

Title Page

Student Name: Kirsty Louise Jones

Student Number: 1500479

Pathway: (P-PGCE)

Targets from previous assignment:

	Target	What have I done in this assignment?
Target 1	Ensure that every section of the assignment is relevant to the question.	I have tried to refer back to the question in each section ensuring to focus on effective teaching throughout.
Target 2	Watch the register of your language to maintain an academic style.	I have proof read this assignment to try and ensure that there is no informal language used.

Link to OneNote Assignment:

https://uowtsd-my.sharepoint.com/:o:/g/personal/1500479_student_uwtsd_ac_uk/EgUeu3K6ShRLge-7q2DsWa0BfJx7nJMaJUdRjwSdZ-Ax1A?e=aDrH1z

Wordcount: 3264

**Good teaching and learning regularly reinforces
Cross-curriculum Responsibilities, including
literacy, numeracy and digital competence, and
provides opportunities to practise them.**

Illustrative Example 1; Literacy

Student-teacher	Kirsty Jones	Class:	Year 2
AoLE or Subject	Mathematics	Date:	05/11/2019
Lesson Focus:	Symmetry; of shapes and in nature		
Meaningful links to Curriculum (from curriculum doc)	Maths: Identify a line of symmetry for 2D shapes and complete symmetrical pictures		
Meaningful links to: Cross Curricular Responsibilities (from LLC and DCF)	Literacy – ➤ express opinions, giving reasons, and provide appropriate answers to questions (why is it symmetrical?) ➤ use simple subject-related words appropriately. (line of symmetry/ symmetrical)		

ANCHOR TASK followed by group discussion; Taj Mahal "What can we see?" "What do we think?" "What do we wonder?" Pick up on point of it being symmetrical. "Is there anyone who can tell me what they think symmetry means?" -then PowerPoint and talk through <i>line of symmetry</i> . **if time also include symmetrical vs asymmetrical?**	Pupils to look at taj mahal and to discuss in pairs/small groups I see.... I think.... I wonder... Express opinions, giving reasons, and provide appropriate answers to questions	Pi Pi
2 groups working on focus task activity, one with	Children on task to complete the worksheet;	Fi
	Pupils will be using simple subject-related words appropriately. (line of symmetry/ symmetrical) Students will move between focus task and the activities.	
No main plenary, mini plenaries throughout,	End of task 'smiley faces' to rate the activity on	

Student-teacher	Kirsty Jones	Class:	PGCE
AoLE or Subject	<u>Science</u>	Date:	11/11/2019 12/11/2019 Over 2 sessions.
Lesson Focus:	Sources of light		
Meaningful links to Curriculum	Knowledge and understanding of the world: Understand that light comes from a variety of sources, such as the Sun, and that darkness is the absence of light.		
Meaningful links to: Cross Curricular Responsibilities	<u>Literacy-</u> show understanding of what they have heard by asking relevant questions to find out specific information		
My mentor and I have agreed that my main target for this week is to develop my delivery of focus tasks so that everything is explained before the children leave the carpet. This falls into the QTS standard for Pedagogy where the teacher consistently secures the best outcomes for learners through progressively refining teaching, influencing learners and advancing learning			

Student-teacher	Kirsty Jones	Class:	Year 2
AoLE or Subject	<u>Welsh</u>	Date:	28/11/2019
Lesson Focus:	Writing factual sentences about themselves		
Meaningful links to Curriculum	FP outcome 5: children communicate by writing words, phrases and sometimes sentences to express factual and personal information, using familiar patterns.		
Meaningful links to: Cross Curricular Responsibilities	Literacy; ➤ Read aloud with attention to punctuation, including full stops, question, exclamation and speech marks, varying intonation, voice and pace. ➤ Look for key words to find out what the text is about. ➤ Follow and build upon a form modelled by the teacher. ➤ Use capital letters, full stops and question marks accurately and sometimes use exclamation marks. ➤ Form upper- and lower-case letters accurately and with consistent size.		
Personal Targets (Linked to QTS and identified in weekly review)			

During this PTE, there have been many opportunities to implement cross-curriculum responsibilities within a Year 2 class. The above evidence depicts my implementation of Literacy as a CCR.

The first image is an example of a Mathematics symmetry lesson in which I was able to implement strands from the LNF. The children swap classes for their maths lessons, so this is the higher attaining class, however there are three sub-groups of attainment within this class; rockets, stars and planets. Oracy is something which is constantly developed during pupils time in education, especially in the foundation phase and the two strands chosen in this plan suited the task well. The introduction allowed the students to take part in an 'I see, I think, I wonder' task where they spoke about the symmetrical building the taj mahal. I had observed this task used during their 'morning jobs' routine a few days before and felt it was a good activity to promote discussion and start the children 'talking maths' from the beginning of the lesson as it encouraged them to firstly start thinking about the task, as well as start to use words like 'it's the same on both sides' etc. The second link was via the use of simple subject-related words, which was evident throughout the lesson using line of symmetry, symmetrical and reflection.

The second and third lesson plans are of Science and Welsh lessons respectively, where the students are not grouped by attainment. Again both have a focus of oracy however the second lesson show opportunity to practice the other strands of the LNF; reading and writing. As seen by the dates on these lesson plans, as the time in PTE progressed so did the ease at which I was able to implement more strands of the LNF.

Illustrative Example 2; Numeracy

Student-teacher	Kirsty Jones	Class:	Year 2
AoLE or Subject	<u>Art</u>	Date:	04/11/2019
Lesson Focus:	3D paper art; sculpture techniques		
Meaningful links to Curriculum	From current curriculum Y2; • Explore and experiment with a variety of techniques and materials • Mix, shape, arrange and combine materials to create their own images and objects that communicate and express their ideas, feelings and memories creatively • Develop and use their understanding of colour, line, tone, texture, pattern, shape and form		
Meaningful links to: Cross Curricular Responsibilities	Literacy – Express opinions, giving reasons, and provide appropriate answers to questions Numeracy – Make increasingly more complex or accurate models with 3D shapes.		
Personal Targets (Linked to QTS and identified in weekly review)			

Warm up discussion on carpet, showing the model of the 3d shapes and how we can create them.

"Does anyone have any ideas about how we create these shapes?"

Followed by teacher visibly showing students how to create each shape.

Partially direct teaching during explanation to outline how the shapes are created, and share the learning objectives, success criteria with the pupils.

2 groups on art/focus task, 1 led by student teacher, 1 led by either T/A or class teacher, facilitating the children, ensuring they are careful and safe and answering any queries, and modelling any techniques they are unsure of. Plenty of positive feedback and ensuring they are using a variety of techniques. Eg. "wow, your rolling and loops are fantastic, can you think of another technique you can add?" "what about adding some fringing to that?"

Rest of children completing their C.O.O.L challenges.

Children answering questions about the shapes to familiarise themselves with the ways to create these shapes.

No differentiation here; children will be encouraged to experiment and explore.

Pupils will create their own 3d shapes using the paper art techniques. They will then add these to their A5 pieces of card to create their own individual 3d art.

Pupils not on focus task will be completing their cool challenges.

Miss. J model of the techniques.

Padlet of 3D paper art model examples.

H&S: Ensure safety with scissor. Ensure tables covered with newspaper and all glue etc stays in that area of the room.

Scissors
Glue
Different coloured paper
A5 piece of card each.

H&S: Ensure safety with scissor. Ensure tables covered with newspaper and all

Student-teacher	Kirsty Jones	Class:	Year 2
AoLE or Subject	<u>Music</u>	Date:	07/11/2019
Lesson Focus:	Beats and tempo		
Meaningful links to Curriculum	Create their own musical ideas and contribute to simple compositions. FP outcome 4: they clap or tap a steady beat in time with others. FP outcome 5: They play a simple pattern on a percussion instrument in time to a steady beat.		
Meaningful links to: Cross Curricular Responsibilities	Literacy - listen to others with concentration, understanding the main points and asking for clarification if needed Numeracy - transfer mathematical skills to play and classroom activities		
Personal Targets (Linked to QTS and identified in weekly review)			

ig	In a circle, teacher will recap syllables, and introduce beats and tempo. Teacher will play a pattern, and introduce each beat. "how many beats did this one have?" Teacher will play same pattern twice but with different tempo. "listen to these two patterns, what is the same? What is different?" Children will then be instructed that today they are going to firstly practice some animal names with the instruments and then create their own musical patterns in groups to share to the class.	Group warm up, with think pair shares, and possible snowballing. Children to engage with questions. Children can practice counting out beats, before experimenting with a range of different beats in a performance	Va H& ins aw like ha be
KS	Children put into groups with different	Children to discuss what the teacher is doing to	Va

Like example 1, during this PTE, there have been many opportunities to implement the cross-curriculum responsibility numeracy within a Year 2 class. Both of these lessons were mixed attainment groupings.

The first lesson plan in the above evidence is of an art lesson on the topic of 3d paper art in which I was able to implement strands from the LNF. I was able to implement both literacy and numeracy during different points in the lesson. The strand of numeracy from the LNF was relevant to the specific action of the children creating their sculptures using 3d shape techniques. This is a prime example of where numeracy can be integrated within another area of the curriculum naturally and authentically. Also by using a strand from literacy the children also have the opportunity to talk about the numeracy they are using by accessing their prior knowledge on 3d shape.

The second lesson was a music lesson which allowed the application of counting beats as a mathematical skill as the children not only counted 1, 2, 3, 4 playing an instrument on each beat, but also counted in 2s using x, 2, x, 4, playing their instrument on every second beat, and also 3s on every third beat.

I think that numeracy is more difficult to implement naturally within a lesson than literacy, and in my next PTE I wish to look at using more numeracy within my lesson starters or plenaries.

Illustrative Example 3; DCF

Student-teacher	Kirsty Jones	Class:	PGCE
AoLE or Subject	<u>Science</u>	Date:	28/11/2019 29/11/2019 Over 2 sessions.
Lesson Focus:	Natural versus man made		
Meaningful links to Curriculum			
Meaningful links to: Cross Curricular Responsibilities	<u>Literacy-</u> - show understanding of what they have heard by asking relevant questions to find out specific information <u>DCF</u> - save work using an appropriate file name, <i>e.g. child's name and simple title</i> - create and edit multimedia components in order to develop text, image, sound, animation and video for a range of tasks.		
Start with an anchor task of 3 natural images, and 1 man made image with the question; "which is the odd one out and why do you think this?" Allow students time to think and discuss, so pose, pause, pounce, bounce. Then answer the question with/for them, and start the PP which will introduce the key differences between natural and man-made, as well as		Students will think of answers to the open ended question, and will be given opportunity to discuss these answers or ask questions of their own	
Teacher will assist students in creating their Venn Diagrams. Groups of roughly 6. Rest of children working independently on C.O.O.L challenges or 1:2 with T/A on christmas cards.		Students will use their previous knowledge of HWB J2E5 to create a venn diagram showing images that are natural or man made.	

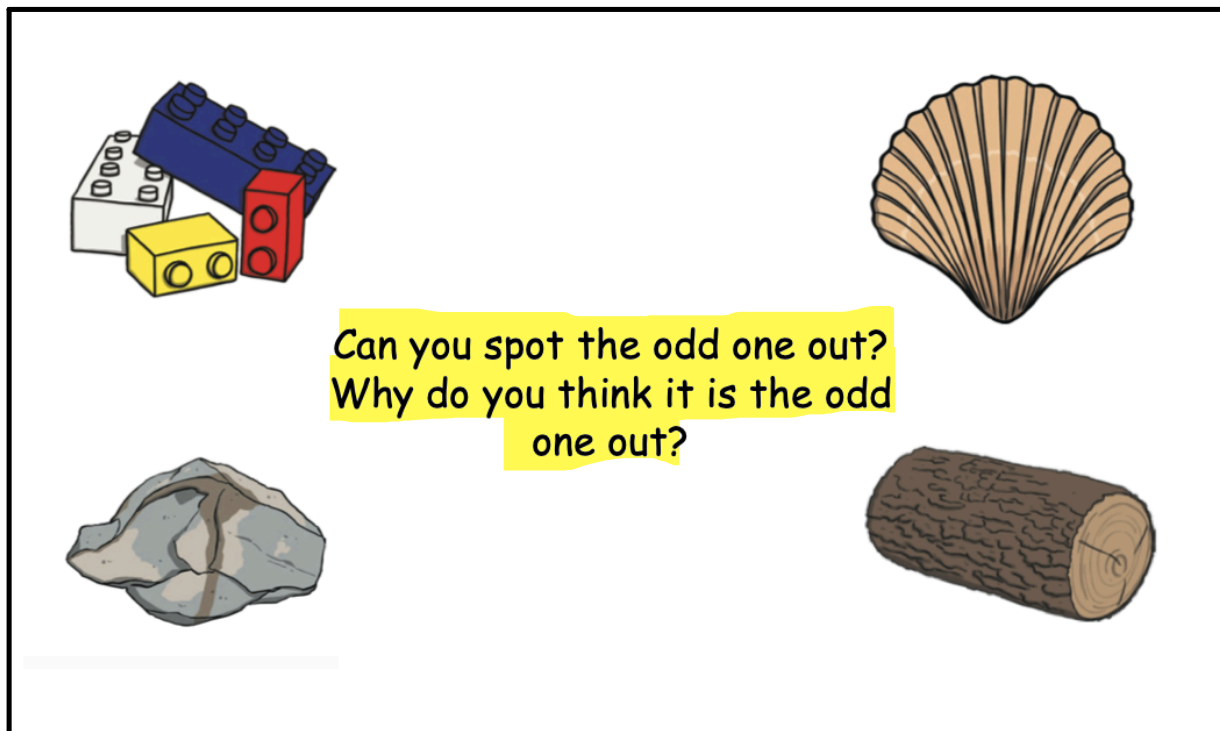
During this PTE, I found there to be limited opportunity to implement the cross-curriculum responsibility Digital competency within a Year 2 class. The above evidence is an example of a science lesson on the topic of natural versus man-made objects, in which I was able to implement strands from the LNF and DCF. The lesson was a mixed ability introduction with children working independently with minimal aid from myself or the T/A.

The DCF strands included within this lesson are skills which year 2 children will need for their transition to ks2 as well as for future activities during this year. They had to create a Venn diagram using HWB, insert images into the diagram, as well as adding text, which could be edited and changed (font and colour). They then had to save this document with an appropriate name.

I feel during this PTE the DCF cross curricular responsibility was harder to meet than the other two, due to the extra time needed to demonstrate for the pupils, and also the resources of the school. During this PTE, I was lucky that iPads and computers are available, however there are only about 4/5 iPads and 3 computers in the class. This means for a whole class activity, iPads would have to be borrowed from other classes, or an extra session in the ICT room would be needed, both of which are not always possible. I was lucky enough however, to watch how easily and effectively DCF can be included in KS2 during a lesson observation in which pupils worked in small teams to complete a task which allowed them to make use of the skills. This lesson has given me some insight and possible ideas of how I can strive to include more DCF.

**Good teaching and learning means employing
assessment for learning principles.**

Illustrative Example 1; Questioning strategies



Opening phase (with links to prior learning)	APK: using powerpoint and Mae Miss Jones yn hoffi gwisgo... "Mae X yn gwisgo... " "Can anyone tell me what X likes to wear?" PP on different characters choices of clothes, Explain tasks thoroughly before leaving carpet.
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Plenary	Back on carpet, teacher will use the cover tool and 'flashlight' to show an item of clothing and children will be able to 'think, pair, share' and pairs can offer the answer. ie. A green jumper Think pair share. Dw in hoffi gwisgo siwmpwr gwyrdd.	Think, pair, share: Pupils to respond to the teacher's questions in their pairs. Children can then model answers, any incorrect answers discussed as a class. "Oh thats almost there, thank you X. Can anybody else help X out?"
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During this PTE, there have been many opportunities to implement a variety of questioning strategies within a Year 2 class. The above evidence illustrates some of these strategies. All of these examples were taken from classes of mixed attainment groupings.

The first example is of an introductory anchor task within a science lesson on natural versus man made materials. It is an example of an open ended question which targets to elicit responses from pupils which they must back up with reasoning. The answer being correct is of little importance, rather the discussion is the focus of this task. Eventually, after many well thought out, considerate answers in which children used reasoning to back up, the targeted answer was given. However, this did not discount many of the other right answers. I found it was a very useful task for introducing the topic, but also improving critical thinking, and decided to use this after seeing the success of its implementation during one of the lessons I observed in the preparation week for PTE.

Secondly is an example of a Welsh lesson where children were asked closed ended questions. They had to ask their friend what they like to wear and feedback to the class. These questions tested the children's understanding of instruction and allowed them to provide straightforward answers. One limitation of this kind of questioning is that if a child does not know the answer they cannot provide it, and I found this led to a lot of blank faces, or answers of 'I forgot'.

Thirdly is another example from the same lesson of another questioning strategy; think, pair, share. The children have been asked to think of an answer, discuss with a partner and then share back with the class. This gives the children time to think, time to share and collaborate with one another, which I found increased their confidence as they have had the opportunity to 'test' their answer out.

Black and Wiliam (1998) state the importance of implementing effective questioning including higher order questions, as well as ensuring appropriate wait times after questioning, which is something I took into consideration during the planning and implementation of these different strategy types.

Illustrative Example 2; Self-assessment



Plenary	Back to key questions, as well as linking onto new learning; Electricity and Kabo's grandmothers house in Botswana. What sources of light will they use?	Children will hopefully consider the sun, and fire as natural sources of light. Children will then be asked to put heads down and show thumbs up, down or sideways based on their self-assessment of thier understanding of todays tasks and lesson.
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Pwy wyt ti? Who are you? Can you use Kabo's sentences to help you write some about yourself?



I

WS

1:1

Tachwedd 2019

During this PTE, there have been many opportunities to implement self-assessment strategies within a Year 2 class. The above evidence illustrates three of the strategies that were implemented. All of these strategies occur in lessons where there were mixed attainment groupings.

The first is a concrete self-assessment strategy during an ICT lesson where the children were required to place the image of their face in the box which represented their understanding of the task, with green being total understanding, yellow being some understanding, and red suggesting a lack of understanding. I have chosen to use this to assess how many children are understanding the lessons, and also how many are finding they have learnt something new or improved a skill during a lesson. This is a strategy that has been modified from something the children were already used to, however they usually use counters, and not images of their own faces. I decided to use their faces as, similarly to the other two examples, it allowed me to see **which children** had trouble during the introduction to target these children for further explanation.

The second and third examples came from science and Welsh lessons respectively. The second was similar to the first example, as it allowed me to assess which children were on track and which children may need further explanation. While the third is one that is always used for written tasks where children smiley face rate their work. However this is where I feel there is a shortfall in this type of self-assessment as many of the children use this to rate their enjoyment of the task rather than their understanding, which is something which I did not identify until my final week, and will now be sure to further explain to my next class in PTE.

Lastly, I also feel that children with lower self-confidence tend to rate their understanding and their work lower than what it may actually be. This is something which must be taken into consideration during self-assessment. During my next PTE I will also start to explore peer-assessment as a form of AFL as this was difficult with this class due to their age and their lack of experience with reflection and evaluation.

Illustrative Example 3; Feedback

Wow [redacted]! Some lovely extended sentences.
W: Remember your capital letters at the start of sentences.
(I) KJ Nov

I miss you. Yesterday I went to the bank. Tomorrow I'm
going to gran's craft shop. Gerry is having very fun in Botswana.
Tomorrow
Safir park, I'm going to safir park to see grifars I hope
I see a grifars.
Love from Kabe
KJ (I) Nov
Well done [redacted] you have followed your plan
really well. Very Neat.
W: Next time remember to start a new line.

Stamp

Nia
123 Park
Street,
Cardiff,
Wales,
CF14 716.

Children will now start to complete their post card plans. "Banana" the tables with teacher working with one group, student teacher with another and T/A with final group.

Children will be supported in creating their plans for their postcards. Teachers will continually remind them to check common features, and will also ask children to consider the audience, and to think of the language used in postcards, as well as reminding them to look at the example postcards on their tables.

Children to work in individually to think of possible openings, closings, and sentences for their postcards.

During this PTE, there have been many opportunities to provide feedback within the Year 2 class. The above evidence illustrates an example of both written and verbal feedback respectively. The class involved mixed attainment groupings so that all children could be supported equally.

The first and second involved feedback for a plan and postcard written by the students as if they are a character called 'Kabo'. The learning for both of these examples was discussed with the pupils and they are given at least one positive point, with some being given a wish for next time (W:) where applicable. Sometimes they are also given a tiny task to complete such as incorrect spellings or incorrectly formed letters which they must repeated a number of times. This feedback is given both during and after the lesson, as tiny tasks can be given if something is spotted live and children can be stopped to complete the tiny task, and learning is discussed where appropriate. This is a school wide way of marking which ensures feedback remains relevant and effective, so that pupils can both appreciate their present attainment, and also understand how to progress, something Black et,. al (2007) deems an essential element of AFL.

The third example is from the lesson plan for the postcard planning lesson. This is where verbal feedback is given during the lesson to children asking questions, to clarify objectives and success criteria, to give general SPAG feedback, and to scaffold the learning. Live feedback is something I have witnessed often during observations and is something I feel has a positive impact on learning outcomes when, like written feedback, it is relative ad implemented effectively.

Good teaching and learning means employing a blend of approaches including direct teaching.

Illustrative Example 1; Direct instruction

Warm up discussion on carpet, showing the model of the 3d shapes and how we can create them. "Does anyone have any ideas about how we create these shapes?" Followed by teacher visibly showing students how to create each shape. Direct teaching during explanation to outline how the shapes are created, and share the learning objectives, success criteria with the pupils.	Children answering questions about the shapes to familiarise themselves with the ways to create these shapes. No differentiation here; children will be encouraged to experiment and explore.	Miss. J model of the techniques. Padlet of 3D paper art model examples. H&S: Ensure safety with scissor. Ensure tables covered with newspaper and all glue etc stays in that area of the room.
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During this PTE, there have been many opportunities to implement a blend of teaching approaches within the Year 2 class, including direct teaching. The above evidence illustrates two examples of direct teaching, for lessons with mixed attainment groups.

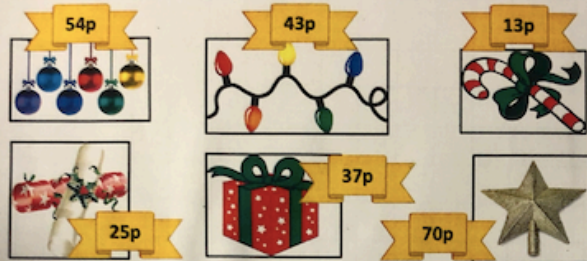
The first is a lesson plan for the introduction of a 3d paper art lesson, where a whole class warm up, demonstration and explanation was used. The second is a gymnastics P.E lesson where whole class warm ups, cool downs, and the initial instruction on how to correctly form the shapes was used. For both of these lesson, direct teaching was the most suitable way to introduce the aims and objectives, ensure all children received the same instructions, and to check their understanding of the expectations of the lesson. For both tasks it allowed me to choose students to model correct techniques, with differentiation not being required during either of these lessons as the children were encouraged to explore 3d shape in the art lesson, and body shapes and sequences within the P.E lesson. It is important to note that for a differentiated lesson, that whole class warm up would be suitable but that instruction may be less suitable, due to expectations differing also.

Illustrative Example 2; Discovery learning



It is Christmas very soon and year 2 have a Christmas tree. Can you buy two things to help them decorate the tree and find out how much change you will have left? You have £1 to spend.

★★★★ ☺ ☹ ☹ I WS 1:1 December 2019



$$43 + 13 = 56$$

$$£1 - 56 = 44p \quad \begin{array}{l} 11 \\ 11 \\ 11 \\ 11 \\ 11 \end{array}$$

$$25 + 37 = 62$$

$$£1 - 62 = 38p \quad \begin{array}{l} 11 \\ 11 \\ 11 \\ 11 \\ 11 \end{array}$$

$$70 + 13 = 83$$

$$£1 - 83 = 17p \quad \begin{array}{l} 11 \\ 11 \\ 11 \\ 11 \\ 11 \end{array}$$

$$54 + 43 = 97$$

$$£1 - 97 = 3p \quad \begin{array}{l} 11 \\ 11 \\ 11 \\ 11 \\ 11 \end{array}$$

$$13 + 13 = 26$$

$$£1 - 26 = 74p \quad \begin{array}{l} 11 \\ 11 \\ 11 \\ 11 \\ 11 \end{array}$$

$$25 + 25 = 50$$

$$£1 - 50 = 50p$$

TT. Try taking away from £2

$$25 + 54 = 79$$

$$£2 - 79 = 121 \quad \checkmark \quad \text{wow!}$$

$$70 + 13 = 83$$

$$£2 - 83 = 117 \quad \checkmark$$

$$54 + 13 = 67$$

$$£2 - 67 = 133 \quad \checkmark$$

$$37 + 13 = 50$$

$$£2 - 50 = 150 \quad \checkmark$$

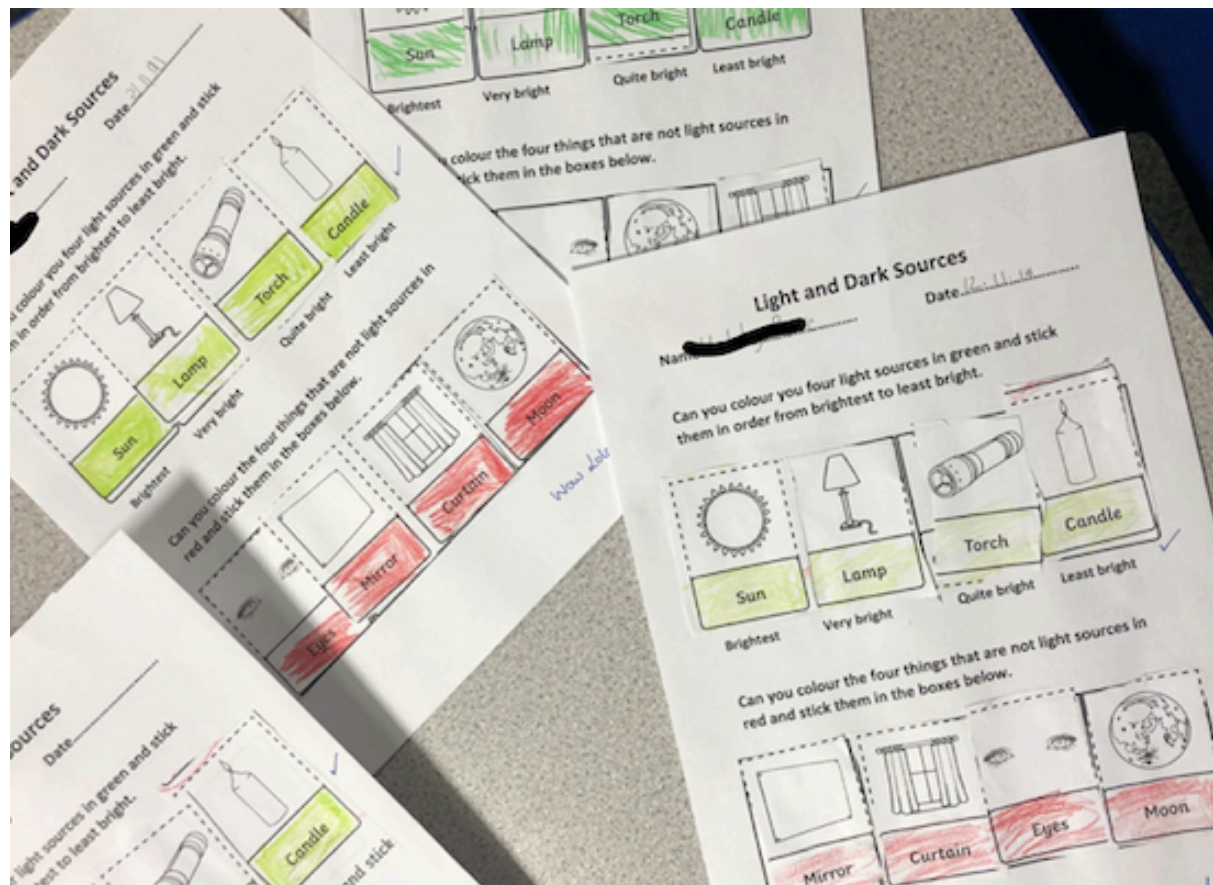
$$43 + 25 = 68$$

$$£2 - 68 = 132 \quad \checkmark$$

I am so impressed

TT check this

74



During this PTE there have been many opportunities to implement a blend of teaching approaches within the Year 2 class, including discovery learning, especially when working with focus groups. The above evidence illustrates two examples of when I have worked with focus groups to promote discovery 'experiential' learning, in mathematics and science lessons respectively.

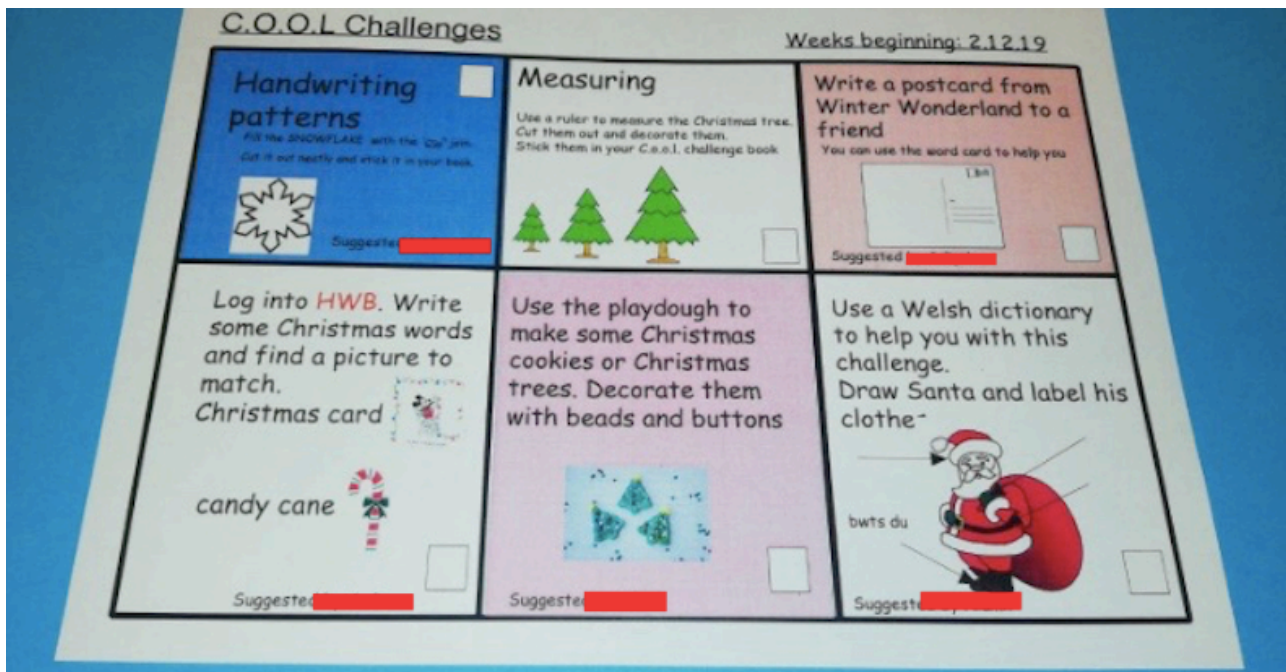
The first image is a group of higher attaining children in maths. The children have been asked to buy items from a 'Christmas shop' with £1 and to show how they have done this with the hope they will write number sentences using the double operation $A + B = C$ $£1 - C = X$ rather than $£1 - A - B = X$. This had little to no instruction, the children were just asked "Can you buy me two items using your money and show me how you did this on your whiteboards?". Some of the children used the double operation, others did not. However, after discussing their methods with one another this led to successful outcomes, as the children were then able to complete a challenge in their books using the theoretical knowledge they had gained from the practical experience where they had discovered the relationship of double operations.

The final two images are from a science lesson which focused on sources of light, where children had the opportunity to explore a variety of sources of light, as well as objects which reflect light. They had an introduction to the lesson, but explored the room within their group and the children led the learning. They came up with questions, with some of the answers being discoverable whilst they explored, and to my surprise used some terminology prior to a full explanation. It was a very interesting experience to observe, where children interacted with one another to not only access their own prior knowledge but also share this with others.

I was very pleased with the results of this type of learning, and it is something I look forward to embracing more of within PTE block 2 in ks2.

Illustrative Example 3; Independent child-centred





During this PTE, there have been many opportunities to implement a blend of teaching approaches within the Year 2 class, including independent learning. The above evidence illustrates two examples of children working independently on C.O.O.L challenges, which is a concept that developed from a whole school approach to pupil voice.

Both images involve Maths C.O.O.L challenges that occurred during a lesson where I was working with focus groups on a set activity. The first depicts children building 3d shapes, and the second depicts children exploring symmetry and lines of symmetry. Both tasks were completed independently by the children, where they had the opportunity to explore and learn in their own way with the resources provided for them, and minimal supervision. The supervision and scaffolding was in terms of ensuring engagement on the challenge.

The third image shows an example of the fortnightly C.O.O.L challenges which the children completed without support from the teacher. Five of these were suggested by the children, while the sixth was an example of one I created for them. Each of these encourages independence, and/or collaboration with other students. These challenges work well for children with high engagement levels, however at this age, it is evident that children who are less engaged find it difficult to work independently to complete tasks, and often a reward is used as an incentive to complete the challenges.

In ks2, a similar approach is taken, but less time is devoted to C.O.O.L challenges as thus the children have to be more focused to ensure they complete them in the time frame given.

Critical Reflection

Introduction

This report intends to illustrate the planning and implementation of three pedagogical principles suggested by Professor Donaldson during my first Professional Teaching Experience (PTE) to aid effective teaching. The principles which contribute to superlative pedagogy, are derived from, and co-dependent on, Donaldson's four purposes, (Donaldson, 2015). They have been generated through a tentative consideration of both theory and practice, to best advise teachers to be exceptional; to aid teachers in being effective in their efforts to facilitate the holistic development and learning of every child, (Donaldson, 2015). This report concentrates on the following three of Donaldson's pedagogical principles that state good teaching and learning;

- regularly reinforces Cross-curriculum Responsibilities, including literacy, numeracy and digital competence, and provides opportunities to practise them
- means employing assessment for learning principles
- means employing a blend of approaches including direct teaching

This PTE was completed in a community primary school, in a class which contains 28 of the 411 pupils who attend the school, (My local school, 2018). There is one T/A within the class, 3 children who attend speech and language sessions, 1 child who is English as additional language, 1 child with statemented additional learning need, and another currently under a dyslexia review. To abide by BERA guidelines, names within this report will be changed to school (X), child (X), and teacher (X), and faces will be blurred in images to preserve confidentiality and anonymity, (BERA, 2018; 21).

Literature review

Coe et al. (2004), describe effective teaching as that which supports an improvement in pupil skill or knowledge in relation to long-term attainment. Effective teaching is supported by pedagogy. Pedagogy is defined as the correlation between teaching and learning, whereby

the educator facilitates the learning of each individual, by continuously reflecting on, assessing and refining their practice, (WAG, 2008). A practitioner's pedagogical stance determines their position as an educator, and is the spearhead for their individual judgement of best practice, (Waring and Evans, 2015). Thus, effective pedagogy derives effective teaching, and it is for this reason Donaldson suggests his idealistic pedagogical principles to be upheld by any practitioner involved in the teaching and learning of children, (Donaldson, 2015).

The first of these principles, reinforcing cross-curriculum responsibilities (CCR), developed due to the need for improvement across literacy, numeracy and digital competency in the UK; a need which firstly prompted the introduction of the statutory literacy and numeracy framework (LNF) in 2013, (NAW, 2013). Changes in the education system, such as the LNF, were introduced to counter the disappointing Programme for International Student Assessment (PISA) results from 2009, which saw a decline in performance for mathematics, reading and science for Wales and the UK, (NAW, 2013; NAW, 2017). This decline continued for four sets of PISA results (Hume, 2016), emphasising the requisite for an improvement in these areas. Wales also underperformed in all three areas when compared to England, Scotland and Ireland in the 2015 PISAs, with results also less than the average for Organisation for Economic Co-operation and Development (OCED), (NAW, 2017). However, the planned curriculum reform was welcomed by OCED, who recommended this continues, (WAG, 2017).

Donaldson stresses in his review, that it is essential the CCRs continue to be embedded within all areas of the curriculum, proposing that it is vital the skills gained from these responsibilities are 'authentic and natural in their application' (2015; 69). It is also understood that the implementation of CCRs, and the application of the skills between subjects, secures high quality standards, which can be evidenced through formal assessment (Rose, 2009; Kelly and Stead, 2012; Kerry, 2015). However, Kelly and Stead (2012) discusses the risk of losing the focus of the lesson, by attributing greater attention to the CCRs than to the lesson topic, and Alexander, Rose and Woodhead (1992) state there

is evidence to support the notion that there are greater benefits of single subject focus.

Despite this, it is still recommended that any natural and appropriate opportunity is taken to implement these CCRs (Estyn, n.d.; Donaldson, 2015), and there has been an improvement in the 2019 PISA scores for Wales subsequently to the introduction of the LNF, DCF and Donaldson's '*Successful Futures*', (Lewis, 2019).

These three responsibilities are important for providing our children with skills for the future. Literacy remains one of the core focuses of the curriculum, with many arguing it is critical to succeed in both education, and life outside of education, (Collins, 2019; Kelly and Stead, 2012). The introduction of the LNF also indicates a rise in attitude toward the vital and beneficial skill of numeracy during everyday life, consequently, separating it from mathematics into its own programme, (NAW, 2013). Lastly, due to our societal changes and our entrance into the digital age, (Voogt and Pelgrum, 2005) it could be claimed digital competency is the CCR which requires a renewed consideration. This is supported by Barnes (2011) who states that not only has the development in information communication technology (ICT) been rapid, but that the accessibility to technology has grown in correlation, and thus our students must be equipped with the skills to succeed with these advances.

The second of these pedagogical principles concerns the implementation of assessment for learning (AFL) formative strategies which provide feedback for the practitioner, which can then be used to support learning, (Black et al., 2007). It is the reflection of this feedback, in order to implement changes to practice to ensure it is inclusive and benefits the learning of every pupil, that qualifies it as AFL, (Black and Wiliam, 1998; Ninomiya, 2016; Spendlove, 2009). It allows the practitioner to choose an AFL strategy, to inform their professional judgement and teaching, to resolve any cause of difficulty for the learner, (Spendlove, 2009). By providing feedback, and amending the teaching that the AFL strategies highlighted as an issue, teachers are able to enhance and increase the understanding and consequently the learning of their pupils, (Bakula, 2010). Black and Wiliam (1998) concluded that there is not only evidence to suggest standards are raised for **all** pupils when AFL is implemented, but that there is a vast body of evidence that illustrates

the improvement is greater for lower attaining students, meaning the range between the lowest and highest attaining student decreases. Likewise, Bakula (2010) states AFL can aid in bridging the attainment gap between students, attributing this to the development of the teacher's pedagogy as they adapt to best suit the needs of their pupils.

Within this area of pedagogy there are also some converse statements and arguments proposed. Firstly, Didau (2013 and 2014) argues AFL could be seen as a test or measurement of performance rather than learning, due to the impossible task of 'observing' learning. He states that making assumptions about learning based on the measurement of performance is unreasonable, due to this not being a true reflection of what will be retained or transferred, as well as performance being affected by a range of conditions, (Didau, 2014). This would indicate some practitioners are misunderstanding the purpose of AFL; rather than it being a tool for feedback and reflection, it is used as a measurement of progress. Following on from this, there is the suggestion that there is a lack of clarity between what is considered formative versus summative assessment, and often, the execution of AFL strategies is poor, (Harlen and James, 1997; Ninomiya, 2016). Ninomiya (2016) suggests this is due to the overuse of strategies such as class tests, used to increase progress and results, rather than to check understanding and improve pedagogy to promote holistic learning, rendering it more of a summative approach. Despite this, many researchers still encourage the use of AFL strategies, citing that when used correctly and thoughtfully, they can be an asset to understanding what practice is best to enhance progress, (Didau, 2013; Didau, 2014; Black et al., 2007).

Finally, the third pedagogical principle focuses on the implementation of a blend of teaching approaches. This includes direct teaching, which refers to any learning led by the teacher, (Rosenshine, 2008), as well as discovery learning, where learners explore and 'discover' things for themselves in order to acquire new knowledge and learning, (Coe et al., 2014). The former derives from behaviourism while the latter is a newer concept which has developed with the introduction of constructivism. The debate between which classroom strategy is superior is also evident, with some arguing constructivism provides more effective

teaching and thus learning for children, (Powell and Kalina, 2009), while others dispute this, claiming there is a lack of definite evidence to support this strategy, and cite that direct instruction is greater, (Kirschner, Sweller and Clark, 2006).

Direct teaching ensures that content can be explained comprehensively so children can not only build upon their prior knowledge and deepen their understanding, but also learn new concepts, (Coe et al., 2014). When looking at specific contexts, and comparing directly, there are many research articles, such as Klahr and Nigam (2004), which report findings that direct instruction shows greater gains than discovery learning. However, Powell and Kalina (2009) advocate that effective teaching requires environments rich with interaction and approaches which support individual learning, and Kamii (2014) argues direct instruction is too limited in its approach, suggesting it will not meet each learner's individual needs. However, despite collaborate practice and discovery learning promoting interaction and discussion, children still require instruction, guidance and practice working collaboratively, (EEF, 2018). Equally, Mayer (2004) also expresses the need for 'Guidance, structure, and focused goals' (p.17) whilst also asserting that as we actively learn and build upon knowledge, then approaches that require (a constructivist) active participation to learning, such as discussions, are more significant than passive approaches such as lectures.

Despite the debate as to whether one of these strategies is more effective than the other ESTYN (2018) state, within their report about schools which display effective teaching, that there must be equal distribution between adult and child led activities, and these are dependent on which is appropriate for the task. This suggests that certain approaches are not superior, but to have a greater impact on effective learning, the implemented approach must be appropriate to the planned situation, (Hattie, 2003; Stronge et al., 2007). Husbands and Pearce (2012), further develop this point, asserting it is the planning for the approach, in order for it to be both appropriate and successful, that determines whether it will be effective. Thus, in order for learning to be supported and teaching to be effective, a blend of approaches is necessary.

Critical reflection

It is recommended that these pedagogical principles are implemented to ensure effective teaching, which will consequently have a positive impact on the learner and their development. Throughout this PTE I have intended to progress my own implementation by evaluating and reflecting, and I have concluded that there is one aspect of the chosen principles which interrelates; the implementation for each does not need to be unnatural or over-used, but instead used where appropriate, as opportunities to reinforce and enhance learning.

Across the term of PTE, I believe that as my confidence grew, so did the success with which I was able to appropriately implement the CCRs in order for them to be effective and, like Donaldson (2015) encourages, natural in their use. Generally, the implementation of literacy and numeracy is achievable with careful consideration and planning, however, it can sometimes be tempting to include statements from the LNF which are not relevant to the task and redirect away from the topic, (Kelly and Stead, 2012). This is something I found challenging during the start of PTE, where it was easier to include literacy strands only, or to overuse the strand seen in CCR illustrative example 1: 'express opinions, giving reasons and providing appropriate answers to questions'.

Despite this, as seen in CCR illustrative examples 1 and 2, I was able to, with greater attention to planning, include many relevant and natural strands from the LNF. For literacy particularly, the children were given sufficient opportunity to develop each of the aspects of literacy within a range of topics across the curriculum (CCR Illustrative example 1). For mathematics, inclusion of the responsibility and the transfer of skills was seen in two areas of expressive arts, without taking the focus away from the lesson (CCR Illustrative example 2). Last of the responsibilities was digital competency, but due to the age of this children, and the rigour of the DCF statements, this was something I found difficult to implement regularly. This was due to the explanation time needed to clarify the skills that the DCF promotes, when not in an ICT lesson, as like previously stated it can add a second 'lesson

focus', something which Alexander, Rose and Woodhead (1992) see as unbeneficial. Still, I was able to implement two strands of the DCF during a science lesson (CCR illustrative example 3), where the children reinforced their previous knowledge of saving and naming a file, and added and edited text and images to a Venn Diagram.

Secondly is AFL, which of the three principles within this study, was the easiest to plan and implement throughout PTE to ensure effective teaching. AFL illustrative example 1 displays one AFL strategy: questioning types. By using a range of question types, both higher and lower order, I aimed to ensure that all pupils had the opportunity to engage and answer, which provided greater insight for myself, than if only lower order were used, (Black and Wiliam, 1998). This can be seen in the first image of AFL example 1, where an open-ended question was used to promote discussion between the learners, encouraging them to think and provide a justification for their answer. The second and third images in AFL example 1 depict implementation of strategic questioning live during the task, allowing me to assess the children's understanding and identify any misconceptions or areas which need further clarification, and allowed the children to self-assess their own progress too, something which Hattie (2012) states will improve their confidence also.

Another aspect of AFL I was able to implement was self-assessment, as seen AFL example 2. For this class, the first and second images from this example provided a more accurate reflection of the children's self-assessment, as it felt more anonymous to the children in light of their peers, but still allowed the teacher to see which children had found the task difficult, or needed further clarification. By having this partial anonymity, we avoid social comparison between students so that they can self-assess without fear of judgment and without comparing themselves to others, (Hattie, 2012). The third image is a school-wide strategy which I found problematic. This was due to the children tending to rate their enjoyment of a task, or their performance on a task, rather than their understanding of the content, which is something Didau (2013;14) also raises; that AFL can often be a test of performance at a point in time, rather than understanding over a period of time.

The last AFL strategy employed was feedback, (AFL illustrative example 3). The first

two images depict feedback that is given at the end of a piece of work to provide positives for the children as well as address any improvements which may be needed. Pinpointing these improvements and providing suggestions is an important part of providing effective feedback as it outlines successive stages of learning, (Spendlove, 2009). Black and Wiliam (1998) also advocate the use of feedback during the task (as seen in the third image of example 3), as it provides opportunity to amend and correct any problems at the time they are created, rather than after. Like in these examples, many of my tasks included feedback during and after the task to ensure that the marking was effective and beneficial for every learner.

Lastly is the planning and implementation of a blend of approaches (BOA) to teaching, including direct instruction. For the majority of the lessons I planned and taught direct instruction appeared to be most suitable depicted in both images in BOA illustrative example 1. Both of these examples depict lessons which required modelling from the teacher due to the introduction of new concepts which can be explained fully by the teacher through direct instruction, (Coe et al., 2014). Like Mayer (2004) indicates, direct instruction can be tailored to the needs of the class to provide support and identify explicit objectives and criteria that is essential for the task, which was effective during the Art and P.E lessons pictured.

BOA example 2 portrays two lessons which followed a discovery learning approach. The first three image display a maths lesson with a group of higher attaining children who have been tasked with buying two items from the Christmas shop for £1 and 'showing' on whiteboards how they have done so, with the hope they will write number sentences using the double operation $A + B = C$ and $£1 - C = X$, rather than $£1 - A - B = X$. The children were able to make connections between the relationship of the double operations, and use the practical experience to guide a theory based task in their books, highlighting the significance of a constructivist way of learning, (Mayer, 2004). This is also evident in the other images within this example which show a science lesson where groups of children were taken to explore light and reflective sources in a darkened room. The interaction and discussion

promoted in this lesson again led to successful outcomes, (Powell and Kalina, 2009), where the children were able to apply their practical knowledge to a theoretical task once again.

Finally, BOA example 3 depicts child-centred learning where the children are able to be C.O.O.L learners (control our own learning) and work independently on a range of tasks related to the topic being taught. The children decide and create these tasks, with only minimal input from the teacher to ensure they are appropriate, allowing for autonomy and pupil voice. Often children feedback during AFL that they enjoy these tasks, and engagement is usually very high as they work independently or interact with one another, and this interaction and independence are thought to be qualities of an effective teaching environment, (Powell and Kalina, 2009). From this PTE, I believe Hattie (2003) and Stronge et al., (2007) are correct in their statement that effective teaching and learning requires a blend of approaches, with application determined by the suitability to the task.

Recommendations for further development

To conclude, I have summarised some recommendations for progress within these pedagogical principles, during my next PTE in ks2, to ensure development in my judgment on effective teaching. Firstly, for CCR it is evident that whilst I have been able to implement strands of the LNF, my implementation of DCF requires advancement in order to ensure the children in my care have the necessary skills to progress in correlation with the progression in technology, (Barnes, 2011; Voogt and Pelgrum, 2005). Secondly for AFL, I aim to continue to incorporate self-assessment, but also aim to include elements of peer assessment, as this was something I did not have the opportunity to implement myself, but did observe during this PTE in the form of a 'silent gallery'. I feel that including all aspects of AFL will allow me to reflect and enhance my own teaching, to guarantee it is effective, and to ensure that AFL is being used successfully, (Didau, 2013; Didau 2014). Finally, I hope to continue to employ a range of approaches, especially discovery learning as I feel allowing

children to actively build on prior knowledge does in fact aid them in retaining the information or skill long term, (Mayer 2004).

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