

Overview

Friday, January 3, 2020 9:31 PM

Name: Emily Nicholson

Student Number: 1900125

Pathway: Primary PGCE

Targets from previous assignment:

	Target:	What I have done in this assignment:
Target 1	Ensure that all referencing meets with Harvard conventions.	I have read the Harvard guidance thoroughly and I have made a conscious effort to reference correctly.
Target 2	Consider extending your reading even further.	I have engaged with many different formats of reading for this essay, in order to extend my reading. I have tried to blend research and my own reflection where appropriate.
Target 3	Consider structuring your work under specific headings to aid clarity and focus.	I have added specific headings in order to make my essay clearer. I have signposted the principles that I am talking about.

Link to OneNote: https://uowtsd-my.sharepoint.com/:f:/g/personal/1900125_student_uwtsd_ac_uk/Eo5uu-ZSSMBAITae0cSAzcYBGE5CsUor8Fv1dENZX1h0Hw?e=uSigNU

Illustrative Example 1

Friday, January 3, 2020 9:32 PM

AFL - Questioning and Think-Pair-Share

Questioning – ask children to show you a few examples in each group of how they worked out their sums. Encourage children to say each step of the subtraction process that they need to do in order to obtain an answer. Learners to all gather on the carpet. Give learners a random sum that they have not already done. Ask learners to show the steps of their answer. Questioning – if I have e.g. 8 and I take away 5/count back 5, what number will I land on? Show answer on fingers, start with 8 fingers and take away 5 fingers to end up with 3. Randomly select learners to choose numbers from the number pot to form a sum. Do this as a whole class task. Ask learners to suggest answers by coming up to the front of the class. Plenary Ask children 'can you prove it to me?' after they have stated an answer. reinforce the method of jumping back and counting back to get to the answer.	Children will engage with the questioning by answering and demonstrating how they got their answer. This can be in either the jumping method or the written counting back method. Children can choose, as they both show their understanding of counting back. Children should vocalise which number they start on which checks understanding. In doing this, the children are practising and reinforcing the vocabulary needed. Learners to explain to each other what they would do to obtain an answer. Children to show answer using their fingers. Other learners to whisper to TPK partner to check answer. Carpet – children to engage and discuss the numbers they used and the numbers they jumped back from. Children selected with lollypop sticks to show either physically or by writing, how they are counting back/subtracting. Children to demonstrate this to the class and others are to watch and shout out the jumps as the child does them.	Plenary Finish with Think-pair-share activity on the carpet. Pose questions to learners similar to that of the activity. Write questions on whiteboard. Encourage learners to firstly think of how they would obtain their answer and try to work it out. Learners then work in pairs to combine and discuss their thinking. Select learners to give answer. Learners to sit on carpet. Learners to firstly consider the question on the whiteboard and try to work it out independently. Learners join with their 'think pair' and discuss answers. Learners combine answers. Selected learners with a range of approaches (counting on, using numicon) should explain their thinking. Learners should show an understanding of how many tens and units are in their answer and how they got to this. Choose some learners to share their reasoning for their answers with the group.
---	---	--

Think-Pair-Share

Questioning

I included a range of AFL strategies in my lessons, which are shown in blue in my lesson plans. In the Year 1/2 maths lesson shown above, I included different AFL strategies and specifically focused on questioning. In university lectures, it had been highlighted that questioning is a crucial part of AFL and ensuring learners are kept on track. I therefore decided to try and implement different questions throughout my lessons. WAG (2010, p.25) also note that a good question is purposeful, promotes discussion, allows all learners to contribute and makes learners think. I felt that purposeful discussion would enable learners to benefit from hearing other peers' responses and would learn more from other learners in this way. I tried to implement a range of questions and on occasions, questions that required evaluation and reasoning. However, these were more difficult to implement as they did not always lend themselves to what we were discussing. In the next part of PTE1, I need to ensure that I plan to implement a range of questions that invoke different types of thinking. Having seen the benefits in lessons of learners giving reasons for their answers and extending their answers, I must continue to do this where possible. This is especially important in maths as often children know the answer but cannot fully explain how they obtained their answer. It is important that my use of questioning is meaningful and creates meaningful discussion. I must focus my attention on wait-time in the next part of PTE1 to ensure that learners have enough time to think their answer through. Many learners would often put their hand up before the question had even finished, simply because they were eager to offer an answer. It is important though that learners have time before offering answers and beginning discussion. This should create more meaningful responses and collaborative discussion. I must give learners more time to think than I have previously done, and also remind learners to have thinking time first before offering their answers.

The Think-Pair-Share strategy is shown in the maths lesson plan above (in blue). I chose to use Think-pair-share in a maths lesson because the class had a lot of experience working in groups and collaboratively, but not in pairs in this way. I felt that particularly in maths, the children would benefit from discussing their answer with a peer to give them extra support. When I was addressing the whole-class during the introduction and plenaries, the children were always eager to give their answers and were sometimes not able to be chosen due to time constraints. Also, I felt that some children would have benefitted from being able to talk through their answer with another person. I therefore felt it was appropriate to introduce Think-pair-share AFL strategy as I felt it was appropriate for the learners as they worked best collaboratively. This also enabled some children to think through their answer and if some less confident children did not feel they could put their hand up, then this strategy enabled them to have the support of a peer to construct an answer. I was very pleased with how the children engaged with Think-pair-share, as they all discussed their ideas together and were able to formulate an answer together. I could also see the

benefits in using this strategy as some learners who would not usually raise their hand, in fact volunteered their answer, perhaps because they had reassurance from working with another peer. The strategy only accelerated the collaboration of the pupils by involving the whole-class in this feedback. However, as I have commented numerous times in my learning journal during the first few weeks of PTE1, I need to re-assess my strategies from obtaining feedback from the children. Although I do not consciously try to, I sometimes find myself asking more confident learners who readily put their hands-up. I used lollypop sticks on a few occasions, which enabled less confident learners to give answers or those less inclined to join in. Even if I could see that these learners were struggling to obtain an answer, I guided them through the process (e.g. if it was a maths lesson), so that they knew how to be successful to get their answer. It was important that I did not just go to another learner who knew the answer.

Illustrative Example 2

03 January 2020 21:41

AFL - Feedback

	As learners are working out the worded-problems, give individual verbal feedback to children. Ask children how they feel the task has gone and what they may have found difficult.	Learners to engage with verbal feedback and evaluate the activity verbally.
Plenary	Plenary straight after activity – check understanding of how children worked out their subtraction problems. Ask individuals for answers. Talk answers through with them if need be and identify points of improvement.	Children to check their answers during activity. Children to engage with plenary by verbalising how they worked out their answers.

Picture 1: Lesson plan

After reflection with my mentor, I have realised that I sometimes do my plenary in the carousel group that I have been working with for the majority of the lesson activity. Instead of gathering the whole class for a plenary when often children have done different activities. My mentor felt that this was an appropriate way to continue in future lessons, as the feedback I can give and obtain is more meaningful. I recognise that doing plenaries in small carousel groups was of much more benefit to the learners than a whole-class plenary. Often the children have had a mixed focus of many activities, so it makes sense for the plenary to be done in each group with the same activity focus. This should enable the children to gain more meaningful and appropriate feedback. They will then be aware of where they are in their learning after the task, and know where they need to progress to in future lessons.

Picture 2: Weekly reflection

The lesson plan above shows the planning of feedback in a maths lesson with a Year 1/2 class. The second picture is a screenshot of one of my weekly reflection's, which focused on how I gave feedback to my learners.

In a weekly reflection, I commented on the fact that after the first few lessons I taught, I realised that doing plenaries in small carousel groups was of much more benefit to the class than a whole-class plenary. This would have often had a mixed focus as the children had been doing different activities with a different focus in the lesson. Therefore, I felt it made sense to do a plenary with the focused group I had been working with. I felt that I was able to give the children better quality feedback, as I could give more individual feedback as I was working with a smaller group of children.

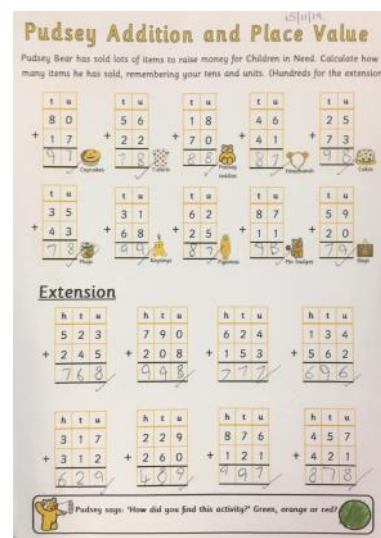
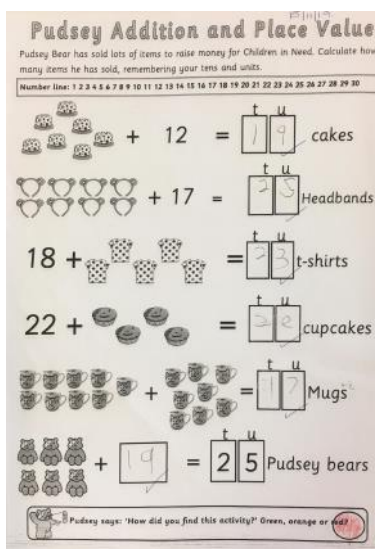
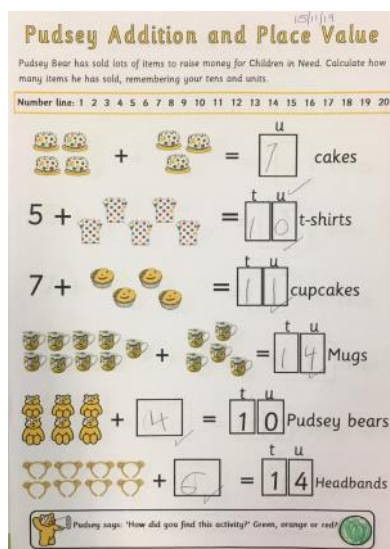
The plenaries enabled quality discussion to develop both as a group and individually. This was especially important in a maths lesson where I needed to be confident that learners had grasped the concept of the lesson's activities. I was able to assess how the lesson activities had gone for the children in many different ways and asking different questions. It was from their responses that I was able to then feedback, by giving constructive comments that added to their knowledge and suggested what can be improved and built on in the next lessons. I found the planning of verbal feedback quite straight forward, especially in lessons like mathematics where the children were working out calculations that I would be able to help them with or extend them in some way. However, when implementing verbal feedback in whole-class lessons, I found time to be an issue. If some children required more time spent with them to help them on the task, then this took my attention away from other children. It also meant that not all the children in the class were able to get verbal feedback. At the time, for the children who had coped well with the task it did not seem as much of an issue after marking their work. They were able to get written feedback in the form of comments and a target (Year 2 children) that they would look at in the next lesson. However, if these children had not have been coping as well with the task then my lack of awareness of timings and not being able to get around the whole-class would have proven more of an issue. I need to work on how I will give verbal feedback when doing whole-class lessons as timing can hinder quality feedback. This is why I felt the children benefitted from the carousel groups, whereby the smaller groups of children could get more quality feedback and now how to improve there and then.

For the next part of PTE1 I need to ensure that I am considering many different forms of feedback in my planning. I need to plan feedback appropriate to my learners and find out how they can benefit most from my feedback. When writing comments and targets in pupils books, I had found it hard to compose targets for some children to ensure that they had something to improve on. I think this is something that will improve with time and experience. I have to ensure that I give immediate feedback to the learners during the lesson at every time that is possible. I feel that this is the best way learners can benefit from feedback, in knowing how to improve there and then, when they can make adjustments there and then.

Illustrative Example 3

03 January 2020 21:41

AFL - Self-assessment. Traffic light strategy:



The above examples of learners work shows the implementation of self-assessment in a mathematics lesson with a Year 1/2 class. I felt that the traffic light strategy lends itself appropriately to this particular task, as learners can simply give their opinion of how they felt the task went (red, amber or green). The rationale for using the traffic light strategy for self-assessment was because in my previous experience in schools (volunteering), it worked well in foundation phase classes. The children were able to engage with it well and understand what they had to do. I felt that written self-assessment was appropriate here, as the children had been doing a written task. Using the traffic light strategy to self-assess provided interesting feedback to me when marking the work. For example, in the first and fourth picture, the children gave themselves a green light. This was reflected when marking the work and I agreed with this as the children had evidently understood the work, as were able to complete it well independently. However, in the second picture, the child gave themselves a red, even though when I marked the child's work, they had all the answers correct.

The work was handed in at the end of the lesson. After marking the work I decided to take some time during a free choice session after the lesson to speak to the children who had gave a red or amber light. Only 2 children gave themselves red and 4 amber. This was encouraging as this aligned with the marking, as most of the children who gave themselves green had showed a good understanding of the work. When speaking to the children who had scored red, one child said that they felt they had taken longer to work out the questions than the others in their group. They therefore felt that this meant they were on a red because it took them a longer amount of time to work out the answers. I encouraged the child in showing them the work, so they could see that they had done extremely well as all the answers were correct. I also stated that it did not matter how long they had taken to obtain their answer, because concentration and checking work is very important. I also assured the child that everyone learns differently and works things out at different paces and that this is something to see as a positive. The child said that they would have given themselves a green for the actual answers they gave, but it was more the process of obtaining the answers that they felt they had not performed as well in. I therefore need to ensure in the future that I am clear to my learners about what exactly I want them to focus on when self-assessing. I also need to ensure that I continue to follow up pupils self-assessment especially strategies like these, as the extra discussion with the child is very insightful into how they view their learning. I believe that the reassurance I gave the child was important too. If this had not been followed up then the child may have continued with a bad attitude in future tasks like these, feeling that they were behind other learners.

I need to continue to follow up self-assessment where possible with a short discussion with the child. This will benefit my implementation of AFL in the future, as I will know where I need to improve when planning them. I can also use the children's views to inform my planning and future implementation, so that I am utilising their full potential in providing appropriate teaching strategies.

Illustrative Example 4

03 January 2020 23:24

AFL - Peer-assessment

Plenary	Finish lesson with poetry performances. Ask each group to one by one perform their poem to the class. Use lollypop sticks to ask for the class' opinions on the performance and to give constructive feedback. Film groups on ipod for evidence.	Peer assessment – children perform their poem to the whole class. Children who are not performing are to give a verbal 'star-star-wish' to each group. Children are selected with lollypop sticks to give opinions.
----------------	---	--

The above is an example of how I planned to implement peer-assessment during a literacy lesson with Year 1/2 children. I found that planning for peer-assessment became increasingly easier towards the end of PTE1. I was able to recognise when it would be most appropriate during my lessons for learners to either self-assess or peer-assess. Peer-assessment for the majority of lessons was planned for during my plenary that finished the lesson. I found that this planning remained for nearly all of my lessons, as it was most appropriate that the learners appraised each other's work after they had finished the task. However, what my planning did not prepare me for were the ways in which learners engaged in peer-assessment during tasks. The learners were clearly used to this assessment for learning strategy and it was extremely encouraging to see how naturally learners commented on each other's work in order to help one another. The above example shows the planning of verbal peer-assessment. During implementation, learners were eager to comment on peers work and offered encouraging constructive feedback. I was pleased with how this had worked with the children. Some children who were receiving the comments even said how helpful the feedback was and this was very pleasing. I could really see the benefits of AFL playing out here.

Positive comments about other learners work often boosted many and this encouraged their motivation to continue the task. Also, I did not plan a lot of self-assessment in many of my lessons. It was during the lessons that this seemed to occur organically and I decided after many reflections that this was the best way for my learners to continue moving forward. The learners either gave their opinions of their own work to me, the class TA or their peers, without any prompting. Many learners would often state that they were confident with some aspects of their work but not others, and this enabled improvements to be made at the time so they could implement these. Given the age of the children, they were clearly experienced in self and peer-assessing. They were confident in being able to highlight their strengths and weaknesses and I could see their progression during tasks and future tasks, because of their ability to realise where they were confident and where they needed to improve. When I did plan for self-assessment, I was pleased with the responses. However, it was when this developed organically with the learners leading their own assessment, lead to the more insightful and productive developments in my opinion.

The children in my class did not do a lot of 'book work' as such and therefore there were less opportunities for things like star-star-wish and traffic lights. Particularly in a mixed class though with younger children, it was not appropriate to put written peer assessment in place as a lot of the children would not have got much out of this. A lot of the children would not have been able to gain full feedback or see the benefits of effective peer assessment, through not being able to read the comments or write them. The children benefitted more from verbally giving feedback to others and commenting on their own work and this enabled them to get the most out of peer-assessment. I made this decision to benefit my learners and feel it was the most appropriate choice for the way they best learnt. Verbal peer-assessment enabled automatic feedback to be given to the child as soon as they had done the activity. This also again encouraged discussion and collaboration between peers.

Verbal peer-assessment like this meant that the lessons were built on communication and children felt comfortable in commenting on their own and others work as it was a safe environment to voice constructive opinions. Also, if the child was self-assessing and they were telling me their opinions on their work, I could respond to their comments immediately and this immediate feedback meant that the child left the lesson knowing what had gone well for them in the lesson and knew how to make improvements if necessary.

I will experiment with more written forms of peer-assessment in the next part of PTE1, as I will be teaching a Year 3/4 class. They may benefit more from written feedback. However, after the success of the verbal peer-assessment in my experience of PTE1 so far, I will still continue to utilise peer-assessment in the verbal form. I can adapt to the new learners I will be teaching and see what works best for them.

Illustrative Example 5

Friday, January 3, 2020 9:33 PM

Cross Curricular Responsibility: Literacy (Oracy) within a PSE lesson

AoLE or Subject	Personal and Social Development	Date:	19/11/2019
Lesson Focus:	Recognising different feelings		
Meaningful links to Curriculum	Well-being: understand the relationship between feelings and actions and that other people have feelings		
Meaningful links to: Cross Curricular Responsibilities	LNF: Oracy: Collaboration and discussion Year 1: Contribute to conversations and respond to others, taking turns when prompted. Year 2: Contribute to discussion, keeping a focus on the topic and taking turns to speak.		

Above is an example of a lesson plan, where I have planned and implemented literacy (LNF) in a PSE lessons with Year 1/2 children (in green). The rationale for planning the oracy aspect of the PSE lesson, was that I had seen in previous lessons how the children benefitted from listening to each other's points and turn-taking in conversation and getting used to allowing other people to speak and responding to what other people say. My class mentor had also flagged up that this is something the class needed to work on and therefore it seemed to fit well with the objectives of the lesson. The circle time lesson created an environment where all talk needed to be listened to and responded to as it was an inclusive space where the children could mediate between each other. This cross-curricular element emerged well in the lesson and I felt that lessons like this lend themselves to the development of these skills. I also felt that the implementation of this skill enabled children to speak more freely and children managed to mediate conversation without talking over each other. There was an opportunity for all children to develop these skills, as they all spoke throughout the lesson with each other. In other lessons when answering questions, often I took a hands-up approach which meant that often only confident learners would speak. Whereas the children all successfully developed this element of the LNF in this lesson as the children either went around the circle to speak, spoke in groups, or just tried to mediate conversation between each other.

I found that planning for literacy as a cross-curricular responsibility was straightforward from the start of PTE and I felt that this was the element I felt most confident in planning and implementing. I could assume that this may be due to my background experience (English language and literature degree) so this was my strength initially. However, I can also conclude that it may have been due to the lesson activities that I planned seemed to allow the cross-curricular literacy elements to emerge organically and fit well with the lesson objectives. Specifically, oracy emerged organically in all lessons because of the collaborative nature of the lessons and group work involved. What was encouraging however, was that compared to the planning, the implementation of literacy showed how the children really utilised the skills in all aspects of the lesson. There were times when the skills were demonstrated when I perhaps had not planned that they would be.

Illustrative Example 6

03 January 2020 22:10

Cross Curricular Responsibility: Literacy (Oracy) within a PE lesson

AoLE or Subject	Physical Development	Date:	20/11/2019
Lesson Focus:	Movement and exploration to create a sequence and pattern		
Meaningful links to Curriculum	Link the basic actions in sequence and gradually improve their control and use of different shapes, levels and direction of travel		
Meaningful links to: Cross Curricular Responsibilities	LNF - Oracy Year 1: Take part in activities with others and talk about what they are doing. Year 2: Share activities and information to complete a task.		

The children will practise their sequence and make it verbally explicit what order they are doing things. The children will also try to agree upon how they will perform the movement (levels, direction, speed).

In the PE lesson I taught, the sequencing activity I had planned also aligned well with the cross-curricular element decided upon. The above shows the planning of the cross-curricular element, and how it is shown in the lesson (in green). The oracy element of the activities in the lesson were essential in order for the children to complete the task to a good standard. Again, this emerged in the lesson naturally, with the children collaborating in groups when coming up with their sequences. My initial ideas when planning the task were that children could work together to create something that they had come up with completely by themselves through good team work. I felt that when planning for the cross-curricular element of literacy it was straightforward to choose the skill focus. During the lesson, there was a lot of valuable discussion happening and the children worked well together to ensure that they all knew what they were doing. The children had clearly worked well together, as when they came to show the class their sequence, they all performed the elements of the sequence in the same way. I had expected that during the time where the children would share their thoughts on how best to complete their sequence, that conflict may emerge. However, this did not happen and the children listened to each other and offered their opinions of how to do certain moves. The collaborative nature of lessons like these allows for the cross-curricular responsibilities to emerge naturally, where some such as DCF may be harder to implement.

Illustrative Example 7

03 January 2020 21:34

Cross Curricular Responsibility: Literacy (Writing) within a mathematics lesson

AoLE or Subject	Mathematical Development	Date:	25/11/2019
Lesson Focus:	Rainforest subtraction		
Meaningful links to Curriculum	Year 1: Use a range of strategies to solve problems within 20. Year 2: Use recall of number facts to 10 and place value to subtract larger numbers.		
Meaningful links to: Cross Curricular Responsibilities	LNF – Writing: Year 1: Talk about what they are going to write. Year 2: Use talk to plan writing.		

Encourage children to verbalise what the problem means which numbers are needed to write in the sum. Once children have extracted two numbers, they need to verbalise how they will work this out. Step by step: line up biggest numbers on top, smallest on bottom (vertical addition). Put larger number in your head/on a numberline and count back the smaller number. Make sure children are saying this process before they write it, and as they are writing it.	Children to say aloud which numbers they need take from the scenario, to solve the problem. Children also verbalise the process of lining up the numbers in a vertical method and which numbers will go on the top and which on the bottom. The children also talk about which number they put in their head/find on numberline and which number they use to count back. The children talk about the process of vertical addition and solving wordy problems to aid their writing of the sum.
--	--

Above are examples of how I planned for writing skills to be developed (LNF) in a mathematics lesson with Year 1/2 children. The top picture shows the cross-curricular responsibility outlined in the lesson plan format (in green). The bottom picture shows how the learners would develop these skills in the lesson (in green). I felt that planning for writing elements of the LNF were not as straightforward as oracy elements. A lot of the tasks of the lessons I had planned required oracy or listening skills. However, upon reflection and after implementation, I think that there were more writing skills being developed than I had initially thought when planning. When I had planned this maths lesson and decided on the skill of talking and planning writing through talk, I was not hugely confident in how this would play out in the actual lesson. It was a maths lesson with Year 1/2 children, where the learners had to work in groups to solve maths worded problems. However, I was surprised with how the children guided themselves and each other through the activities and seemed to do this very naturally. I had guided the learners during the introduction through the process verbally. I also modelled verbally how the sums were to be written. This could perhaps account for the childrens development of this skill. The children seemed to mirror the modelling I had provided, by taking it in turns in their groups to talk each other through the process to obtain the answer to their maths question. This therefore ensured that the writing skill I had planned for was developed well, because the learners were writing as they were talking about each step of the maths process. This meant learners developed a better understanding of the task, as they were verbalising the writing process that they were doing step-by-step. I felt encouraged by this and would continue to deliver tasks in this way.

I saw the benefits of modelling the cross-curricular elements that I wanted the children to develop. The children also used their talk to help others plan their writing who were finding the task more challenging. I could see that all children benefitted from this, as those explaining were bettering their own understanding as well as those who they were helping. This again created a good level of discussion and collaboration between the pupils. This was an insightful way of implementing cross-curricular responsibilities, as it showed me how skills can develop in meaningful ways.

Moving forward, I need to focus on planning tasks that develop children's reading skills more. This was something I did during some of my lessons but was not the overall focus in the skills the children were intended to develop. I think this will depend on my learners in my next part of PTE1 as to how I will plan tasks for this. For example, reading tasks required significant differentiation in my first part of PTE1. Therefore, I will need to take this into account moving forward and ensure that the skills are appropriately set for the learners.

Illustrative Example 8

03 January 2020 21:34

Cross Curricular Responsibility: Numeracy within a literacy lesson

AoLE or Subject	Language, Literacy and Communication	Date:	6/11/19
Lesson Focus:	Bonfire night poetry		
Meaningful links to Curriculum	- Join in, repeat or memorise a poem and intentionally use some non verbal cues such as facial expressions and gestures. - Understand and use language appropriate to writing – adjective and verb.		
Meaningful links to: Cross Curricular Responsibilities	LNF - Numeracy: Using data skills Year 1: Make lists and tables based on data collected by voting. Year 2: Gather and record data from lists and tables. (Make a tally chart of their favourite adjectives).		

Collate children's 'favourite fire-words' in a tally chart. Give each child a colour block and during poem practise, they are to place their block on their favourite fire-word (adjective). Children gather around table of adjectives on the floor with blocks on each word. Teacher chooses children to count up a column each. Teacher records this in a tally chart on the whiteboard.	Children to place coloured block on their favourite 'fire-word' (adjective)	Coloured blocks
This will be transformed into a written numeracy task in following lesson.	Children to count up each column. Children are to engage with tally chart and count up with teacher. Children are to count up tally markings to record how many children preferred each fire-word.	Graph drawn out on paper on floor, with 5 fire-word columns
	(This will be followed up in next lesson by recording these numbers in a bar graph – differentiation – Year 1 to colour up to number on pre-filled bar chart. Year 2 – draw bar chart themselves).	

This is an example of how numeracy (LNF) has been used within a Year 1/2 literacy lesson (in green). The top picture shows the planned cross-curricular element and the bottom picture shows how the numeracy skill is developed. I had previously observed a Year 2/3 class whereby the whole class completed a graph in a welsh lesson. I took inspiration from this and made the decision to implement the numeracy element in a similar way. I planned it as a whole class activity, that would then lead to independent work in a follow-up lesson. My mentor felt it would be beneficial for it to be the focus of a second lesson also. Given that the learners would all suggest adjectives to add to their poem, I felt that the favourite adjectives would be appropriate to use in a graph as each child would have suggested a 'fire-word' that they thought to be their favourite. I felt this was an appropriate way of implementing numeracy, as the children could develop their graph and chart skills, while still having the focus of the firework adjectives.

I also found that planning for this cross curricular responsibility helped me to differentiate the level of work set for Year 1 and Year 2, as the LNF gave me an idea of where the learners should be and where they could progress to. By planning quite in-depth for the cross curricular responsibility, as well as the overall lesson focus, it enabled me to know exactly how the learners were to carry out their tasks. Even though the cross curricular element differed between year groups, the whole class initial tally chart meant that all learners were challenged to some extent and allowed for progression in the learners number practise. I found that the planning for the numeracy element was relatively successful, as I was able to gain an idea of where the learners were beforehand and set criteria for where they would be after they had completed the task. It meant that learners were challenged to an extent that was comfortable for them.

To improve on my implementation of numeracy in this lesson, I need to perhaps try and ensure that the task I have planned are able to be completed alongside the lesson focus that is taking place. I may have overestimated while planning how long the activities would take. Moving forward, I need to be more realistic when planning the timings of both the lesson focus and the implementation of cross

curricular responsibilities. I must ensure that the planning matches with what is do-able in the lesson and that the learners can get the most out of the tasks, without overloading them.

I found that the numeracy cross curricular responsibility was difficult to plan for and implement, as at times it felt as though I had shoehorned certain elements. I felt that I had forced the implementation of this aspect, when perhaps it was not the best fit for the lesson. Moving forward, I need to consider how I am planning for embedding numeracy and trying to implement meaningful numeracy aspects in my lessons. I did not feel confident in how I could incorporate numeracy into my lessons and this was perhaps due to not having many ideas as to how to plan and implement numeracy meaningfully in lessons other than mathematics. I think that this is something that I will develop as I gain more experience in the second half of PTE1 and then into PTE2. I will have more experience seeing other lessons taking place where numeracy is used as a cross curricular responsibility. I also feel this is an area in which I need to research, in order to gain insight into how numeracy can be implemented without just being used for the sake of it. I taught a lot of mathematics lessons during PTE1 and perhaps this may account for why I was then not able to think of many new ways in how to use it in other lessons with a different focus.

Illustrative Example 9

03 January 2020 22:10

Cross Curricular Responsibility: DCF within a Welsh lesson

AoL or Subject	Welsh Language Development	Date:	11/11/19
Lesson Focus:	Rainforest animals – what is in the rainforest? Beth sy yn y goadwig law?		
Meaningful links to Curriculum	Learners begin to write in a conventional way, communicating by using words, phrases and short sentences, linked to familiar patterns		
Meaningful links to Cross Curricular Responsibilities	DCF: Strand: Producing Year 1: Creating: Select appropriate software to complete given tasks in order to use text and image Year 2: Creating: Create and edit multimedia components in order to develop text and image (link images created to corresponding text)		

Teaching & Core Learning	Pupils will all sit by a computer. Teacher explains task, stating that the children will complete a picture on the computer – children open software. Children are presented with an example, showing drawings of animals and welsh sentences underneath. Pattern used 'Mae _____ yn y goedwig law'.	Learners choose which animals and welsh words they would like to use in their picture.	2 create a story computer software
	Make children aware of the help sheets with welsh words available to them to use. Pattern will be left on the interactive whiteboard for children to refer to. Explain how learners will be successful by creating a picture with sentences underneath, showing their understanding of welsh words for animals in the rainforest. Support learners where needed and go around classroom checking learners are on task and if they need help, to refer them to the key sentence pattern or correct welsh words.	Learners will create their rainforest picture, using different colours and brush sizes and type corresponding welsh sentences. Year 1 – use sentence pattern 'Mae _____ yn y goedwig law'. Year 1 – HA – use sentence pattern 'Mae _____ yn y goedwig law' and reasoning for what they have drawn in English. Year 2 – use sentence pattern 'Mae _____ yn y goedwig law.' Followed by whether they like or dislike the animal and give a reason if possible. Can give reason in English. – 'Dw i'n hoffi/ddim yn hoffi _____ (animal in welsh) achos mae'n _____ (reason in english)' Learners show an understanding of how to manipulate certain features of the software, by creating a picture.	Sheet with rainforest animals welsh translation with corresponding picture

This is an example of how Digital Competency (DCF) was used within welsh lessons in a mixed Year 1/2 class. The two pictures show the planning of the DCF element, however the bottom picture shows how learners will actually develop the skill (in green). The children were given a choice of software to use to compose their picture, as well as a choice of which animals to draw and write about. This meant that the children were able to independently compose a picture and understand how they could link images to welsh text. The decision to use this DCF element, was because the children had previously completed written work where they would draw pictures and try and match the corresponding welsh words. I felt that it would be beneficial for the children to build on their DCF skills by completing the welsh task on the computer. The structure of the lesson also meant that the initial recap of their welsh oracy, could be transferred into digital form, showing that they were confident in speaking the words and sentences, as well as typing them and matching them correctly to images. The teacher had previously highlighted that due to a lack of resources, the children did not get much opportunity to complete tasks on the computers. I therefore felt that planning the lesson in this way would give the children more experience in using computer software. The children were also then able to see how they could apply their welsh knowledge in different formats (digitally) and they were able to see how they could use welsh in a number of different ways.

The planning of the DCF element meant that the children would be given a platform to develop both their digital competency skills alongside their welsh skills and would become more attuned to a cross curricular way of completing lessons. The children could see that these skills are not in isolation and they can be combined. The implementation of DCF in my lessons enabled the children to be creative and have a freedom to experiment. I was pleased with the way I planned and implemented DCF, as the DCF elements had a clear purpose for the tasks planned, and the resources were used appropriately to challenge and engage learners. The implementation of DCF as a cross curricular responsibility showed the children how they can combine their skills within lessons.

The difficulty in planning for DCF was the availability of resources. The lessons that included digital competency elements, I was able to complete in a carousel. This meant that there were resources available to the children who needed them. However, when planning for whole class lessons, it would be more difficult in implementing certain elements of DCF as there are not as many resources available as would be needed to complete the tasks at the same time. This is something that I need to consider when going into a new class and to plan appropriate elements so that all children can benefit from building on their digital competence skills.

Illustrative Example 10

03 January 2020 22:36

Cross Curricular Responsibility: DCF within a Welsh lesson

AoLE or Subject	Welsh Language Development	Date:	26/11/2019
Lesson Focus:	'Deth sy yn y goedwig law?' Rainforest: oracy with green screen.		
Meaningful links to Curriculum	Oracy: - Building on previous experience and speak with confidence. - Listen to increasingly complex phrases and questions and respond as appropriate.		
Meaningful links to: Cross Curricular Responsibilities	DCF - Producing: Evaluating and improving :- Year 1: Comment on work in relation to the success criteria (add comments using recording feature in software) Year 2: Identify what worked and what didn't, giving some reasons for their thoughts.		

Teacher will record performance using ipod and green screen app.

Teacher asks questions to prompt the children's responses for certain sentence patterns, or to extend the children.

Pass the ipod to the children for them to engage in self assessment.

The children will perform as a group by standing in front of the green screen. Each child in the group will say their sentences individually.

Children respond to teacher's question with appropriate sentence pattern or answer.

Children can playback their videos to assess their performances.

Children can add comments individually using the recording feature. Children should identify what went well (Year 1). Also what they think could be improved and give reasons for this (Year 2).

Above shows the planning (in green) of DCF within a welsh lesson with Year 1/2 children. Within this welsh lesson, the children's task was to respond to questions with welsh sentences about the rainforest. The children were recorded in groups and their performance was transformed via an app using the green screen. The rationale for implementing the DCF element of evaluating and improving, was for the children to associate self-assessment with a digital format. The children were familiar with verbal forms of self-assessment such as 'Star Star Wish'. Therefore, when planning, I felt that it was appropriate to incorporate DCF in the form of self-assessment, so that the children were doing something familiar to them in commenting on their work but doing it in a new format to extend their DCF skills. This allowed the children to see that there are many ways to self-assess and also extended and expanded their knowledge of using digital devices to improve their work and comment on this.

I felt that the planning for this DCF element was relatively straightforward, as I had wanted to give the children opportunity to reflect on their work. Given the use of the ipod and green screen app, I therefore felt that this cross curricular link was very appropriate here and worked well with the task the children had done. The children were able to successfully record their own comments and attach these to their videos and offered some insightful comments on what went well and how they could further improve. Given that the welsh lesson required digital resources, I felt confident in planning for the element of DCF that would coincide well with the lesson. I felt encouraged with how the children engaged with this way of evaluating their own work and that they had experience in this strand of the DCF.

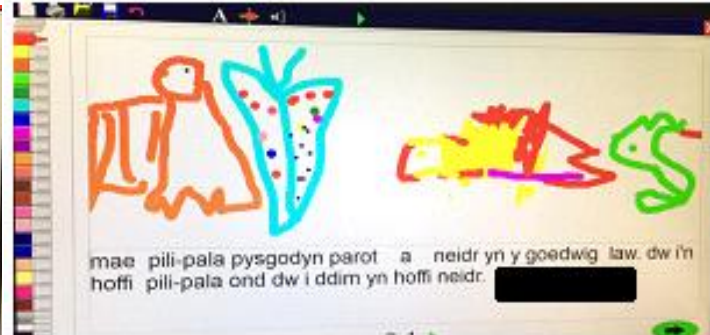
Planning for this cross curricular responsibility is something I feel more confident about, after having reflected on the success of the lessons that included DCF. This is now an element that I would feel confident planning for and implementing into the next part of placement. I need to ensure that I use a range of DCF elements in my lessons, so that my implementation is not too repetitive for the children.

Illustrative Example 11

Friday, January 3, 2020 9:33 PM



Learner work: Lesson 1



Learner work: Lesson 2

The above are examples of pupil work from welsh lessons with a mixed Year 1/2 class. Both lessons featured activities that enabled the pupils to build on their previous knowledge of welsh sentence patterns and develop their use of topically relevant terminology. The focus of the first lesson was to develop the way pupils combined their knowledge of welsh colours and putting these into sentence pattern, when talking about Bonfire Night. The focus of the second lesson was to again use a similar welsh sentence pattern to discuss animals in the rainforest, which was the class' theme for the term. The children were also encouraged to engage with the pattern 'dw i'n hoffi', as some had vocally engaged with this in the first lesson, but were not as confident when writing it in the task. The children began with an introduction to activate their prior knowledge of colours and introducing sentence patterns by giving verbal responses and then completing the task on the computer (first lesson). The second lesson followed the same structure where the children first gave their answers verbally, and then went on to complete the task in written form on the computer. The rationale for carrying out both lessons in the same way and selecting tasks that were similar, was that before the first lesson, my class mentor had felt that the children were confident in their spoken welsh, but not as much with written or transferring it to the computer. My mentor also felt that the children had not had much experience of typing the welsh words and recording welsh in this way. I therefore took the advice of my class mentor to carry out the lesson by firstly focusing on their strengths (oracy) and then moving the main lesson task to something that would be more challenging for them. I then decided to do the second lesson in the same way, as I felt most of the pupils had coped well with the first lesson but that many needed more time being able to experiment in developing their welsh digitally.

The second lesson made use of similar sentence patterns to the first and I therefore felt that it would be of use to the children that they could build on their current knowledge of the patterns, by using the resources that they had experience with and had become more comfortable in using. The task and resources set therefore enabled the children to build on their previous knowledge of the welsh sentence patterns, as well as the way in which they completed their task. This meant that the pupils seemed to thrive more in the second lesson, as they were building on the skills that they had used in the first lesson and were therefore more engaged with the task set. I felt this was a positive and was encouraged to continue to plan in this way, where lessons are not stand alone and have a purpose going forward for the children as they become more confident in building on their previous experience. I found that this way of conducting both lessons, having begun with oracy and then transferring this to a written task worked well because the children had the opportunity to activate their prior knowledge and feel comfortable with the content of the task, before it had to be completed. It was particularly beneficial to conduct both lessons in the same way because this continuation allowed children to gain in confidence in carrying out the welsh task on the computer, as they built on their sentence patterns from the previous lesson and were also more confident when doing the task on the computer.

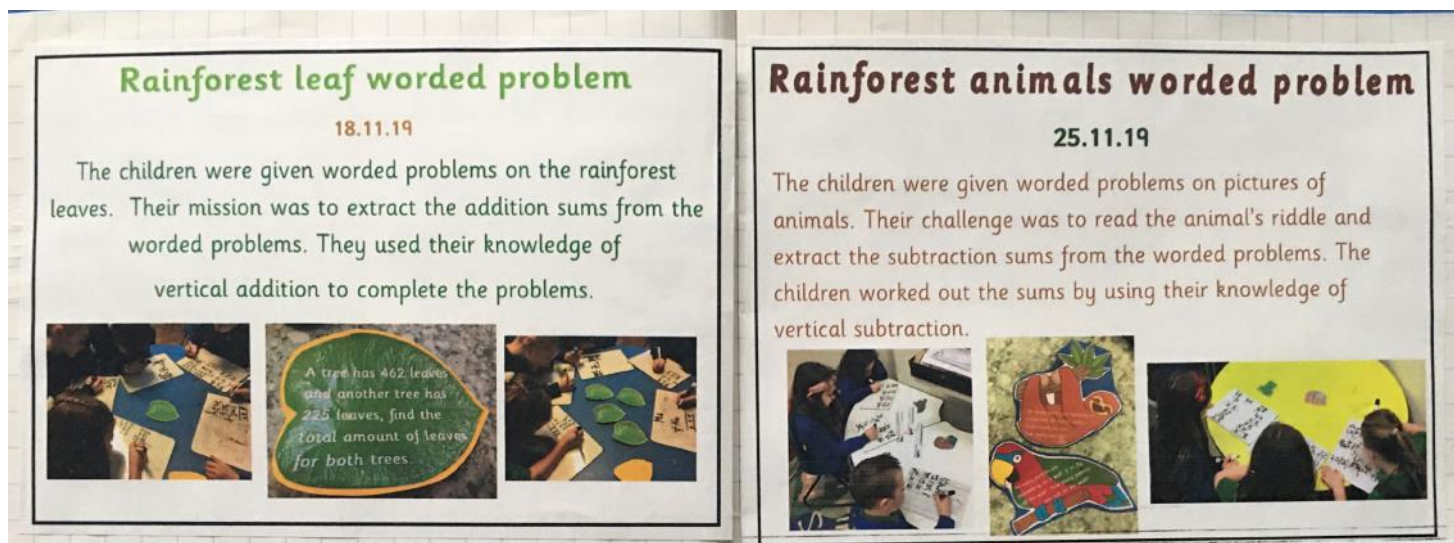
In the second lesson the children were able to extend their use of sentence patterns in the lesson activity because they had previously carried out a similar task. This meant the children had more confidence to push themselves further, as they were able to build on their current knowledge and challenge themselves. I had noted in my learning journal that within the first lesson that some of the children struggled with recognising and finding some of the letters on the keyboard. I adjusted the task for them in the lesson and they therefore typed what they felt they could independently. In the second lesson I then took this into account with the level of work I set for the children, ensuring it was appropriate in challenging them but still enabling them to build on what they had previously done. Moving forward, within this principle I need to ensure that I consider the pupils current level and set an appropriate target of where they should progress to. This would have implications on the level of interest and engagement of the children, if they feel the work they are doing is enabling progression from what they already know to using this current knowledge to progress further.

When planning in the future for lessons such as these, I need to ensure that I feel that repeating the structure of the lesson, and providing a similar task for the children enabled them to build on their knowledge of welsh sentence patterns, but progress in applying them to different topic contexts. I feel this worked well because it was evident in the progress in the work the pupils produced, as they became more confident in finding the letters to make words and sentences, as well as experimenting with more sentences in the second lesson. The above

images show how the pupils were able to successfully build on their knowledge of sentences, by reiterating known sentences and adding new ones to their work in the second lesson. This task showed that the children were expanding their knowledge by beginning to match their oracy abilities with their written work. It also shows that the lesson task enabled progression to be made from previous welsh work.

Illustrative Example 12

03 January 2020 21:42



Learner work: Lesson 1

Learner work: Lesson 2

These are examples of pupils work from two different maths lessons. The examples are taken from a Year 2 pupil's book. Even though the two lessons differed in their focus (one addition, the other subtraction), they both required the same problem-solving skills. In both lessons the children had to transform rainforest (topic) wordy problems/riddles into written maths sums. This task was successful in engaging the pupils as they seemed to enjoy putting themselves as characters in the riddles to try and solve the problems together. The riddles kept the children interested and meant that they were confident in trying to solve the maths problems. The task was topically relevant for the children and they engaged well with the task. The children were more familiar with the wordy problems in the second lesson so therefore seemed to engage more confidently and offer answers readily to each other. It was encouraging to see that pupils were helping each other to work out the answers and collaborating in these tasks. The tasks fostered a sense of collaboration and the pupils helped each other to progress in their understanding and learning by developing the methods used in the first lesson.

In both lessons, I decided to extend the pupils knowledge of vertical sums by giving them worded problem solving activity in the form of riddles. The rationale behind this way of administering both tasks came from many education websites. Many suggested that riddles were a good way of building on children's number knowledge, by changing the format of a question from simply a sum to having to extract numbers out of a worded problem to form their sum. The children had been working on vertical addition for a while and were therefore seeing lessons as repetitive. The decision to administer the maths lessons in this way was due to the fact that the children needed further practise of vertical addition, but also were at a point where they could build on what they already knew by extending their thinking to problem solving activities. This challenged learners but also engaged them well as the riddles and worded problems did not look to them like their previous lessons tasks had. I decided to administer the task similarly after the children became familiar with the vertical method for subtraction, because it had worked successfully in the first lesson. The children were again able to apply their knowledge and use it in a more extended and challenging way, because of the way the questions appeared (not in standard number form, but worded).

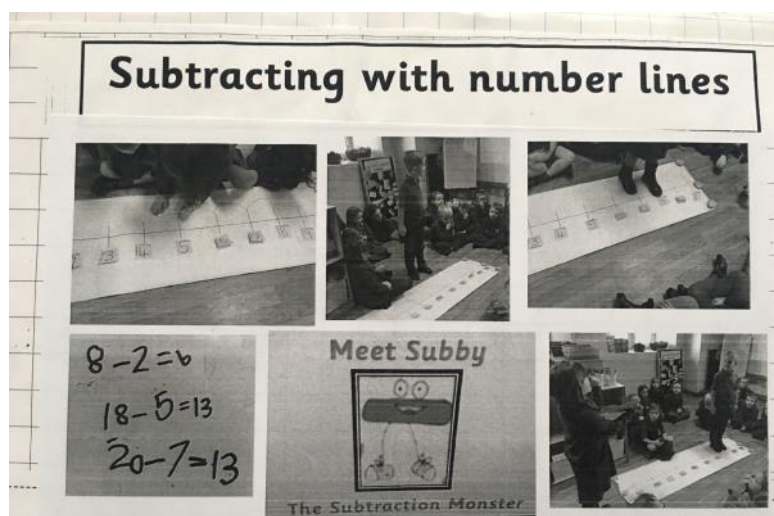
Comments in my learning journal showed that many of the children were excited by the rainforest animal riddles in lesson 2, as this was not only topically relevant with their everyday work, but they also stated that it was a fun way of doing maths tasks because they took on board the need to solve the problems of the explorer (lesson 1) and the animals (lesson 2). I felt this was age appropriate as they were very on-board with the characters in the worded problems and wanted to engage with them to solve the problems. My decision to repeat this lesson, with the change of focus of subtraction, was also due to feedback from my mentor who had recognised the pupils level of engagement with the task, and felt it would be beneficial to continue to build on these skills again, as the resources had resulted in meaningful discussion between the children to work out the sums. I felt that these lessons successfully engaged learners, as the tasks enabled learners existing knowledge of vertical addition and subtraction, to be further developed in the form of worded problems that extended their thinking and the process of working out the sums.

I felt that the task was appropriately set in challenging learners, and it also fostered collaboration between learners, so that learners of many abilities were able to push each other appropriately. The second lesson was

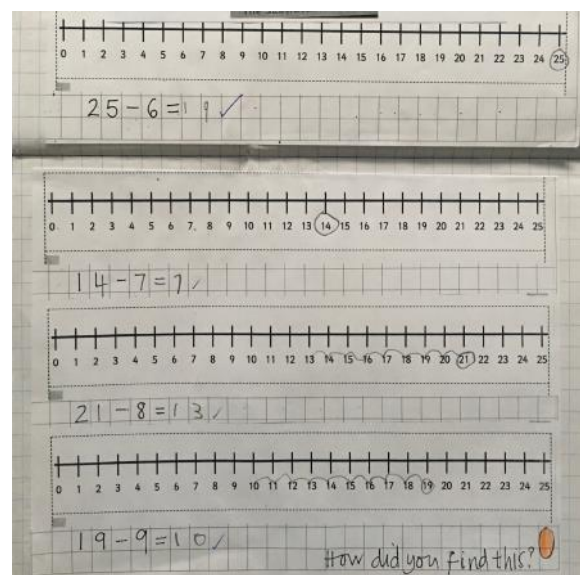
beneficial as learners could use what they had learnt from the first lesson to help them with the task. I may need to consider how I can extend learners when administering lessons that build on previous knowledge, as the task tended to become too easy for some learners. I also recognise that maths enables repetition with added progression of difficulty in maths. However when looking at other AOLE's, I think I need to look at how I can further develop this principle as the maths I taught seemed to lend itself well to this principle, as the tasks were somewhat repetitive in building on learners knowledge. I may find this more difficult in other AOLE's where tasks may be more isolated and individually focused. This was a teacher-led task in carousel groups, which meant that learners could help each other as well as the fact that I was able to see where learners were and how I could help them to progress.

Illustrative Example 13

03 January 2020 21:42



Learner work: Physical task



Learner work: Written follow-up task

In the subtraction mathematics lesson (shown above) with a mixed Year 1/2 class, I decided to give the lesson a physical focus. The learner work above shows the whole-class physical task and how learners engaged as a group to complete the task. The rationale behind this decision was that I had observed previous lessons, in which the teacher got the children actively involved and the learning that took place was evident. The children had taken an active part in previous lessons on coordinates and mapping, where the concept of moving from one place to another seemed to be absorbed by the children because they were doing the movements themselves. Due to the children engaging well with physically active lessons, I decided to reinforce the basics of subtraction in this manner. The children physically jumped from the bigger number in a sum to the smaller number to obtain an answer. The children then transferred this knowledge to written methods of using number lines to count back. The introduction of a character (Subby) engaged the children well, as in the lessons that followed the children without any prompting were able to recall subtraction facts and the process of taking away, by referring to this character to help them do this. I need to ensure that where appropriate, I introduce characters that engage the children and make learning memorable. It enabled the children to make progress by developing their thinking, because the fundamental process was solidified by these initial lessons engaging the children.

It was particularly beneficial to extend the physical introduction and make it a whole-class activity. It involved all children in the process and the children collaborated to obtain their answers. I felt that the physical element of the lesson made the concept of subtraction easier for the learners to understand, and they were able to transfer this knowledge when completing written sums in their books as shown above. The physical task built on the learners familiarity of lessons previously delivered in this way, as well as enabling progression to be made when completing their written work as they were transferring their physical experience to their follow-up written tasks. The whole-class activity encouraged larger numbers to be used in the sums, as the children were able to guide each other through the process. In future, I may need to ensure that this task enables all children to have teacher supervision when splitting into smaller groups. Some were not as confident in working out the sums independently. In order to build on the experience and for the children to see their own progression, I must ensure that the children are firstly confident with the task in hand, in order to move to the next point in their learning. The concept of subtraction required further practise for some when writing the sums. I need to therefore be cautious in making sure that my methods work well for all learners (having a choice of methods).

Critical Reflection

Friday, January 3, 2020 9:33 PM

Word Count - 3300

Introduction

This essay will critically reflect on the progress made in the planning and implementation of three of the pedagogical principles highlighted by Donaldson (2015), during my Professional Teaching Experience (PTE) Part 1. My PTE took place in an English-medium Primary school in Swansea, in a mixed Year 1/2 class (School website, 2019). The importance of good teaching to effective learning has been widely documented (Hattie, 2009). Donaldson (2015) highlights twelve pedagogical principles that relate pedagogy with the purposes of the new curriculum. The pedagogical principles I will reflect on are those concerning Assessment for Learning, Cross-curriculum Responsibilities and setting tasks that build on knowledge and experience. I will conduct a review of literature for the research surrounding each principle and then reflect on my progress of implementing each principle. In my reflection, I will refer to the illustrative examples that accompany this portfolio.

Principle One: Good teaching and learning means employing assessment for learning principles

An assessment for learning (AFL) approach enables teachers to adapt their teaching to meet the needs of their learners, by gaining a deeper understanding of learning (Donaldson, 2015). Assessment is essential in supporting learning. Formative assessment is a constant regulation of learning and takes place constantly in classroom interaction (William, 2002). Black and Wiliam (1998) concluded that 'Assessment for learning' was a more appropriate term than 'formative assessment' as it was not open to as many different interpretations (Wiliam, 2017). Black and William (1998) were the first to publish the concept of Assessment for Learning. AFL sees the importance of assessment for improving learning, as opposed to just proving that learning has taken place as summative assessment does. AFL is about finding out where a learner is, knowing and making explicit where the learner needs to get to and showing the learner how to get there (ARG, 2002). When transferring AFL research into working practice, the ideas that motivated teachers in the research to alter their practice were drawn from the four areas of AFL: quality of questioning; quality of feedback; sharing criteria with learners; peer and self-assessment (Black et al., 2003). There are a range of strategies that enable these areas to be implemented in classroom practice, as will be expanded on in my reflection.

Assessment for learning was highlighted as the major means of raising standards. Further, Black and William (1998) found that where pupils are given high quality support and feedback and are encouraged to take responsibility for their learning, they learn more effectively. This offers support for the importance of this pedagogical principle (Donaldson 2015). Hallam et al. (2004) expands on an evaluation report conducted in UCL of the impact of formative assessment on pupils. The findings showed an increase in learners confidence and motivation. Pupils also recognised their strengths and weaknesses. AFL therefore develops learners resilience as they take responsibility for their own learning; which links to Donaldson's four purposes (Donaldson 2015).

It is vital that assessment for learning involves students in the process. It is vital that teachers use the constant information about student achievement in the everyday classroom to advance student learning (Stiggins, 2002, p.761) The effect of AFL is that students remain confident that they are learning learning at a productive level. Afl seeks to support the learning process as it unfolds. This arguably reflects a more accurate picture of a learners development, as opposed to formal summative assessment. It also means that teachers can adapt to their learners needs, as instructional decisions are informed by accurate on-going information about student achievement. (Stiggins, 2002, p.764).

When appraising Black and Wiliam's (1998) research, Stiggins (2002, p.764) argues that if assessment for learning becomes standard classroom practise, then there is no other school innovation that compares to the effects of AFL. AFL enables students to monitor their own learning and progress, 'which is the foundation of lifelong learning' (Stiggins, 2002, p.764) Currently in Wales there has been significant good practice shown in this area, although there is a lot of variation within and between schools and further development needed (Welsh Government, 2010)

During my Professional Teaching Experience (PTE) part 1, I found the planning of this principle quite straightforward. In my first week of placement, I was able to observe my class and this gave me an opportunity to see how AFL strategies were implemented. The strategies I implemented in PTE1 focused on the areas of AFL of questioning, use of feedback and peer and self-assessment.

At the beginning of placement, amongst other AFL strategies, I specifically focused on questioning to create quality discussion. I was encouraged by the learners responses to the various types of questions that I used in my early lessons, as these created meaningful discussion (Illustrative example 1). I tried to plan questions that would invoke higher order thinking, such as evaluation and reasoning. I found these more difficult to implement

regularly. Rosenshine (2012) notes taxonomies like Bloom's Taxonomy are helpful for supporting planning for higher order thinking and strengthens purposes for learning. In the next part of PTE, I need to implement a range of questions that invoke different types of thinking to aid my progression in this principle. After reflecting on my first few lessons, I realised that I was not giving enough wait-time for learners to generate an answer to questions. I introduced the Think-Pair-Share strategy to try and overcome this (Illustrative example 1). I must give learners more time to think when questioning in general.

During the initial weeks of PTE, I found that obtaining and distributing feedback did not work very well in whole-class plenaries if the lesson had featured different carousel activities. In illustrative example 2, I altered my strategy and by doing plenaries in small carousel groups, it meant I could give learners more high-quality feedback. The Education Endowment Foundation (2018) indicate that if feedback is effectively distributed, then the impact on students learning is significant. Giving immediate verbal feedback meant that my learners were aware of how to improve as they did the task. In illustrative example 2, I was unable to give effective feedback to all learners, as a few pupils requiring my attention. I need to improve on my administration of immediate feedback in the next part of PTE, for all learners to benefit.

I felt unsure at the beginning of placement of how to implement peer-assessment in my lessons, as the learners had not done a lot of it beforehand. In illustrative example 4, I was encouraged by the learners engagement with the verbal peer-assessment 'Star-Star-Wish' I had implemented. I was pleased to see learners giving constructive comments to help one another make progress. This discussion built upon the level of collaboration established in lesson introductions from questioning, as peer-assessment encourages involvement (Weaver & Cotrell, 1986, p.301). It was around the halfway point of my placement that I focused my AFL planning on self-assessment. I implemented the traffic light strategy where appropriate. In illustrative example 3, I gained the most beneficial feedback from following up the self-assessment with the learners to discuss their feelings about their work. I must continue to do this, as discussion gave me an insight into how they viewed their learning. This aligns the assertion that self-assessment leads to meaningful reflection (Sluismans, Dochy & Moerkereke, 1999, p.297).

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

The new curriculum proposes importance of the embedding of the Cross-curriculum Responsibilities of Literacy, numeracy and digital competence into all teaching (Donaldson, 2015). The existing Welsh Government's Literacy and Numeracy Framework (LNF) and Digital Competence Framework (DCF) will be embedded in the curriculum. The LNF is a skills framework that is designed to help teachers embed literacy and numeracy skills throughout all aspects of the curriculum (Welsh Government, 2013). For learners to reach their full potential, it is vital that they have the literacy and numeracy skills needed for this (Welsh Government, 2013). Therefore, effective planning and implementation of this principle can enable successful skills development.

Literacy and numeracy skills are the main priority for a twenty-first century curriculum (Thomas and Lewis, 2016). In a recent survey, many teachers rated Welsh Government policies. Results showed that around 65% of primary school respondents rated the LNF as a good or very good initiative (Grigg, 2016). Interestingly, previous literature has argued that implementing Foundation Phase principles alongside a prescriptive LNF could be a challenge (Thomas and Lewis, 2016). However, this cannot take away from the importance of equipping young learners with these essential skills.

In support of this principle, it has previously been concluded that improvement of literacy and numeracy skills of Welsh pupils may lie in cross-curricular work (Hopkin, 2015, p.20). Cross-curricular approaches have been proven to strengthen teaching and learning and is deemed the long-awaited 'Holy Grail' for education (Hayes, 2010, p.381). The Rose Review showed that this approach develops children's skills and knowledge in a creative way, through interrelated topics (Hayes, 2010 p.383). This arguably makes education more meaningful and relevant for children as skills and knowledge are transferrable. Following the introduction of the LNF, a recent Estyn report has shown a school in South Wales' development of outdoor activities that showed rich enhancement of literacy and numeracy skills such as Forest Schools (Estyn, 2018a). This shows how literacy and numeracy skills can be applied to many creative and meaningful contexts.

The DCF was the first element of the new curriculum to be introduced (Welsh Government, 2018). It focuses on developing digital skills that can be applied to a wide range of subjects and scenarios. Being digitally competent is vital in everyday life which reflects the importance of this principle. The DCF consists of four areas where skills can be developed: citizenship, interacting and collaborating, producing and data and computational thinking. Sutherland et al (2004, p.422) showed that the use of digital technologies enabled student engagement for longer periods of time, than tasks that did not explore digital skills. This provides support for this principle in obtaining learners sustained engagement.

A further Estyn (2018b) report has shown how a school's implementation of DCF rich tasks enabled the

development of pupil leadership and raised standards in core subjects and cross-curricular skills (Estyn, 2018b). Opportunities to share good practice with other schools have emerged from these developments and this therefore creates more consistency in implementation of DCF and the cross-curricular responsibilities from school-to-school.

At the beginning of placement, I struggled with knowing which aspects of the LNF and DCF to focus my planning on. I had advice from my mentor about how to create lessons that featured rich cross-curricular tasks that would develop the learners skills appropriately. I was able to gain in confidence in planning and implementing the cross-curricular skills in meaningful ways.

I found that planning for literacy as a cross-curricular responsibility was straightforward from the start of PTE and I felt most confident in this area throughout. In illustrative example 5, the oracy focus of the PSE lesson meant that learners could mediate conversation, turn-take, question each other and respond to peers views. Learners use talk to 'interthink' and make joint sense of the world (Mercer and Mannion, 2018, p.17). This cross-curricular element was purposeful in a lesson like this as it enabled the natural development of collaborative oracy skills. I initially found the planning for the writing elements of the LNF not as straightforward. Using the LNF helped me to generate ideas for lesson activities. As noted in illustrative example 7, Learners developed a better understanding of the task, as they were verbalising the writing process they were then going to carry out. This gave me an insight into how the cross-curricular skills can be combined meaningfully. In order to fully implement this principle, I need to now focus on planning tasks that develop children's reading skills.

At the start of placement, when planning numeracy as my cross-curricular focus, I felt that I had slightly forced the implementation and that it was not the best fit for the lesson (illustrative example 8). However, upon reflection, the learners engaged well with the activities and developed a good understanding of the numeracy skill implemented. During my placement, I taught a lot of lessons whereby mathematics was the lesson focus. This may account for my lack of progress in implementing numeracy as a cross-curricular skill. I did not feel confident in knowing how to best incorporate numeracy appropriately and need to focus my attention here in the next part of PTE.

I felt relatively confident throughout PTE in planning tasks that would develop learners digital competence skills. As noted in illustrative example 9, by implementing DCF in the lesson, meant that the children displayed a good level of understanding of key sentences patterns and vocabulary in Welsh. Using DCF in a welsh lesson enabled learners to see how these skills are transferrable in cross-curricular teaching. After the success of this lesson, I felt confident in continuing to plan for DCF provision. Illustrative example 10 shows how learners developed their evaluation skills by self-assessing on digital software. I planned this task in this way so that learners could utilise their evaluation skills digitally. The difficulty in implementing DCF in lessons was due to the availability of resources and I will need to consider this in the next part of PTE when planning for whole-class lessons.

Principle Three: Good teaching and learning sets tasks and selects resources that build on previous knowledge and experience and engage interest

The need to set tasks and resources that build on previous knowledge and experience is essential to the progression and engagement of learners (Donaldson, 2015). Husbands and Pearce (2012) similarly asserted that 'effective pedagogies build on pupils' prior learning and experience' (p. 6) Therefore, it is crucial that planning and teaching is informed by learning. Much of the research into how children learn and make progress developed from constructivist ideas of learning. The work of Vygotsky informs this principle significantly, as it positions social interaction at the fore point of effective learning (Husbands and Pearce, 2012). Vygotsky affirms that guiding learners in pedagogy that builds on current knowledge will enable the learner to progress independently in their learning (Husbands and Pearce, 2012). This is known as the 'zone of proximal development', which refers to the distance between what the learner can currently do independently and what the learner could achieve with appropriate guidance from a skilled other (Vygotsky, 1978).

When considering the ZPD, it is important to engage the child in activities that build on this current level of knowledge in order to progress to the level of achievement that is desired (McLeod, 2019). It is key that activities are introduced that will engage a child's prior knowledge, to form new learning (Clark and Lyons, 2011). The importance of activating prior knowledge has been proposed as a key learning event (Gagne, 1985). For learning to be successful, new lesson content must be combined with prior existing knowledge (Clark and Lyons, 2011). This shows that activating prior knowledge is a catalyst for productive learning and progression (Donaldson 2015). Fisher, Frey and Lapp (2012, p.22) conclude that learners will engage more with learning experiences, if these experiences have built on previous ones of a similar nature. This finding shows how sustained engagements creates productive learning.

It is important that background and previous knowledge is accessible. It is accessible when is tied to other knowledge. This aligns with Donaldson's (2015) principle of having a cross-curricular approach to learning,

where skills and knowledge can be accessed holistically and are not subject specific. It is an essential principle as previous knowledge is accessible then learners can therefore apply this knowledge in many different lesson contexts. Rosenshine (2012) has asserted multiple key principles of teaching that align with Donaldson's. One of these principles is to review previous learning at the beginning a lesson. In doing so, this can strengthen previous learning and leads to a deeper understanding of new information. Rosenshine (2012) discusses how effective teaching features a review of previous learning and activates prior knowledge. By implementing this principle, teachers can be confident in knowing that their learners have grasped the skills needed to progress. This again offers support for Donaldson's principle as it illustrates that knowledge building is a universal aspect of effective teaching (Sherrington, 2018).

At the beginning of PTE, planning tasks that built on previous knowledge was difficult because I did not know my learners. I also did not know the learners and therefore it was more difficult trying to plan tasks that I thought would be engaging. Hattie (2012) highlights the importance of knowing learners when planning lessons and having a 'deep understanding' of what their learners already know for teaching to be effective (p. 42). Being new to the class, I did not have this understanding in the initial stages of PTE.

Although it was difficult at first to build on learners knowledge, as the placement continued I became much more aware of the learners previous experiences and how I could best support them going forward. I used a lot of activating prior knowledge in my lesson introductions, which enabled learners to make connections between previous knowledge and new learning. Fisher, Frey and Lapp (2012, p.23) note that crucially, for learning to be continuous then background knowledge must be validated and extended to ensure progress. As shown in illustrative example ... this was my first time teaching a welsh lesson. I therefore lacked a full understanding of the learners knowledge of welsh. However, as the placement went on I was able to extend the learners in the second lesson (illustrative example 11). I had noted in my learning journal within the first lesson that some children were not as confident in using some the welsh sentence patterns I had set. This again shows the difficulty in planning for this principle when I was unaware of the learners level of welsh. In the second lesson I then took this into account, ensuring I appropriately challenged learners. It was beneficial to plan similar tasks for the second lesson as the children were able to extend their use of sentence patterns more confidently as it built on what they had previously done. I therefore need to ensure I continue to implement this principle in the next part of PTE by creating tasks that connect prior and new learning and engage pupils.

As the placement went on, I became more attuned to my learners and this led to more effective planning of tasks. Having taught many maths lessons during my placement, this enabled me to develop this principle considerably. I was able to plan and develop previous lessons and decide how I could adapt them so that learners made progress. In illustrative example 12, even though the two lessons differed in their focus: one addition, the other subtraction, they both developed the learners problem-solving skills. The decision to administer the maths lessons in this way was because the children needed further practise of vertical addition, but also ready to extend their thinking in problem solving activities. The children were more familiar with the worded problems in the second lesson and engaged more confidently by offering answers readily to each other. I need to ensure that in the next part of PTE I can deliver lessons that build on learners knowledge, engage my learners and make learning memorable (illustrative example 13).

Conclusion

In conclusion, I feel I have made good progress in implementing the three pedagogical principles discussed, but there are many ways in which I can develop these further in the next part of PTE. To fully develop AFL, I must regularly share criteria with learners as this something I often planned for but I did not always make explicit in implementation. I also need to develop my questioning techniques. In order to develop my cross-curricular teaching, I need to research ways of appropriately embedding numeracy in lessons. I also must continue to plan lessons that enable learners to build on their previous knowledge. By relating existing research with my practice, I can see how the principles interrelate to enable effective teaching and learning.

References

Friday, January 3, 2020 9:33 PM

References

ARG (2002) *Assessment for learning: 10 principles: research-based principles to guide classroom practice*. Assessment Reform Group. Available at: <https://www.aaia.org.uk/storage/medialibrary/o1d8j89n3u1n0u17u91fdd1m4418fh8.pdf> (Accessed 15th December).

Black, P., Harrison, C., Lee, C., Marshall, B., Wiliam, D. (2003). *Assessment for Learning: Putting it into practice*. Maidenhead: Open University Press.

Black, P., & Wiliam, D. (1998). *Inside the Black Box: Raising standards through classroom assessment*. London: King's College London School of Education.

Clark, R. C., & Lyons, C. (2011) *Graphics for Learning: Proven Guidelines for Planning, Designing, and Evaluating Visuals in Training Materials*. CA: Pfeiffer.

Donaldson, G. (2015) *Successful Futures Independent Review of Curriculum and Assessment Arrangement in Wales*. Available at: <https://gov.wales/sites/default/files/publications/2018-03/successful-futures.pdf> (Accessed: 8th December 2019).

Education Endowment Foundation. (2018) *Feedback: High impact for very low cost, based on moderate evidence*. Available at: <https://educationendowmentfoundation.org.uk/evidence-summaries/teaching-learning-toolkit/feedback/> (Accessed 17th December 2019).

Estyn (2018a) *Developing pupils' skills across the curriculum*. Available at: <https://www.estyn.gov.wales/effective-practice/developing-pupils'-skills-across-curriculum> (Accessed 20th December 2019).

Estyn (2018b) *Putting digital learning at the heart of the curriculum*. Available at: <https://www.estyn.gov.wales/effective-practice/putting-digital-learning-heart-curriculum> (Accessed 20th December 2019).

Fisher, D., Frey, N., & Lapp, D. (2012) 'Building and activating students background knowledge: It's what they already know that counts', *Middle School Journal* <https://doi.org/10.1080/00940771.2012.11461808> pp. 22-31.

Gagné, R. M. (1985). *The conditions of learning and theory of instruction* (4th ed.). New York: Holt, Rinehart & Winston. In, Clark, R. C., & Lyons, C. (2011) *Graphics for Learning: Proven Guidelines for Planning, Designing, and Evaluating Visuals in Training Materials*. CA: Pfeiffer.

Grigg, R. (2016) 'Leave me alone and let me teach. Teachers' views of Welsh Government education policies and education in Wales', *Wales Journal of Education*, 18(1) pp. 64-86.

Hallam, S., Kitson, A., Peffers, J., Robertson, P., & Stobart, G. (2004). Evaluation of Project 1 of the Assessment is for Learning Development Programme: Support for professional practice in formative assessment. Institute of Education, University of London. Available at: <https://www.webarchive.org.uk/wayback/archive/20180518134848/http://www.gov.scot/Publications/2004/10/19947/43007> (Accessed 14th December 2019).

Hattie, J. A., (2009) *Visible Learning: A Synthesis of Over 800 Meta-analyses Relating to Achievement*. New York: Routledge.

Hattie, J. A. (2012) *Visible Learning for teachers*. New York: Routledge.

Hayes, D. (2010) 'The seductive charms of a cross-curricular approach', *Education 3-13*, 38 (4), pp. 381-387.

Hopkin, J. (2015) *Investigation into the Development of Numeracy across the Curriculum in a South Wales Comprehensive School*. Doctoral dissertation, Cardiff Metropolitan University. DOI: <https://pdfs.semanticscholar.org/c196/1c4f315c66064cc8f9c72bcfe16de3dd1e43.pdf>

Husbands, C and Pearce, J (2012) *What makes great pedagogy? Nine claims from research*. National College for School Leadership. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/329746/what-makes-great-pedagogy-nine-claims-from-research.pdf (Accessed 19th December 2019).

McLeod, S. A. (2019). *What Is the zone of proximal development?. Simply Psychology*. Available at:

<https://www.simplypsychology.org/Zone-of-Proximal-Development.html> (Accessed on 28th December 2019).

Mercer, N. & Mannion, J. (2018) *Oracy across the Welsh curriculum: A research based review: key principles and recommendations for teachers*. Available at: <https://oracycambridge.org/wp-content/uploads/2018/07/Oracy-across-the-Welsh-curriculum-July-2018.pdf> (Accessed 18th December 2019).

Rose, J. (2009). *Independent review of the primary curriculum: Final report*. London: DCSF Publications. In, Hayes, D. (2010) 'The seductive charms of a cross-curricular approach', *Education 3-13*, 38 (4), pp. 381-387.

Rosenshine, B (2012) *Principles of Instruction: Research-based strategies that all teachers should know*. *American Educator*. <https://www.aft.org/sites/default/files/periodicals/Rosenshine.pdf> (Accessed 16th December 2019).

School Website (2019) *Home*. Available at: [https://www. \[REDACTED\].co.uk](https://www. [REDACTED].co.uk) (Accessed 10th December 2019). (school name in URL blocked).

Sherrington, Tom (2018) *Exploring Barak Rosenshine's seminal Principles of Instruction: Why it is THE must-read for all teachers*. *Teacher Head*. Available at: <https://teacherhead.com/2018/06/10/exploring-barak-rosenshines-seminal-principles-of-instruction-why-it-is-the-must-read-for-all-teachers/> (Accessed on 16th December).

Sluijsmans, D., Dochy, F., & Moerkerke, G. (1999) 'Creating a learning environment by using Peer and co-assessment', *Learning Environments Research*, 1, pp. 293-319.

Sutherland, R., Armstrong, V., Barnes, S., Brawn, R., Breeze, N., Gall, M., Matthewman, S., Olivero, F., Taylor, A., Triggs, P. & Wishart, J., (2004) 'Transforming teaching and learning: embedding ICT into everyday classroom practices', *Journal of Computer Assisted Learning*, 20(6), pp.413-425.

Stiggins, R.J., 2002. 'Assessment crisis: The absence of assessment for learning'. *Phi Delta Kappan*, 83(10), pp. 758-765.

Thomas, A. & Lewis, A. (2016) *An introduction to the Foundation Phase: Early Years Curriculum in Wales*. London: Bloomsbury.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.

Weaver II, R. & Cotrell, H.W. (1986). 'Peer evaluation: a case study', *Innovative Higher Education*, 11(1), 25-39. In, Sluijsmans, D., Moerkerke, G. & Dochy, F. (1999) 'Creating a learning environment by using Peer and co-assessment', *Learning Environments Research*, 1, pp. 293-319.

Welsh Government (2010) *Why develop thinking and assessment for learning in the classroom?*. Available at: <https://s3-eu-west-1.amazonaws.com/hwb-live-storage/05/ae/7b/09/4ca143999dea481cd5d23846/why-develop-thinking-and-assessment-for-learning-in-the-classroom.pdf> (Accessed 14th December 2019).

Welsh Government (2013) *National Literacy and Numeracy Framework. To support schools in introducing the National Literacy and Numeracy Framework*. Available at: <https://hwb.gov.wales/storage/64812b0e-3d20-4d10-94e8-68221e47a38d/to-support-schools-in-introducing-the-national-literacy-and-numeracy-framework.pdf> (Accessed 16th December 2019).

Welsh Government (2018) *Digital Competence Framework guidance*. Available at: <https://hwb.gov.wales/storage/337437b8-cfe3-4305-ae32-f47ad82f3e76/digital-competence-framework-guidance-2018.pdf> (Accessed 17th December 2019).

Wiliam, D. (2002) 'Thinking Through Assessment: An Interview with Dylan Wiliam', *English in Education*, 36 (3) pp. 47-60.