to specification i.e. scale, colour, labelling etc. Glue graphs into topic books. Extension activity Opportunities for children to work in pairs to questions to write. AFL Further extension The pupils could exchange graphs to answer the questions.	Graph paper, rulers, pencils, coloured pencils (red and green)
Plenary	Ask if the pupils can advise the three most important skills in drawing a bar graph,	Pupils will think, pair, share and reflect of the	

(discuss with partner and share with group). Give opportunities for pupils to share with the class. Write suggestions on white board and then decide top three as a class. Pupils to give a lesson tweet as a form of self- assessment at the end of the lesson.	priorities of the lesson. Pairs or individuals to volunteers suggestions for the top three qualities of a bar graph.	
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One example of the bar graph, representing Rugby players and the tackles made during the Rugby World Cup 2019. All pupils worked to the best of their ability during this session to achieve the outcome of a completed, coloured in bar graph.



Each of the pupils work was then peer assessed using 'traffic lights' and a comment that included a suggestion for next steps.

Evaluation 1

Pupils retrieved data from the internet and produce a frequency table, from which they were able to construct a bar graph.

The work was differentiated, the MA group were able to successfully arrive at an appropriate scale for

the bar graph with minimal teacher input. LA researched a reduced numbers of players and they were provided with a resource that had a pre- drawn X and Y axis on the graph paper.

The pupils were engaged with the task and performed it enthusiastically and to the best of their ability.

The plenary included a review of the task and a traffic light self- assessment completed by each each pupils.

I introduced the activity as a class lesson, I accessed prior knowledge through questioning, I then instructed individual groups with their differentiated tasks

(differentiation).

The learning materials provided an appropriate challenge **(challenge and expectations).**

The activity involved a real life context for the learning experience **(real- life, authentic contexts).**

The activity extended learners capacity incrementally and built upon prior knowledge **(progression in learning).**

I was aware of the time constraints of the session and set the pace of the lesson accordingly. accordingly.

The pupils were **ambitious, capable learners** and set themselves high standards and enjoyed the challenge and were able to explain the ideas they were learning about.

I used the usual class method of visual assessment i.e. thumb tool, but I would like to develop my 'fist of five' assessment tool as an alternative assesment of understanding for future occassions. I will take opportunities to pause the activity activity to ensure the pupils are on task.

At the outset of the task, I will develop the ability to sustain a discussion with the class, that promotes and stimulates the thinking processes.

Lesson Plan – 2

Student-teacher	Jessica Grace Llewellyn	Class:	Year 6
AoLE or Subject	Mathematics and Numeracy	Date:	6/11/19
Lesson Focus:	Ratios		
Meaningful links to Curriculum	Pedagogy - (Refining) – (Assessment) Assessment is used effectively to pinpoint learning needs for all learners. Pedagogy – (Advancing) – (Progression in learning) – learning is planned so the next stages extend learners' capacity incrementally and build upon prior knowledge. Pedagogy - (Influencing) – (challenge and expectations) – to communicate appropriate levels of challenge and expectations of learners, which are reflected in the quality and achievement in their learning.		

Meaningful links to: Cross Curricular Responsibilities	Numeracy – using number skills – ratio – to use simple ratio. Literacy – the pupils will contribute purposefully to group discussion to achieve agreed outcomes.		

Learning Objectives (focus on Learning- use accessible

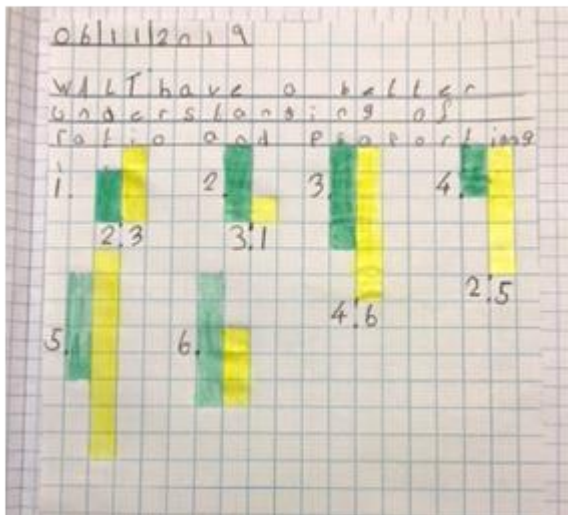
The pupils will learn to:

Identify and use simple ratio.

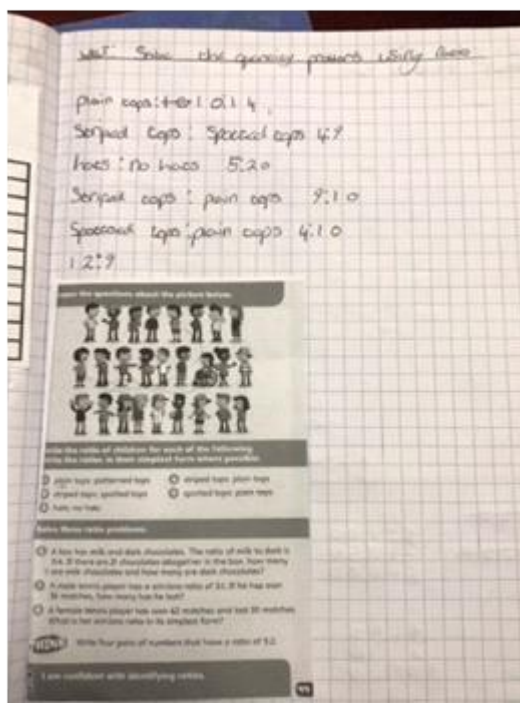
Success Criteria (clearly linked to each Learning Objective and related to the process and/or product of learning)	Assessment of Pupils' Learning Evidence (What have the learners to say/write/do/produce – to demonstrate learning)
To understand that ratio is the relation of one quantity to another. Pupils are able to simplify ratios. Pupils will solve a series of problems connected to ratios. Pupils will use multi-link cubes to construct a visual representation of different ratios.	Complete a series of ratio problems. Visually represent ratios using multi-link cubes. Effective use of questioning. A 'fist of five' or thumb tool to check for understanding within the class. Self and peer assessment.

Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role –including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening phase (with links to prior learning)	State WALT. Deliver a class presentation using the interactive board and a pre- prepared powerpoint to explain the	To write WALT and date in book. Children will attempt practice	Mini whiteboards, pens, interactive board, teacher prepared powerpoint resource.

	concept of ratio.	ratios on mini whiteboards.	
Teaching & Core Learning	Pupils will receive a series of differentiated activity sheets containing simple ratios and grid problems and be required to use multiplication and division facts to calculate ratio statements.	LA – use coloured multi- links to construct visual representation of ratios. MA – write ratio statements and use multiplication and division facts to calculate alternative statements.	Differentiated worksheets textbook activities.
Plenary	Support LA's and assess accuracy and understanding with the rest of the class in completing the differentiated textbook pages.	Self and peer assessment in text book.	Traffic light stickers to reflect on performance.



This lesson used differentiated worksheets according to each attainment level in the class, the picture shows the task for the lower attainment level within the classroom, whereby they used multilink cubes to have a visual idea of how ratio worked and only using two colours to make the concept of ratio clear, the pupils in this group experimented with different combinations of cubes in order to answer different questions.



Above is an example of the other differentiated activity sheet used for the higher attainment groups within the class, these activity sheets did not involve the use of multilink cubes and relied on the pupils ability to use the knowledge they had gained from the introduction of the task that included a powerpoint on ratio to explain the concept and their prior knowledge of multiplication and division.

Evaluation 2

Pupils gathered on the carpet to listen and participate in answering questions delivered via a powerpoint presentation that explained the concept of simple ratio. Working with a partner, the the pupils used mini whiteboards to answer the questions during the introduction stage of the the lesson. Evaluation was ongoing of both individuals and groups and continuous assessment assessment was completed through discussion and observation.

As this was a new concept, I was looking for growing confidence, sustained concentration and perseverance to complete the task.

The pupils were then given differentiated worksheets appropriate to attainment levels within the the class. The MA and A pupils were given picture questions and word problem questions that that

required simplifying ratios and the LA group practiced their ratios using multi-link cubes to represent the ratios and were supported by the class teacher.

The learning materials provided an appropriate challenge (**challenge and expectations**).

I instructed individual groups with their differentiated tasks (**differentiation**).

The pupils showed evidence of being **ambitious, capable learners** who were questioning and enjoying the problem solving activities.

Lesson Plan – 9

Student-teacher	Jessica Llewellyn	Class:	Year 6
AoLE or Subject	Science	Date:	21/11/19
Lesson Focus:	Electricity		
Meaningful links to Curriculum	Refining – Managing the learning environment – organisation of learners is focused on building learning habits and behaviours that meet the four purposes and are understood by learners in that		

	context. Advancing – cross curricular themes - are used to build links between areas of learning and the learning within each component can be articulated. Influencing –learning outcomes and being – to ensure that learners appreciate how high quality product and performance outcomes lead to improved learning and improved habits of well- being. Science – Skills (communication) – 1. learners should be given the opportunity to search for, access and select relevant scientific information from a range of sources including ICT. 2. Communicate clearly by writing and drawing using relevant scientific vocabulary.		
Meaningful links to: Cross Curricular Responsibilities	Literacy – element – (organising ideas information), aspect – (meaning, purposes, readers) – to use features of non- continuous text, using imagination and adapting their style to suit the audience and purpose to engage the reader. DCF – Strand (Producing) – Element (Creating) – learners’ are able to select and combine a range of texts and images to produce an outcome for a selected purpose.		

Learning Objectives (focus on Learning- use accessible

The pupils will learn to:

Create a poster showing the safety rules when using electricity.

Success Criteria (clearly linked to each Learning Objective and related to the process and/or product of learning)

Assessment of Pupils’ Learning Evidence

(What have the learners to say/write/do/produce – to demonstrate learning)

Produce a set of electrical safety rules

A poster should have a strong

using persuasive techniques in the form of a poster.	title/ heading. Eye catching layout. Punchy catchphrase/ slogan. Attention grabbing pictures. Concise presentation of the main message (short, snappy sentences). More detail set out in bullet points. Short, sharp conclusion.
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Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role –including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening phase (with links to prior learning)	Date and WALT on whiteboard. Explain that the purpose of the task today is to create a poster that makes people aware of those important safety rules. (Think, pair, share) - Working in pairs – can you come up with 5 safety rules that are important when it comes to electrical safety (can do this on mini whiteboards in pairs). Ask some pairs to say one they have. Make notes other of suggestions from others if you need to. Ask them what makes a good poster, again in your pairs, come up with 3 things (e.g. colourful, big headings etc.)	Work in pairs to come up with five points on electricity safety and share ideas with class. Work in pairs to come up with three points on what makes an effective safety poster and share ideas with class. Watch powerpoint presentation on features of posters.	Whiteboard and pens Interactive board Mini whiteboards and pens Scrap paper Prepared powerpoint.

	Walk around class when they are having a think. Make notes of other suggestions. Just to remind ourselves and to give us some ideas. Go through powerpoint and talk through it (different examples of posters). Tell class the top tip – safety poster needs to be attention grabbing – use bossy words – start the sentence with a command i.e. DON'T, YOU MUST NOT, ALWAYS, etc. Say they can use paper, Chromebooks (J2e5) or iPads to design their posters.		
Teaching Core Learning	Continuous observations and assistance given to each table during task to ensure the pupils understand the task and are progressing effectively towards completing the task.	Pupils are too choose in what form they want to create their poster i.e. paper, Chromebook or iPad. Pupils can work in pairs or individually to create their safety poster. Refer to success criteria to complete task.	A4 paper Chromebooks iPads Coloured pens/pencils
Plenary	Look at samples of each of the groups work and assess	To peer assess their posters according	

	according to the success criteria.	to the success criteria.	
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Above is one example of the electrical safety poster that was created on a Chromebook. The pupils either worked individually or in pairs for this task and used their computer skills to generate an effective, eye catching safety poster that fulfilled success criteria for the session. The pupils enjoyed this session as they had the opportunity to work as a team and use their creativity to explore a variety of effects, colours and pictures to create the poster.



This session allowed the pupils to have the independence to decide whether they wanted to use ICT to create a safety poster or create on by hand. Above is an example of a piece of work by a pupil who decided to draw their safety poster by hand, the creativity and imagination that was drawn upon upon using this method of making a poster, allowed this pupil to use different skills within the task order to effectively achieve the success criteria.

Evaluation 9

I used the thinking strategy of **think, pair, share** in order to develop collaborative learning. It was an enjoyable activity and the pupils were engaged and enthusiastic to complete the introduction. **Four purposes for learners**, the pupils are ambitious, capable learners who are building up a body of knowledge and are developing the skills to develop and apply that knowledge.

Cross- Curriculum Responsibilities

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Lesson Plan – 3

Student-teacher	Jessica Llewellyn	Class:	Year 6
AoLE or Subject	Mathematics	Date:	7/11/19
Lesson Focus:	Using number skills (manage money)		
Meaningful links to Curriculum	Pedagogy – (Advancing) – (Real life, authentic context) – a real life, authentic context for learning being provided as a natural part of the learning process. Pedagogy – (Advancing) – (Cross-curricular) – themes are used to build links between areas of learning. Humanities/ Geography. Four purposes aspect – children will be ambitious, capable learners who use digital technologies creatively to communicate, find and analyse information.		
Meaningful links to: Cross Curricular Responsibilities	Literacy (LNF) – (Element) - developing and presenting information and ideas. (Aspect) - collaboration and discussing - Year 6 – to contribute purposefully to group discussion to achieve agreed outcomes. DCF – Strand (Producing), (Element) - Planning, sourcing and searching – able to develop strategies for finding information using different keywords and techniques.		

Learning Objectives (focus on Learning- use accessible vocabulary):

The pupils will learn to:

To plan events and activities and make calculations as part of the planning process.

WALT: Make comparison between prices and understand which is the best value for money.

Success Criteria (clearly linked to each Learning Objective and related to the process and/or product of

Assessment of Pupils' Learning Evidence

learning)	(What have the learners to say/write/do/produce – to demonstrate learning)
Using Chromebooks pupils will: Find 5 airlines that fly to Japan. Find 5 hotels to stay in. Find 5 sightseeing attractions to visit. Make comparison between prices of each and understand which is the best value for money. Present results in a table form with calculations.	Pupils will produce an organised table of their costs for each item researched. Make and record calculations for the planning process. Each group to feedback their overall most cost effective holiday.

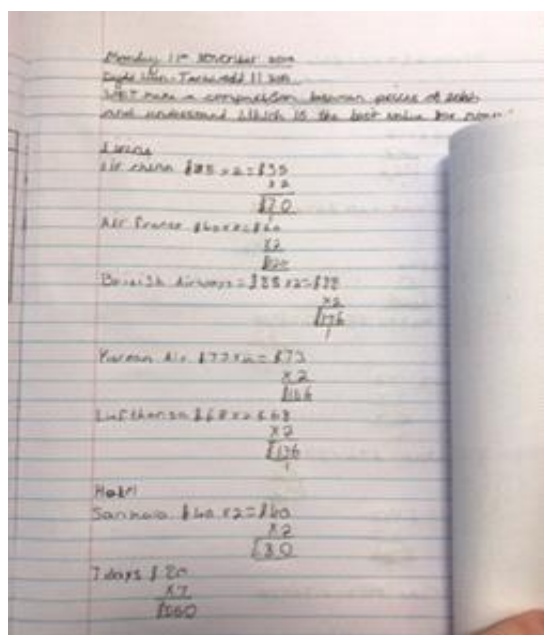
Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role –including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening phase (with links to prior learning)	Gather pupils on carpet to introduce activity. Introduce via a short travel film of Japan (YouTube – Japan – A short travel film) Introduce a breakdown of the activity via powerpoint.	Pupils review previous knowledge of geography and culture of Japan. Review short film clip, what descriptive words comes to mind when you think of Japan? Use thumb tool for understanding or 'fist of five'.	Computer, interactive board, teacher prepared powerpoint.
Teaching & Core Learning	Ensure understanding and offer support as and when appropriate.	Working in ability groups, pupils will research the elements of the activity to meet	Chromebooks/iPads Pre- drawn tables

	Inform teaching assistant of the expectations of the lesson and designate her a group to support. Ensure that the lesson proceeds at a suitable pace to complete lesson within the time allowed.	the success criteria. Pupils to use topic books and will record the data into tables using pencil and pen. Pupils to complete the calculations. Pupils to arrive at the most economical holiday holiday price.	for LA. Pens, pencils, rulers.
Plenary	Guide the on the comparisons between the groups different holiday decisions.	Each group to decide on a speaker to give feedback to the class on their holiday choices i.e. flight, hotel, attractions.	Whiteboard and marker pen to record the finding of each group.

Monday 11th November 2019
 Topic: Holiday Planning
 Task: Pupils to compare the prices of different airlines and hotels and decide which is the best value for money.

Airline	Flight price (pp)	Total price for (2, 4 or 8)
Air China	£35	£70
Air France	£60	£120
British Airways	£88	£176
Korean Air	£73	£146
Lufthansa	£68	£136

Hotel Name	Price per night (pp)	Price per night for (2, 4 or 8 people)	Total price for a week
Sankara	£40	£80	£560
Kyoto	£56	£112	£784
Ritz Carlton	£47	£94	£658
Park Hotel	£59	£118	£819
Nagasaki	£76	£152	£1064



The example above shows the layout and presentation of the task that the pupils were required to undertake during this session. The success criteria of the lesson was to access a variety of skills that the pupils would have gained over their time in education, for example, researching information online using Chromebooks and use their previous knowledge of multiplication and addition with the aim of creating an authentic holiday plan to Japan that linked with the rugby world cup topic for that term and involved the cross- curricular subject of Geography when researching information on Japan. Japan.

Evaluation 3

Evaluation of Pupil Learning	
Evidence of Learning (including attitude to learning over time))	I will be evaluating the learning of the whole class. My evaluation of the task was ongoing throughout the session and I supported each level of ability within the class through discussion and questions to ensure each group was on task. From my observations, the pupils were appeared to be enthusiastically engaged in the task and working independently they performed with confidence and sustained concentration. I considered the standard of the childrens work to be very good, they showed a good level of understanding. I have photographic evidence of the differentiated activities.
Next Steps for Progress	The next steps in using data skills and the presentation and analysis of data would be use mean, median, mode and range to describe a data set. I would implement a similar task based a visit to the Tokyo Olympics 2020. I considered that the task was appropriately challenging and my constant monitoring of the task ensured the pupils were well supported. On reflection, I would include an extension activity for the middle and top groups to move their learning on.
Reflective Analysis of Teaching and Strategies For Development – including justification/rationale for pedagogical choices	
Evidence of my Effective Practice	I set the scene with an opening video clip of Japanese tourist attractions. I felt it was a clear explanation of how to fill out the tables on the worksheet for their holiday, which were pre- drawn. I felt the introduction of the task was effective, the differentiation of the tasks within the groups was successful.

	This activity involved a real life, authentic context. This task was a cross-curricular activity and built links between the humanities and numeracy areas of learning. Efforts were made to improve the timing of the lesson and many completed the task to the extent that there was an opportunity to complete an extension activity. I feel slightly more confident in speaking in front of the class and maintaining the attention of most of the class.
Areas for my Development Personal Targets for Progress	Verbalising my thoughts in a child friendly manner is a skill that requires more refinement. To further develop the opportunity to extend the plenary at the end of a session. I am still developing the ability to work comfortably within the time limit of the lesson. I am continuing to familiarise myself with and apply the accepted classroom practice, for instance, in regards to presentation and routines.

Lesson Plan – 10

Student-teacher	Jessica Llewellyn	Class:	Year 6
AoLE or Subject	Science	Date:	25/11/19
Lesson Focus:	Electricity		
Meaningful links to Curriculum	Refining – Managing the learning environment – organisation of learners is focused on building learning habits and behaviours that meet the four purposes and are understood by learners in that context. Advancing – cross curricular themes - are used to build links between areas of learning and the learning within each component can be articulated. Influencing – learning outcomes and well-being – ensure that learners appreciate how high quality product and performance outcomes lead to improved learning and improved habits of well-being. Humanities (AoLE) - (History) – Progression Step 3 - learners will find and collect a range of evidence to support their enquiry with some independence, learners will present findings in a range of ways using appropriate methods. Science – Skills (communication) – 1. learners should be given the opportunity to search for, access and select relevant scientific information from a range of sources including ICT. 2. Communicate clearly by writing and drawing using relevant scientific vocabulary.		

Meaningful links to: Cross Curricular Responsibilities	Literacy (reading across the curriculum) – Element (locating, selecting and using information) – Aspect (reading strategies) – the learners are able to use a range of strategies for finding information, e.g. skimming for gist and scanning for detail. Writing – Strand - (writing across the curriculum) Element - (organising ideas and information) Aspect – (meaning, purposes, readers) – learners are able to use the characteristic features of non-continuous text in their own writing, e.g. posters and web pages, using imagination where appropriate, adapting their style to suit the purpose. DCF – Strand (producing) – Element (creating) – learners are able to select and combine a range of text and image to produce an outcome for a selected purpose and use software tools to enhance the outcomes for specific audiences.		

Learning Objectives (focus on Learning- use accessible

The pupils will learn to:

Create an information poster on the history of electricity.

Success Criteria (clearly linked to each Learning Objective and related to the process and/or product of learning)

Assessment of Pupils' Learning

Evidence

(What have the learners to say/write/do/produce – to demonstrate learning)

Produce an information poster explaining the key developments in the history of electricity.

Heading.

Chronological order.

Dates clearly written.

Interested fact clearly written.

With pictures if possible.

A poster should have a clear title.

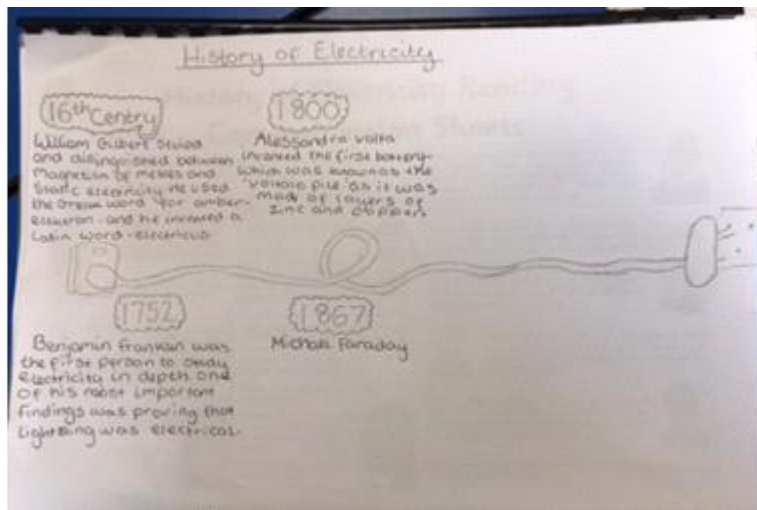
Eye catching layout.

Interesting fact clearly written.

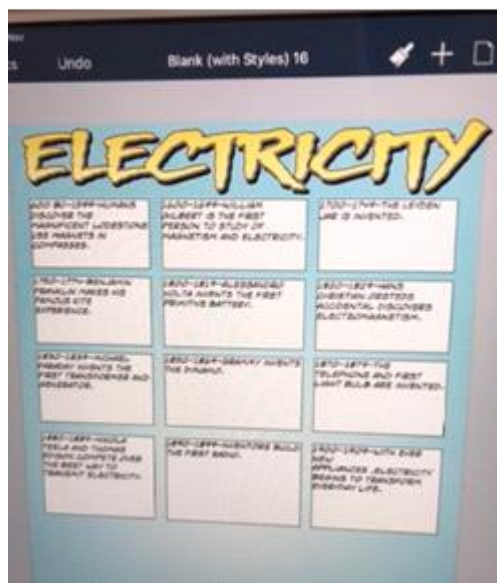
Attention grabbing pictures if possible.

Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role –including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening	Date and WALT on	Review the concept of a	Teacher

phase (with links to prior learning)	whiteboard. Say their task is to create a poster/ timeline showing the chronology in the discovery of electricity. Ask if they know what what 'chronological order' means? Brief introduction powerpoint of a sample timeline that displays presentation technique.	timeline, stating that it includes dates and short, snappy sentences and discuss appropriate presentation.	prepared powerpoint on on interactive board.
Teaching & Core Learning	Provide differentiated differentiated worksheets for each group. Assist pupils where necessary during the task.	MA & A – Use Chromebook to research the dates of key scientists from fact sheet and then draw a timeline on on paper. LA – use Comic life programme to construct and order the chronology of of the history of electricity from a non – chronological fact sheet.	Chromebooks iPads Paper, pens, pencils and coloured pencils/pens
Plenary	Review their information posters/ timelines.	Pupils to read out their favourite fact. Peer assess each others posters relative to the success criteria.	



The pupils had the opportunity to create a timeline on the history of electricity either by hand or using ICT, the above example show the initial start to a hand drawn timeline that required the use of ICT in order to firstly research the historical figures and information about them to then add to their timeline.



The pupils also had the option of creating their timeline on a Chromebook or iPad.

Evaluation 10

Evaluation of Pupil Learning	
Evidence of Learning (including attitude to learning over time))	This was a whole class differentiated activity. I evaluated the lesson through observation and continuous assessment, I was hoping the pupils would work with sustained levels of concentration and effective communication. I took photographic evidence of different abilities within the class and the qualities of work was at an appropriate level.
Next Steps for Progress	Next steps would be for the pupils to be able to identify information that interests them to develop further understanding of aspects of the topic. I would implement this by providing opportunities for independent research using library resources and internet access. I would hope the pupils to work independently with confidence and communicate their findings effectively, written or orally.
Reflective Analysis of Teaching and Strategies For including justification/rationale for pedagogical choices	
Evidence of my Effective Practice	Differentiated resources provided appropriate challenge to every learner. I used direct teaching methods to give clarity to the lesson objective. I continue to develop my confidence when I am addressing the class and instructing them on their task. This lesson covered managing the learning environment, cross curricular themes and learning outcomes and well-being .
Areas for my Development Personal Targets for Progress	I am learning through hands on experience the particular requirements within classroom with regards to standards of presentation of pupils work. I will ensure that the work completed by the pupils is of a high standard and endeavour to ensure presentation is of a similar high standard.

APK and Engagement

Wednesday, December 11, 2019
8:40 PM

Lesson Plan – 5

Student-teacher	Jessica Llewellyn	Class:	Year 6
AoLE or Subject	Numeracy – Data handling	Date:	14/11/19
Lesson Focus:	Bar graphs		
Meaningful links to Curriculum	Pedagogy – refining – (element)- managing the learning environment - resources are focused on building learning habits and behaviours that meet the four purposes. Pedagogy – Advancing – (element) - progression in learning – learning extends the learners’ capacity incrementally and builds upon prior knowledge. Pedagogy – Influencing learning – (element) – sustained effort and resilience in learners – learners are encouraged to apply themselves with sustained effort because they see the point of their learning and understand that resilience is needed to succeed.		
Meaningful links to: Cross Curricular Responsibilities	Literacy – oracy (listening) – to listen carefully to presentations and show that they understand the conclusions and opinions being shared. Numeracy – using data skills present analyse data using bar graphs. Digital Competency (DCF) – (Element) data and information literacy – learners begin to create data sets with tables and charts (hwb).		

Learning Objectives (focus on Learning- use accessible

The pupils will learn to:

Display data in a graph.

Success Criteria (clearly linked to each Learning Objective and related to the process and/or product of learning)

Assessment of Pupils' Learning Evidence
(What have the learners to say/write/do/produce – to demonstrate learning)

Complete a series of differentiated questions involving calculating a percent of a number and entering that onto a bar graph – MA group.

Interpret data on their worksheet in order to create a bar graph using that data.

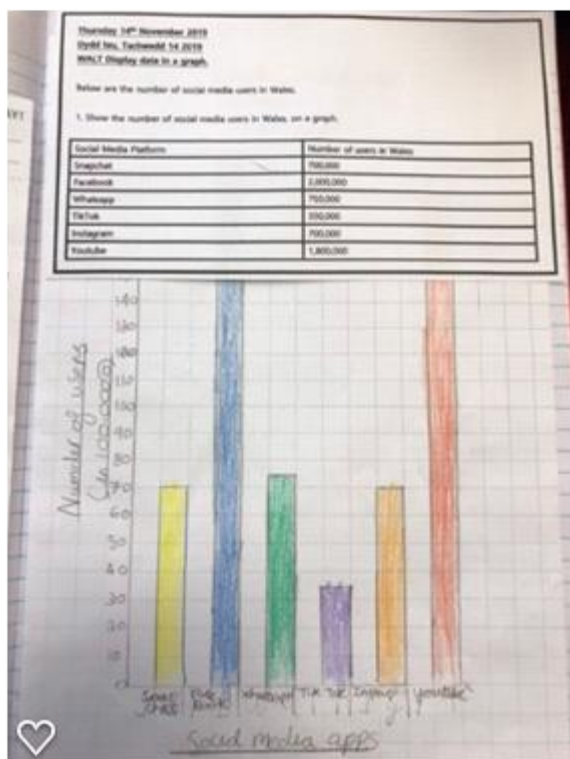
Respond orally to a class introductory activity to gauge initial understanding.

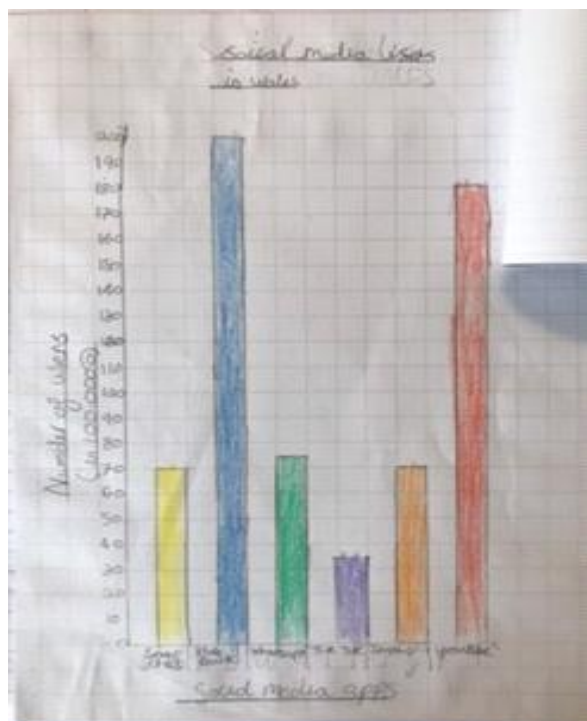
Pupils will complete their differentiated worksheets, which will be peer assessed.

Pupils can draw a graph with an appropriate scale and labelling.

Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role –including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening phase (with links to prior learning)	Date and WALT is provided on the worksheets. Introduce the task on e-safety by playing two YouTube clips on being safe online. Use whiteboard to review how to draw and layout a bar graph in order to record their data.	Listen and watch the YouTube clips that would recap their previous discussion on e- safety with their teacher. Participate in answering questions to test their knowledge and understanding on what to include in a bar graph e.g. scale, labels, axis, title, etc.	Interactive board YouTube clips Whiteboard, pens
Teaching & Core Learning	Explain task to the class, the task included differentiated worksheets	MA – work out 5% of the number first, to find find number of social	Photocopied differentiated worksheets

	in order to construct a bar graph that represents the amount of social media users in Wales.	media users in Wales, then draw the bar graph using that result. A – already provided with the numbers for the amount of social media users in Wales on worksheet, only draw a bar graph using that data. LA – use J2Data on Chromebooks to enter of the numbers of social media users in the class.	Graph paper Chromebooks
Plenary	Check answers for each differentiated pieces of work, evaluating those within each group that may need further reinforcement.	Colour bar graphs, stick in books Peer and self- assess	Traffic light stickers





Thursday 14th November 2019
 Cycle 100, Task 100, 14.11.19
 WALT: Display data in a graph.

Below are the number of social media users in the class.

1. Show the number of social media users in the class, using 10Data.

Social Media Platform	Number of users in the class
Snapchat	13
Facebook	6
Whatsapp	19
TikTok	11
Instagram	5
Youtube	21

DATE: 14.11.19
 WALT: Display data in a graph (using 10Data)
 Reference: 10Data - Chart
 The answer is: Hwb ☒ 10Data ☐
 Pupil folder

The three images above are an example of a piece of work that was completed during the session, focusing on social media facts and figures with the requirement of creating a bar graph to display their finding after having researched the information through an online source. Also demonstrated here is the use of an AfL sticker. The task was differentiated and each attainment level had an adapted version of the task in order for them to be able to complete it to the best of their ability.

Evaluation 5

The introduction, which included two video clips that reinforced their previous learning, my whiteboard demonstration of the presentation requirements of the task, the **differentiated** worksheets were appropriate to the level of understanding. I felt more confident in front of the class presenting the task and I am developing a greater awareness of the different levels of attention within the class. The activity involved a real life context for the learning experience (**real-life, authentic contexts**).

The activity extended learners capacity incrementally and built upon prior knowledge (**progression in learning**). The pupils were **ambitious, capable learners** and set themselves

high standards and enjoyed the challenge and were able to explain the ideas they were learning about.

Lesson Plan – 6

Student-teacher	Jessica Llewellyn	Class:	Year 6
AoLE or Subject	Numeracy	Date:	18/11/19
Lesson Focus:	Short Division		
Meaningful links to Curriculum	Pedagogy – (Refining) – Learning materials and experiences are used to provide appropriate challenge to every learner. Pedagogy – (Advancing) – (Progression in learning) - Learning is planned so the next stages extend learners' capacity incrementally and build upon prior knowledge. (Real – life, authentic contexts) – examples of real life, authentic contexts for learning being provided as a natural part of the learning experience. Pedagogy – (Influencing) – (Sustained effort & resilience in learners) – teacher encourages learners to apply themselves with sustained effort because they see the point of their learning and understand that resilience is needed for sustained success.		
Meaningful links to: Cross Curricular Responsibilities	Numeracy – (Strand) - Using number skills – (Element) - Use number facts and relationships – learners are able to use mental strategies to recall multiplication tables up to 10 x 10 and use to solve division problems. Literacy – (Strand) - Reading across the curriculum (Element) - Locating, selecting and using information (Aspect) - Reading strategies – learners can use a range of strategies for finding information, e.g. skimming for gist, scanning for detail. DCF – (Element – Producing) – (Planning, Sourcing and Searching) – Learners can navigate through a series of icons/ images to find the desired item (information/ software/ media) e.g. scroll through		

	familiar website/ software to find familiar activity.		

Learning Objectives (focus on Learning- use accessible

The pupils will learn to:

WALT: Apply division in a real life context.

Success Criteria (clearly linked to each Learning Objective and related to the process and/or product of learning)	Assessment of Pupils' Learning Evidence (What have the learners to say/write/do/produce – to demonstrate learning)
To understand how to use the 'bus stop' method to work out short division calculations. Recite the times tables from 2 to 12 and be able to link the use of times tables to work out the division calculations. Pupils are able to round up or round down numbers with a decimal point in order to get an accurate answer. Pupils will practice using calculators to work out their calculations.	Complete a series of short division questions. Demonstrate an understanding of the times tables in order to answer questions involving short division. Self and peer assessment.

Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role –including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening phase (with links to prior learning)	Date and WALT on board Class gathered on the carpet for introduction. State their task today will involve short division and we will be using the 'bus stop' method to work out the calculations.	Engage in carpet activity of reciting and practicing their times tables and understand how knowing the times tables link to answering division	Whiteboard and pen. Interactive board. Teacher prepared powerpoint.

Use whiteboard to write and example of division calculation e.g. 3 divided 18. Warm up – recite times tables (say they need to know their times tables in order to help them with the division questions) • Start with the 2 times table recite together as a class in full e.g. one two is two etc. • Ask about four mental arithmetic questions about the two times table e.g. how many two's in 16, half of 22 etc. • Do the same for the three times table and four times table • (extension)- point to two random pupils to play a game of carpet ping pong using the answers only of the four times table. • Recite the five times table backwards together as a class. • Boys only recite the six times table. • Girls only recite the seven times table. • Ask random mental arithmetic questions on these times tables. Show powerpoint. Explain using whiteboard	calculations. Listen to powerpoint introduction.
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	whiteboard where to place the decimal point in their answers when working out division calculations involving money.		
Teaching & Core Learning	Hand out differentiated activity sheets containing short division calculations.	LA – using activity sheets use J2e5 on Chromebooks in order to create a graph by adding the data from their activity sheet that shows how much energy is used by various electrical appliances in the home. A – using activity sheets divide numbers written as money by 4 and 7 in order to find the cost per week and the cost per day of various home electrical appliances. MA – using activity sheets use the Chromebooks and the specific website to research a number of electrical appliances and then calculate the cost per month, the cost per week and the cost per day of each appliance by dividing by 12, 4 and 7 respectively.	Differentiated activity sheets. Mini whiteboards Scrap paper Work books Chromebooks Calculators Website – www.thisismoney.co.uk
	Support each table as	Self and peer assess	Traffic light

Plenary	Support each table as needed in order for the pupils to be able to in time, confidently carry out the calculations independently.	Self and peer assess and add a comment.	Frame eight stickers and coloured pencils.
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Evaluation 6

I will be evaluating the performance of the whole class. I will be doing this through observation and ongoing monitoring of performance. I am looking for engagement with the activity and sustained levels of concentration and evidence of collaboration. I have photographic evidence of the differentiated activities, the pupils peer assessed and a brief plenary resolved any misconceptions.

The introductory task for my maths division session proved to be a success, all of the pupils participated and enjoyed the times table warm up task. My introductory task was a slight improvement on my previous lessons, as I used my knowledge of the times tables (a subject I am more comfortable with) to my advantage, which led to me being more relaxed for that part of my delivery of the introduction. The pupils then went onto work on their specific task and and as always I made myself available to any pupil that required assistance at any point. The **differentiated** worksheets were appropriate to the level of understanding. The activity involved a real life context for the learning experience (**real- life, authentic contexts**).

The activity extended learners capacity incrementally and built upon prior knowledge (**progression in learning**). The pupils were **ambitious, capable learners** and set themselves high standards and enjoyed the challenge and were able to explain the ideas they were learning about.

Lesson Plan – 14

Student-teacher	Jessica Llewellyn	Class:	Year 6
AoLE or Subject	Science – Numeracy	Date:	3/12/19
Lesson Focus:	Division and data handling.		
Meaningful links to Curriculum	Pedagogy - (Refining) – (Differentiation) – learning materials and experiences are used to provide appropriate challenges to every learner. Pedagogy – (Advancing) – (Progression in learning) – learning extends the learners’ capacity incrementally and builds upon prior knowledge. Pedagogy – (Influencing) – (Sustained effort and resilience in learners) – learners are encouraged to apply themselves with sustained effort because they see the point of their learning and understand that resilience is needed to succeed. Science – (Skills) – (Communication) - Pupils should be given opportunities to: 1.		

	search for, access and select relevant scientific information, from a range of sources, including ICT 2. communicate clearly by speech, writing, drawings, diagrams, charts, tables, bar charts, line graphs, videos, and ICT packages, using relevant scientific vocabulary.		
Meaningful links to: Cross Curricular Responsibilities	Numeracy - (Strand) - Using number skills – (Element) - Use number facts and relationships – learners are able to use mental strategies to recall multiplication tables up to 10 x 10 and use to solve division problems. 2) – using data skills present and analyse data using bar graphs. Literacy – (Strand) - Reading across the curriculum (Element) - Locating, selecting and using information (Aspect) - Reading strategies – learners use a range of strategies for finding information, e.g. skimming for gist, scanning for detail. DCF- (Element) – (Data and information literacy) – learners begin to create data sets with tables and charts. 2) - (Element – Producing) – (Planning, Sourcing and Searching) – Learners can navigate through a series of icons/ images to find the desired item (information/ software/ media) e.g. scroll through familiar website/ software to find familiar activity.		

Learning Objectives (focus on Learning- use accessible

The pupils will learn to:

WALT: divide by two digits and display data in a bar graph.

Success Criteria (clearly linked to each Learning Objective and related the process and/or product of learning)

Assessment of Pupils' Learning Evidence

(What have the learners to say/write/do/produce – to demonstrate learning)

To be able to research the yearly energy consumption of household items online using a specific website. Divide the data gathered by 12 in order to find the monthly energy consumption and round to the nearest whole number.

Research energy consumption of household objects from a specific website. Divide the yearly

Be able to display results in a frequency bar graph.	consumption figure by 12 in order to find the monthly energy consumption. Display the monthly consumption of the household items in a bar graph.
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Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role –including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening phase links to prior learning)	WALT on whiteboard. Class stay on tables for introduction to task. Chromebooks are available for pupils to work in pairs or individually, (LA need a Chromebook each). Outline their task for today, show the activity sheet they will be using on the interactive board as an example of what the task involves, use whiteboard to recap how to divide by 12 using the 'bus stop' method and then how to round up if they have a remainder in their answer. State that they will be writing their calculations for each item in their science books. As they are familiar with drawing bar graphs, explain that when the pupils have finished dividing their results by 12, they need to display their results on a bar	Pupils stay on tables to listen to introduction. Listen to explanation of the task ahead.	Whiteboard and pens.

	graph. Go through the main points of what to include on a bar graph e.g. axis, labels, title, scale etc. Ask pupils if they can work out their own scale using the numbers from their table, (only MA and A), emphasis drawing the graph in pencil but write all labels and titles in pen. LA work with the TA to research the data from the website and record the data onto the pre- drawn table and then divide by 12 with TA help and then record their data onto J2e5 on the Chromebooks in order to create a bar graph.		
Teaching & Core Learning	Pupils will need to use the website provided in order to research household items and record the yearly energy consumption of these items onto the pre- drawn table provided. Pupils then need to divide those yearly figures by 12 using the 'bus stop' method in order to find out the monthly energy consumption, their workings out will be done in their science books. The table will be stuck into their science books. Graph paper will be provided in order for the pupils to record their monthly energy consumption consumption figures in the	Pupils will need to use the website provided (working in pairs or individually) in order to research household items and record the yearly energy consumption of these items onto their individual pre- drawn table provided. Pupils then need to divide those yearly figures by 12 using the 'bus stop' method in order to find out the monthly energy consumption, their workings out will be done in their science books. Once they have this	Science books Graph paper Teacher prepared activity sheet.

	form of a bar graph.	data they will use the monthly energy consumption figures and create a bar graph on graph paper, looking at their figures for each item and using their previous knowledge of drawing bar graphs in order to try to work out the best scale to use for each of their graphs.	
Plenary	Continuously observe and check pupils progress.	Colour in bar graph and stick activity sheets and bar graph into science books. Peer and self- assess and comment.	Self-assessment stickers



Unit Month, October 3, 2019
 Sunday, 3rd December, 2019
 Wkt. 7, divide by 12 and display data in a graph

1. Choose 10 household items and calculate their monthly energy consumption. Divide the annual yearly consumption by 12 and round the answer to nearest whole number.

Household Item	Yearly consumption (kWh)	Monthly consumption (kWh)
Oven (Electric)	210	17
Electric Kettle	167	14
Microwave	56	5
Fridge-freezer	427	38
Fridge	62	4
Kettle	34	3
Vacuum cleaner	18	1
Traffic lights	12	1
TV (Plasma - Flat screen)	658	55

2. Display the household items' monthly consumption on a graph.

1. $0.21 \times \frac{1000}{12} = 17.5$

3. $0.167 \times \frac{1000}{12} = 13.9$

5. $0.056 \times \frac{1000}{12} = 4.7$

7. $0.18 \times \frac{1000}{12} = 15$

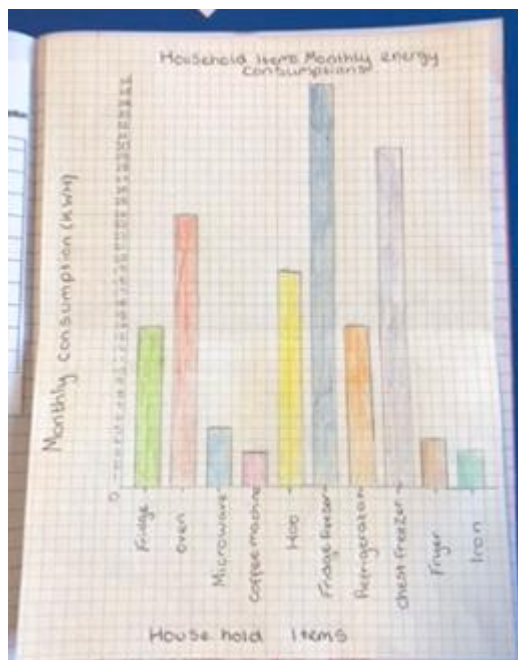
9. $0.012 \times \frac{1000}{12} = 1$

2. $0.113 \times \frac{1000}{12} = 9.4$

4. $0.35 \times \frac{1000}{12} = 29.2$

6. $0.03 \times \frac{1000}{12} = 2.5$

8. $0.01 \times \frac{1000}{12} = 0.8$





This lesson involved clear access to the pupils prior knowledge on division using the 'bus stop' method and creating a bar graph of their data.

Evaluation 14

This was a differentiated classroom activity, delivered through direct teaching using practical examples that reinforced knowledge and understanding of prior learning.

Lesson Plan – 11

Student-teacher	Jessica Llewellyn	Class:	Year 6
AoLE or Subject	Science	Date:	26/11/19
Lesson Focus:	Circuit symbols		
Meaningful links to Curriculum	Pedagogy – (Refining) – (Managing the learning environment) – organisation of learners is focused on building learning habits and behaviours that meet the four purposes and are understood by learners in that context. Pedagogy – (Advancing) – (Progression in learning) – learning is planned so that the next stage is to extend learners capacity incrementally and build upon prior knowledge. Pedagogy – (Influencing) – (challenge expectation) – teacher communicates appropriate levels of challenge and expectations of learners which are reflected in the quality and achievement of their learning. Science – Skills – communication –to communicate clearly using relevant diagrams and scientific vocabulary. Range - learners should be given opportunities to study the uses of		

	electricity and its control in simple circuits.		
Meaningful links to: Cross Curricular Responsibilities	Literacy – Strand (Oracy) – Element - developing and presenting – Aspect (collaborate and discussion)- learners are able to contribute purposefully to group discussions to achieve agreed outcomes.		

Learning Objectives (focus on Learning- use accessible

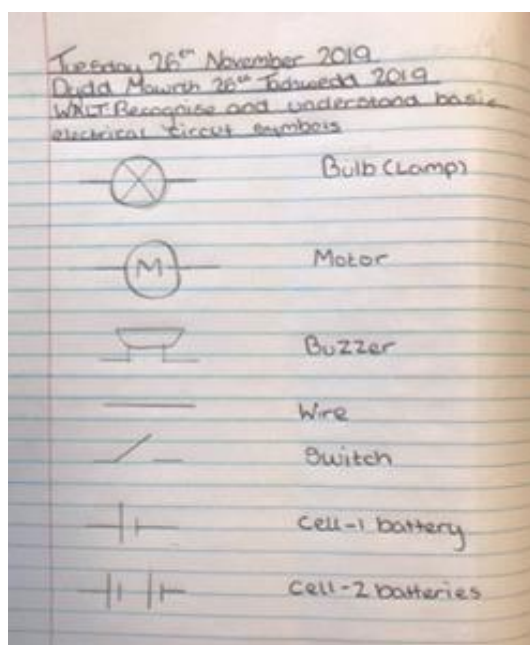
The pupils will learn to:

Recognise and understand basic electrical circuit symbols.

Success Criteria (clearly linked to each Learning Objective and related to the process and/or product of learning)	Assessment of Pupils' Learning Evidence (What have the learners to say/write/do/produce – to demonstrate learning)
Pupils will complete a series of activities that familiarise them with the symbols of circuit diagrams and the components of a complete electrical circuit.	Pupils will use acquired knowledge of electrical symbols to draw a variety of circuits with that include various components e.g. light, buzzer, switch etc.

Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role –including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening phase (with links to prior learning)	Date and WALT on board. Introductory explanation via teacher explanation and powerpoint.	Listen carefully to presentation and show understanding of the speakers conclusion.	Interactive board and teachers prepared resources
Teaching & Core Learning	Oragnise a carousel of activities within the classroom to be visited by each group	Following the introduction the pupils will return to their desks to complete specific activities for a set	Activity sheets Screen timer

	within a set time limit. Differentiation will be by outcome. Make sure all pupils have a copy of the symbol key. Ensure that pupils put name on all activity sheets.	time period (approx. 10 mins). On completion they will move to a new station within the classroom and engage in a different series of related tasks, using their symbol key to support them in the task.	
Plenary	Review the concept of what constitutes a complete circuit i.e. battery, bulb, wires etc. What can break a circuit? = switch Discuss any misconceptions or difficulties that the pupils might have had with the task.	Peer assess activity sheets and file in text book.	

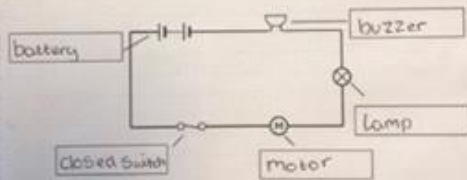


Electric Circuits

Electricity flows in a circuit from the negative pole of the battery to its positive pole. The flow of electricity creates an electric current. There is a symbol to represent each component in an electrical circuit.

				
battery	closed switch	open switch	cell	voltmeter
				
buzzer	lamp	lamp	motor	wire

Label the circuit below.

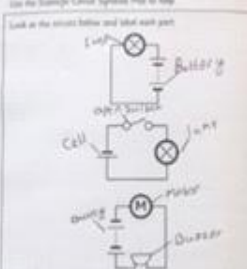


Complete the sentences.

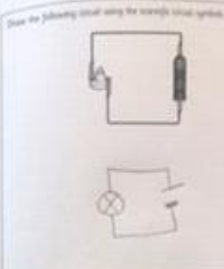
The electric current leaves the battery and passes through the buzzer.
It then travels through the lamp, next through the motor and finally through the closed switch before returning to the battery.

Use the Example Circuit Symbols Map to help

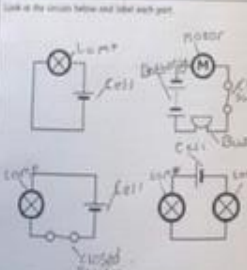
Look at the circuit below and label each part.



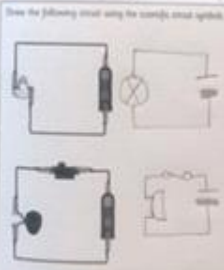
Draw the following circuit using the example circuit symbols.

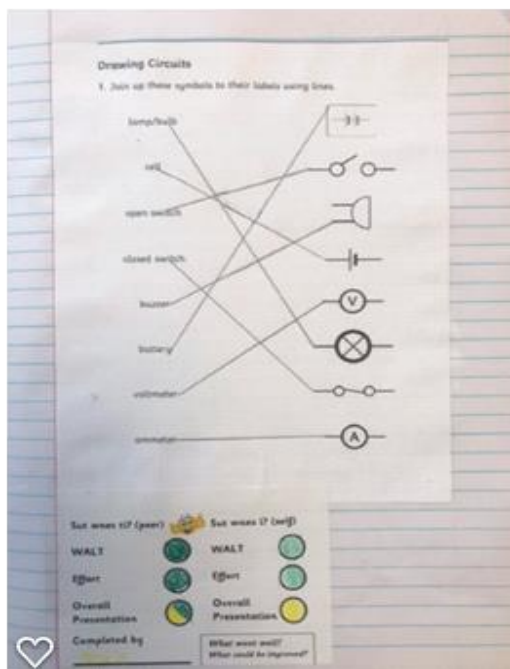


Look at the circuit below and label each part.



Draw the following circuit using the example circuit symbols.





The above images show the variety of activity sheets that the pupils worked on during this session in order for them to practice and develop a clear understanding of the new topic of basic circuit symbols. The pupils had one activity sheet at a time and on completion would move on to another activity sheet that followed on from the previous one, therefore using and building on the knowledge they had gained from the start of the task. This sessions task upon completion was also self-assessed using AfL stickers.

Evaluation 11

The materials provided appropriate challenge to every learner. My introduction was clear and succinct and the pupils had extension activities which furthered their understanding of the topic. From my growing knowledge of the pupils and their performance levels within the class, I was confident that the pupils worked to the best of their ability and advanced their learning.

There was **challenge and expectation** which was reflected in the quality and achievement in their learning. I felt confident in this instance, to adapt my lesson plan to the circumstances on this occasion and decided against the carousel option as I had planned.

Lesson Plan – 12

Student-teacher	Jessica Llewellyn	Class:	Year 6
AoLE or Subject	Science	Date:	2/12/19
Lesson Focus:	Building simple circuits		
Meaningful links to Curriculum	Pedagogy – (Refining) – (Managing the learning environment) – organisation of learners is focused on building learning habits and behaviours that meet the four purposes and are understood by learners in that context. Pedagogy – (Advancing) – (Progression in learning) – learning is planned so that the next stage is to extend learners capacity incrementally and build upon prior knowledge.		

	(Real life, authentic contexts) – there are examples of real life, authentic contexts for learning being provided as a natural part of the learning experience. Pedagogy – (Influencing) – (challenge and expectation) – teacher communicates appropriate levels of challenge and expectations of learners which are reflected in the quality and achievement of their learning. (Learners leading learning) – learners are encouraged to suggest ways in which learning can be further developed, interpreted or extended. Science – (Range) - (Reflecting) - How work - Pupils should use and develop their skills, knowledge and understanding by investigating the science behind everyday things, e.g. toys, musical instruments and electrical devices, the way they are constructed and work. They should be given opportunities to study: 1. the uses of electricity and its control in simple circuits.		
Meaningful links to: Cross Curricular Responsibilities	Literacy – (Strand) - Writing across the curriculum (Element) - Organising ideas and information – (Aspect) - Structure and organisation - use features and layout which are constructed to present data and ideas clearly.		

Learning Objectives (focus on Learning- use accessible vocabulary):

The pupils will learn to:

WALT: Use knowledge of circuits so far, to light up a 2D Christmas

Success Criteria (clearly linked to each Learning Objective and related to the process and/or product of learning)	Assessment of Pupils' Learning Evidence (What have the learners to say/write/do/produce – to demonstrate learning)
Learners will review their prior knowledge of circuit symbols in order to assist with today's activity.	Learners will access their prior knowledge of electrical circuit symbols.
Learners will take part in a practical	They will be able to transfer this knowledge onto the practical activity of

activity involving electrical circuit equipment. To use the time allowed in order to develop an understanding of how different components of an electrical circuit create varied outcomes e.g. two batteries, one bulb, or three bulbs and two batteries etc.	creating electrical circuits and experimenting with various components components in order to show how different connections in the circuit produce different results. Be able to match each circuit symbol to the real life component.
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Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role –including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening phase (with links to prior learning)	Date and WALT Class gathered on the carpet to take part in an activity that reviews their prior learning of basic electrical circuit symbols. Working in pairs, using a mini whiteboard, the class will answer questions from a powerpoint that tests their understanding of circuit symbols in order to engage their thinking for the main task ahead. Then working as a on the carpet go through example circuit circuit diagram using various components in each one and ask if the learners can answer correctly which circuit	Class will gather on the carpet and listen to a brief introduction of the task for the session. Working in pairs using mini whiteboards the class will take part in an activity that tests their previous knowledge of circuit symbols and then be able to work as a class in order to agree or disagree as to which diagram of example circuit would work or not work, they will use their knowledge of how the components of a circuit work together in order to answer these questions. Be able to match each circuit symbol to the real life component.	Interactive board. Teacher prepared powerpoint with questions and answers. Mini whiteboard and pens.

	would work or not work work depending on what is included in that example circuit. Using the equipment available demonstrate the link between what the symbol for each component is and the actual component.		
Teaching & Core Learning	Electrical circuit equipment will be equally laid out on each table. Each table can work together to experiment various ways of linking together an electrical circuit using different components each time in order to change the result of the circuit e.g. what makes the bulb brighter or dimmer? What makes the buzzer louder? Which connections makes the motor go faster? The aim being to make a circuit with three bulbs that can be added into their 2D Christmas tree picture.	Working together, pupils will experiment with the electrical circuit equipment on their tables. After experimenting with the equipment initially, pupils will ultimately make a circuit that includes three light bulbs that light up and be added to their pre-prepared 2D Christmas trees.	Various electrical circuit equipment. 2D Christmas trees Science books
Plenary	Observe and guide pupils where and when needed in order to establish a working circuit.	Demonstrate and present their Christmas trees each other's tables.	



This was the electrical circuit equipment used for the practical task sessions with the aim of making working circuit that included three lit bulbs.



Above are two examples of the outcome of the practical circuit session, the three lit bulbs were inserted into a paper Christmas tree and displayed on each of the pupils tables for them to look at each others work.

Evaluation 12

Provision of appropriate resources and classroom organisation. The introductory activity set the context for the task and accessed their prior knowledge.

Critical Reflection

Wednesday, December 11, 2019
8:40 PM

My Professional Teaching Experience 1 (PTE1) involved the planning, preparation and delivery of a series of learning activities to twenty one Year 6 pupils with varying levels of attainment, aiming to provide the appropriate level of challenge and engagement for the pupils across a range of the Areas of Learning and Experience with cross-curricular aspects, incorporating the literacy and numeracy framework, based on the 2008 National Curriculum for Wales and digital competency framework, 2016, I used pedagogical principles, appropriate to the task and the learning needs of the children, as identified in Donaldson's, 'Successful Futures', these principles set out "teaching and learning approaches that incorporate experience, creativity and energy into the learning of children" Donaldson (2015) and the principles are reflected in the new National Curriculum 2022 with its vision for the development of teaching and learning in Wales. The programme of study followed the termly themes of the school, the lessons developed aspects of those themes and the content, planning and preparations were made with prior discussion and collaboration on a weekly basis with the class teacher. I also had the opportunity to teach swimming lessons in addition to my classroom lessons.

My critical reflection will include the analysis of three of Donaldson's twelve pedagogical principles.

1. Good teaching and learning means employing assessment for learning principles.
2. Good teaching and learning regularly reinforces Cross-Curriculum Responsibilities, including literacy, numeracy and digital competence, and provides opportunities to practice them.
3. Good teaching and learning sets tasks and selects resources that build on previous knowledge and experience and engage interest.

Pedagogical principle seven out of Donaldson's twelve, acknowledges the principles of assessment formulated by the Assessment Reform Group (2002) and the research and seminal work of Paul Black and Dylan Wiliam in the publications 'Inside the Black Box, Raising Standards Through Classroom Assessment', (2001) and the follow up "Assessment for Learning: Beyond Black Box", (1999), as to the significant impact that formative assessment or assessment for learning (AfL) can have on pupil progress.

"Assessment for Learning is any assessment for which the first priority in its design and practice is to serve the purpose of promoting pupils learning", Wiliam et al, (2002). Wiliam explains that formative assessment, AfL, is not a process done by teachers to students, it is led by teachers with students to engage students in their own learning. The idea being that the continuous dialogue between teacher and pupil, aids the development of appropriate teaching strategies allowing pupils to progress, thrive and achieve their full potential, Wiliam, (2012).

Wiliam identifies key aspects, for effective assessment for learning, he considers the participants to be the teachers, peers and learners, it involves the process of identifying where the learners are in their learning, where they are going and how they are going to get there, from a combination of the processes and participants, Wiliam (date) identifies key strategies covering shared learning intentions, effective classroom discussions and activities, activities, regular feedback to pupils, collaborative learning and peer assessment, metacognition and self-assessment.

My first lesson (see AfL tab, Lesson Plan 1), involved data handling and required the pupils to produce a bar graph on data gathered from the Rugby World Cup in Japan, which was the cross-curricular theme for the first half of the term. My planning took into account the three main areas of AfL, questions, quality feedback and peer and self-assessment. The lesson objective was clarified using the WALT, it was a differentiated activity that accessed prior knowledge, involved collaborative learning, internet research and a final product of a completed bar graph. Using recall and knowledge questions I employed the AfL 'first of five' strategy after my introduction to determine the pupils level of understanding of the task.

Throughout my first lesson, I was mindful of the concept of constant review posited by Shirley Shirley Clarke and endeavoured to give feedback to the children throughout the session, ensuring that the children were reviewing their progress so that the final product was evidence of good learning. My plenary for this lesson had the AfL strategy of 'think, pair, share', which allowed the pupils to give feedback to each other and discuss the outcomes of their work and ultimately to self-assess with 'traffic lights' and a personal comment, (see AfL tab, images).

In this lesson I employed a variety of AfL strategies which, as an amalgamation resulted in an engaging, positive learning experience, however, the impact of each individual strategy on learning would be difficult to ascertain without further action research on different strategies.

My second lesson involved the challenge of introducing a new concept to the children, that of ratio, my experience of the previous days teaching and interaction with the class guided my planning for this lesson. The preparation covered AfL strategies that included, 'fist of five', 'five', 'think, pair, share' and 'peer feedback' as a form of self-assessment. Despite my preparedness my explanation of the concept might have led to some ambiguity. This brought into focus the key AfL feature of a success criteria, which in this lesson should have been the prominent strategy. Despite having worked through several examples, displaying a step by step method to solve ratio problems would have directed the children's thinking and encouraged better understanding and would have been even more valuable had the children contributed to the creation of that success criteria. My experience on this occasion was a reminder that a lesson plan should be considered a versatile resource that should be responsive to developments as the lesson progresses and adaptable to the changing teaching and learning needs of the children. My lesson planning evolved as a consequence of knowing the pupils, becoming aware of their differing personalities, their previous knowledge and individual strengths and weaknesses, adapting to how the school day was organised also assisted in the content and timing of lessons. Throughout the PTE1, I sought to develop a relationship and rapport with the children, to expand my own knowledge and understanding of the responsibilities of a practitioner, to be a role model and facilitator, to be accessible to the pupils and to maintain a supportive discourse with the children.

I noted that 'traffic light' stickers were frequently used for peer and self-assessment and the Year 6 class were well rehearsed in automatically getting a self or peer assessment sticker and adding it to their work on completion of the task. I continued to encourage the pupils to self and peer assess at the end of my lessons, however, the pupils would refer to the class teacher for further reassurance and approval of their work and often the class teachers expectations, on the finer points in the presentation would differ from those of mine, I was always content that the work undertaken during my lessons was completed to a high standard, nevertheless this did not always equate to that of the class teacher, even though I considered my standards to be high from my experience in other classes and school. I was fortunate during my PTE1 to have the opportunity to attend staff moderation meetings looking at literacy and numeracy, from which I saw the value of achieving the standardisation of presentation and curriculum coverage. I will take this forward into part two of my PTE1 and ensure that there is greater correlation between my expectations and those of the class teacher.

The developmental progression of my lesson planning evolved into more concise and focused aspects of AfL strategies as evidenced in my lesson on creating a persuasive electrical safety poster. On this occasion I targeted the 'think, pair, share' strategy, to encourage collaborative work and thinking time, with the idea of accessing the pupils thoughts and provide the opportunity to suggest, discuss and to confidently share with the class. Asking high quality questions to challenge or move the discussion is a skill that needs to be developed I was aware that my questions were from the lower tier in the hierarchy of Bloom's Taxonomy to discover knowledge and comprehension, I recognise there is a need to cultivate questions that promote higher order thinking skills. Towards the end of my first PTE1, I became more able and willing to allow the lesson to evolve in response to the feedback from the children which is the essence of AfL and the lesson plan, as stated earlier, should be both adaptable and responsive to meet the pupils learning needs.

The Literacy and Numeracy and the Digital Competence statutory requirements across all areas of learning were central in lesson preparation and most lessons involved the use of Chromebooks or iPads. Pedagogical principle nine in Donaldson's (2015) 'Successful Futures' states that teachers should be 'reinforcing and creating opportunities to practice cross-

cross-curricular responsibilities'. I had the opportunity to plan lessons that integrated aspects of history, geography and science in addition to the LNF and DCF.

Barnes, (2015) describes the concept of cross-curricular as, "when the skills, knowledge and attitudes of a number of different disciplines are applied to a single experience, problem, question, theme or idea".

The principles for a cross curricular or an integrated approach are found in the cognitive and constructivist theories of learning where the children are at the centre of the learning and learn through direct experience, processing information from prior learning experiences, making connections and using the acquired skills and knowledge to develop further skills, knowledge and understanding and thereby achieve a more holistic learning experience, proponents of the theory of multiple intelligences would also acknowledge the value of the integrated approach to learning.

(See cross- curricular tab, Lesson plan 4), this lesson involved planning a holiday to Japan and the integration of Numeracy, Literacy and Geography within a cross-curricular theme, with the added authentic experience of researching flights, hotels and attractions in Japan in order to create a realistic holiday plan. A "Science Fortnight" provided further opportunity for integrated lessons (see cross- curricular tab, Lesson Plan 10). The aim of this lesson was to make a timeline of the history of electricity and required the pupils complete a reading comprehension, research and order historical dates on the Chromebooks and either draw by hand or create a timeline on the iPad or Chromebook thus integrating the DCF, science, literacy and history. This was also the start of a new topic and on this occasion the class collaborated in producing a success criteria for the timeline. Both lessons were challenging and stimulating ways to apply skills and gain new understanding. The children saw the relevance of the tasks and approached the work enthusiastically, displaying good communication skills and creativity and worked collaboratively. Integrating subjects allows the pupils to become aware of the connections within and between different areas of learning and offers teachers opportunities to develop children's knowledge and skills in a more imaginative and motivational way, Hayes (2010). The principle of subsidiarity that is a feature of "Successful Futures" allows for such an approach to the curriculum.

Nevertheless there has to be a balance found of acquisition of skills and the acquisition of knowledge, and the issue arises as to whether "skills are the bi-product of knowledge" or does "knowledge underpin the application of skills", OFSTED, (2018). I found that the pupils were computer literate and displayed a high level of proficiency in searching the internet and in using computer programmes, I had the opportunity to learn from their expertise, navigating navigating software such as J2e on Hwb. However, the computer skills would probably have been acquired through direct teaching methods and having been taught then become portable and applicable in a different context, which is when the child would see the benefit of the initial learning. This reflects the views of E. D. Hirsch, who has been influential in recent years in UK education, who argues that a child centred approach to the curriculum was detrimental and has posited that children benefit from learning in a more organised, structured way and are then better able to use the skills and knowledge taught discretely and apply them in different learning environments. From a teaching perspective I can see the creative potential in a cross curricular approach to curriculum planning and I can appreciate that for pupils the learning activities could be more motivating and therefore memorable. With a cross curricular approach, curriculum mapping and skills coverage would have to major considerations for the school and the class teacher, not all subjects integrate naturally which could result in tenuous links within a thematic plans. Likewise, teacher preference or specialism may inadvertently give more preference to some subjects over others and teachers may feel unable to deliver subjects of which they have little knowledge or understanding. Within an education system that has a strong emphasis on results in national testing, challenging school performance targets and teacher appraisal there may be a tendency to revert to discrete, direct teaching of the core subjects in order to alleviate the pressures of accountability.

"Regardless of the way in which the curriculum is organised, it is the quality of teaching and motivation level of pupils that has the greatest impact on children's involvement in their learning – not least the way they perceive the lesson's relevance." (Hayes 2010)

The third Donaldson pedagogical principle I have chosen to discuss is 'good teaching and learning sets tasks and selects resources that build on previous knowledge and experience and engages interest', Donaldson, (2015). Hattie ((2012, Chapter 4), referenced David Ausubel, who said, "The most important single factor influencing learning is what the learner

already knows. Ascertain that and teach him accordingly", Ausubel (1968).

It is important to know what a student knows and understands before it is possible to develop a bespoke lesson that moves the learning forward it is also necessary to have a target of attainment in order that lesson planning can show progression that eventually meets that target. Being placed in a Year 6 class for my PTE1, came with the potential of pupils having acquired a range of transferable skills, knowledge and understanding. When preparing my lessons I would ensure that I began by accessing the pupils' prior knowledge with appropriate questions or activities on the subject to try to establish the levels of understanding. For example, my lesson on short division used the game of times table "ping pong" at the beginning of the lesson to introduce an aspect of challenge, competition and fun, which allowed an insight into the levels of ability within the class, (see APK tab, Lesson Plan Plan 6). Knowing the children's personalities, interests, levels of confidence and preferred way of working, learning or expressing themselves whether that is independently, collaboratively or practically are important considerations in order to be able to provide a learning experience that is sufficiently challenging motivating and relatable to that child.

Hattie in his concept of 'Visible Learning', maintains that the resources and activities should not be the initial consideration in lesson planning and uses the term "Targeted Learning", specifying that planning should have a learning intention, regarding what is to be learned from the lesson and a success criteria which makes clear that the requisite learning has been achieved with the challenge being to adapt available resources to meet the next level of progression for the pupils.

(See APK and Engagement tab Lesson Plan 11 & 12), the science fortnight that took place during my time in Year 6, provided the opportunity to carry out a series of science lessons that were linked by the topic of electricity. As this was a new subject to the pupils, the challenge was to establish a good understanding of simple circuit symbols in the first lesson, this was then built upon in the next two lessons by using that knowledge to recognise each component of an electrical circuit in different contexts, the pupils used the knowledge gained from the first introductory lesson and carried this information forward into the next session, which was enhanced when the pupils were required to apply their newly acquired knowledge in a practical context with opportunity to experiment with basic circuit equipment aiming of building a working electrical circuit that lit three bulbs on a paper Christmas tree. The collaborative working, discussion and problem-solving skills displayed by the pupils during the practical circuits building lesson and the use of AfL strategies throughout encouraged pupil metacognition, the Education Endowment Foundation (2018) states that, "approaches which promote talk and interaction between learners tend to result in the best gains."

My personal challenges in planning and delivering lessons, was to ensure that my contribution during PTE1 had an impact on the children. I tried to ensure my exposition set the appropriate tone that engaged and motivated the children and to be clear and explain in a child-friendly manner. To become more fluent and confident in my presentation to strike the happy medium between an explanation that was neither too brief nor too long aiming to build on previous knowledge and experiences and endeavouring to provide bespoke support whilst focusing on the outcomes of the lessons. The lesson tasks were differentiated and suitably challenging for each attainment group in order to achieve their own personal best the aim was also to encourage a higher level of thinking and learning in each task. I encouraged independent and collaborative learning skills and using the appropriate pedagogical principle for the best teaching and learning. The pupils were enthusiastic and responsive and displayed a good understanding of each concept of the lesson and I was always on hand to assist and provide encouragement during each task.

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