

**A critical analysis of the relationship
between teacher subject knowledge and
effective learning and teaching in the
primary school.**

Introduction

Introduction

To begin this essay, I will firstly discuss the current literature surrounding the primary school teacher's subject knowledge. This will then allow me to critically reflect upon and analyse my own subject knowledge to continue to develop in the future. This process will be based upon my Professional Teaching Experience (PTE) in my current placement school. For ethical reasons, I will be keeping the school, the staff and the student's names anonymous. Throughout the essay will I refer to the placement school as School A and all names of student and staff members will be changed for confidentiality purposes.

School A is a very large primary school and caters for pupils between the ages of three to eleven. The catchment area for the school is large and pupils "come from backgrounds which have some degree of social or economic disadvantage." (ref, no date). Currently, thirty-two percent of children in the school are entitled to free school meals, which in comparison to the local authorities and national averages, is slightly higher. There are no children in the school that are fluent Welsh speakers and two pupils have English as a second language, however, these pupils do not receive any extra support. Also, thirty-six per cent of children are considered to have additional learning needs (ALN) which is also above the local and national authority average. I was placed in a year 3 class with a total of 30 students (16 male, 14 female) with all pupils being between the ages of seven and eight years old. There was also another year three class which shared the support of one additional teaching assistant.

The Literature Review

Literature Review

It is vitally important for any primary school teacher to recognise and scaffold each child's knowledge in the classroom. Coe et al., (2014) suggests that the most effective teachers have a greater understanding of the topic they're teaching. They also stress that teacher knowledge is more than knowing just the content of a lesson, it is also important to consider the different ways that the children learn and engage with it. This point is reiterated by Shulman (1986) and Ernest (1989) as they offer various definitions for teacher knowledge and provide explanations to the different forms of knowledge a teacher requires to be successful. It is also suggested that if the teacher's knowledge is substandard, there are direct negative effects to learning in the classroom. In a study by Ekstam et al., (2017) on the effects subject knowledge has on lower-ability children in mathematics, it was clear that teachers with higher levels of subject matter knowledge understood the content of the lesson more clearly. Teaching low-performing students in mathematics who lack the basic skills is often difficult, which is why it is vitally important that the class teacher has a sound understanding and can explain new methods and rules clearly (Boyd & Bargerhuff, 2010; Mevarech & Kramarski, 2014). However, Ekstam et al., (2017) also suggests that some of the student teachers observed struggled to motivate the children and create an interest in learning mathematics, which led to the children becoming disengaged and losing interest in their learning.

It is suggested that student teachers need to create new methods to motivate each pupil, which is achieved through building rapport and understanding the child's needs. The OECD (2016) state that lower-achieving students tend to be less motivated to learn due to a lack of confidence to complete work, which is why it is imperative for the teacher to create a supporting environment where the children are ready to tackle all educational opportunities. To achieve this when working with lower-achieving children, it is vital to have high self-beliefs to remain interested and motivated towards developing their own practice (Kings-Sears et al., 2014). In other terms, it is important for any teacher to keep up to date with both content and pedagogical knowledge, continuously thinking of new ways to keep the learning interesting and relatable to the children. This is also highlighted by Mageira et al., (2005), who found that teachers require a combination of subject and pedagogical knowledge to create the right educational setting to learn. The points above already

suggest that teacher subject knowledge is very broad and is a combination of different skills and strategies.

A similar study by Rowlands et al., (2003) observed and scrutinised twenty-four maths lessons both planned and delivered by trainee teachers working in the primary school. From the vast amounts of data, the results of the observations were separated into four different groups. These groups were named foundation, transformation, connection and contingency and make up the concept of 'the knowledge quartet'. Throughout the study there was an obvious focus on subject matter knowledge (SMK) and pedagogical content knowledge (PCK) and how they affect learning in the classroom (Rowland et al., 2003). Ekstam et al., (2017) defines subject matter knowledge as knowing the topic and what is being taught. It is important that as professionals, we consider different concepts, facts, the skills involved and to also offer reasoning or evidence.

During the study, a student teacher named Naomi was observed in a mathematics lesson. The learning objective highlights that the children are to understand that both 'take away' and 'the difference between' are the same. 'The Knowledge Quartet' groupings were used to provide Naomi with feedback on the four key areas of teacher content and pedagogical knowledge. The foundation category examined the trainee's knowledge, beliefs and understanding, as they were identified as key areas to develop in preparation for the responsibility of having their own classroom. At first, it was highlighted that the children struggled to understand the concept of the difference after recapping previous work on 'how many more?'. Naomi used questioning to draw information and understanding from the children, with the children responding correctly to the question. However, when posed the question of "the difference between," Jeffrey was unable to respond to Naomi's cues from previous questions and workings out. This led to Naomi being more explicit by saying "we can say that another way." It is evident that the student-centred approach to learning has disappeared, as it takes away the cognitive understanding of the what difference and take away mean.

Both Piaget (1972) and Vygotsky (1986) strongly believed that social interaction and thoughts helps to piece together new information and build relationships between different topics. This point is also reiterated by Lantolf and Thorne (2006), who suggest that oral communication isn't just a result of thinking, it is something that can help us

to guides our thoughts and develop a deeper understanding. This suggests that Naomi's choice to question the children was correct, as it allowed her to check for understanding and challenge the learners further.

The next group in the knowledge quartet is transformation. This category requires the teacher to hold a solid understanding in both planning and delivering lessons (Rowlands et al., 2003). This is again shown by Naomi during the next activity, as children completed number bonds of 10 to help recap previously learnt information. The activity allowed the children to practice counting forwards, which is a key skill for finding the difference between two numbers. Moving into the next category, it was clear that Naomi had an opportunity to make two significant connections. According to Rowlands et al., (2003), the connection category is where children piece together what has been taught in previous lessons and pair it with new knowledge. During Naomi's next task, it was clear that she was trying to establish a link between the partitive and comparative approaches to subtraction. This was achieved by completing the two approaches in their own unique ways and recording them in the same form, for example $x - y = z$. This made the comparison easier for the children, as they were able to see that both methods looked identical in written form. The second connection established was evident in the practical counting on activity, as she says, "we can do this on our fingers as well". This is deemed a positive aspect of Naomi's lesson as it allowed the children in the class an option of which method they felt most comfortable using, as well as helping the children develop an understanding of the of the two terms. The final category of the knowledge quartet is contingency. This category highlights the areas that are hard to plan for and requires the teacher to act in the moment. This requires the teacher to listen and respond to each child's ideas throughout each lesson. Throughout Naomi's lesson there was a clear disinterest towards responding towards the pupil's thoughts and ideas, despite them offering her several chances to do so. Brown and Wragg (1993) suggest that our ability to listen lessens with anxiety, which could be deemed a similar case with Naomi, as she seemed unwilling to respond or listen to children's ideas. This suggests that if a teacher is uncertain over their own subject matter knowledge, it is harder to respond to children's questions and allow them to take control over their own learning.

One of the main authors, Shulman (1987), argues that teacher knowledge is broad, as to be an effective teacher it is required to have a full understanding of the content,

pedagogy and pupils. This is comparable to Rowland et al., (2003) 'The Knowledge Quartet' as they also suggest that teachers need a wide scope of all aspects to learning, to develop a deeper understanding and enhance their own practice. Shulman (1987) uses Coleen, a student teacher with a master's degree in English, as an example to show the results of a teacher that holds a solid knowledge of both subject and pedagogy. It was obvious that Coleen felt confident in her teaching as she always taught English with an enthusiastic approach. One of the key strengths to Coleen's practice was her ability to include the children in the learning that took place, creating a holistic approach to learning. The lessons that she planned motivated the students as they were tailored to the interests of her class. For example, Coleen used a popular rock song that all pupils in her class liked and asked them to re-write the work using synonyms. Coleen also offered discussions throughout the writing, asking pupils to share what they have written about, which in turn sparked discussion between class mates. It was clear that her own confidence in her subject matter knowledge and pedagogical content knowledge made it easier to teach with more efficiency. The results of this show an increase in the pupil's motivation and willingness to participate and engage in the learning.

However, when Coleen is faced with the task of teaching a skill outside of her comfort zone, it is obvious it has had a direct effect on her confidence to teach with same approach to previous lesson on literature. In the new unit of work on grammar, a topic of which Coleen shows a lack of interest from previous experience, this is evident as the interactive, student-centred approach to teaching had disappeared, with little or no discussions being held. This point is further reiterated, as Coleen even admitted to observers that she avoided eye-contact with a pupil in the front row, as she asked questions that were difficult or didn't know the answers too. From this research, it could be suggested that a teacher's subject knowledge allows them to access better learning in the classroom, as the teacher is more able to apply a student-centred approach by holding more in-depth discussions and responding to children's thoughts or opinions. This is an important point to consider, especially with the new curriculum by Donaldson (2015) coming into place in the next few years, as this style of teaching is going to be a big part of future practice. As the world is changing at a fast pace, Donaldson has made it clear that we need to teach children a wide-range of skills, so that they can be successful in the jobs that have yet to have been created. However, for the curriculum

to be a success, it is the teacher's responsibility to possess a sound knowledge of all areas of learning as lessons are cross-curricular. This could become a great challenge to teachers who specialise in certain subjects, as they will need to think of new ways to include the key areas of learning into their lesson plans.

Analysis and evaluation of subject knowledge for primary teaching

Analysis and evaluation of subject knowledge for primary teaching

In this section of the essay, I will critically analyse and evaluate my own subject knowledge from my first teaching placement. To achieve this, I will draw upon my own experiences whilst out on placement and highlight what I can do differently in the future to improve my own practice. As I was teaching in a year three class, I believed that my subject matter knowledge was of a decent enough standard to teach each of the subjects. However, I strongly believed that I needed to develop my pedagogical knowledge, as working with my own class was never something I had experienced previously. It is also to be noted that many of the children in the class had additional learning needs and were at a low level in comparison to guidelines.

At the start of the placement in School A, the children were learning how to add three-digit and two-digit numbers using the column method (see Appendix 1 for lesson plan). Despite having a sound understanding of how to add using the column the method, I didn't consider the needs of the lower ability children in the class, as some of them struggled to lay out the columns. As a result, children were not able to access the work planned. These issues mainly occurred due to some of the lower ability children not being able to form numbers correctly or use rulers to draw tables. During the lesson I had to think of a way to make the work accessible to them. This was achieved by sitting the children together in a small group, as this way it was easier to manage. By drawing out the tables for them it allowed them more to freely practice their number formation as they were completing calculations, as they were allowed more room to work within. This relates to the contingency category in Rowlands et al., (2003) 'the knowledge quartet.' It was highlighted that at this stage it is important for the teacher to be able to think on their feet, which was required when I needed to change the lesson for the lower-ability children.

As I was following a scheme of work, I didn't take into consideration the alterations I needed to make it successful for the class I was working with. In the next lesson I planned resources (see Appendix 2) to overcome the difficulties the lower-ability children were having regarding lay out. These grids made it easier for the children to access the work, as it was easier for them to practice number formation and could clearly see how the column method worked. By the end of this unit of work, many of these children were able to use the method confidently with others remaining on

working with smaller numbers. Reflecting on this incident, I should have taken into consideration the ability of the children and provided them with the resources needed to allow them to access the work from the beginning of the unit.

In the Inquiry Based Learning lessons, several different subjects were taught that all interlinked and connected with each other under the same topic of islands. The first subject within this area of learning that I would like to discuss is Literacy. Literacy was one of the key areas I needed to improve my subject matter knowledge the most. I felt that prior to the placement, I had little to no experience in teaching English to a full class of children. In some aspects of the teaching I felt comfortable delivering lessons, as I had good understanding of the content. An example of this is seen in my lesson on the use connectives (see Appendix 3 for lesson plan). This task was created in preparation for children to write their own newspaper reports on the towns history. It seemed that throughout the many of the children enjoyed learning about where they live and really got engaged with the task. As the planning required a lot of research into the history of where the school was situated, I felt confident in answering questions and discussing with students why they had selected certain connectives to join facts together. However, this was not the case in my lesson on collecting information in preparation for writing the report (see Appendix for lesson plan), as the children couldn't fully understand how to find the information that they needed. This required a lot of one-to-one attention for the children that had problems with their reading and spelling, making it difficult for many of these children to focus and have interest in what they are learning. Again, this indicates that I need to further develop my content matter knowledge for literacy and continue to think of creative ways to get my children interested in their learning.

This a similar example to Coleen from Shulman's (1987) work on teacher subject knowledge. In some aspects of literature, Coleen was very able to teach new skills to a high standard, which is shown in her lesson using the classes favourite rock song at the time. This created an interest in the topic for the children, with most of them paraphrasing the song with no fuss. In my lesson, I used the connectives activity as a hook to get the children excited and engaged in something they find both relatable and interesting. The student-centred approach applied here is important to consider as the new curriculum by Donaldson (2015) will require this to be implanted correctly as it will make it easier for the children to take charge of their own learning and create links

across the curriculum. In contrast to this, when I felt I knew less about the content being taught, I felt less able to challenge the needs of all the children in the class. This was also evident when Coleen taught a lesson on grammar, something she wasn't comfortable teaching due to her lack of knowledge on the subject. As a result, this led to there being a lot less discussions between her and the children, as well as the children being less engaged in the lesson, taking away the student-centred approach created in previous lessons. This suggests that a teacher's subject matter knowledge has a direct effect on pedagogical content knowledge, as a teacher's competency to teach the content changed the way both myself and Coleen taught lessons and responded to the needs of the children.

Next, I will discuss the importance of pedagogical content knowledge within my History lesson. In this example, I am introducing a new topic as part of the remembrance of the end of the first world war (see Appendix 6 for lesson plan). I am highlighting this lesson as it was difficult for me as I was teaching half of a class that I hadn't previously worked with, and with basic knowledge of the subject despite research into the topic. To allow the children to share what they had already learnt in the carousel of activities, I believed it was important to offer the children to share their thoughts on the topic. When this is compared to Rowland et al., (2003) the knowledge quartet, this has clearly laid the foundation to the lesson, as I was using the knowledge I had to spark discussion and test the learners. As I was teaching new children, this also gave me a good understanding of how much experience they have had on the topic. It was also useful to discuss the previous work from the carousel, as this allowed them to make connections and deepen their understanding through what they had previously learnt.

The last subject that is included in the Inquiry Based Learning lessons is Geography. Towards the end of the unit of work, the children focussed their attentions to Hawaii, and the differences between there and the area they live. I taught a lesson on how food differs between the food places (see Appendix 5 for lesson plan), which had the aim of creating a student-centred approach to learning by using group discussions and research task. Prior to the lesson, I felt it was important to give the children a new experience, as this would make them more excited about a topic they spent a lot of time on. These decisions were again helped my previous experiences of working with the class, as they helped me think of new ways to challenge and engage them. In the lesson, I offered the children the opportunity to try fruits from both Wales and Hawaii.

This made the children excited to learn and I had their full attention for the whole lesson. This lesson also highlighted how my lessons may be taught in the future. As I was on placement in a pioneer school, I was able to be more creative in my lessons and try to include other parts of the curriculum into my lesson plans. This was achieved by introducing a numeracy activity, where the children were required to sort the fruits into different categories using a Venn Diagram. The children were also allowed the use of iPads, so that they could research the foods they had eaten. Throughout the lesson I also stressed the importance of using Welsh when referring to the different fruits. This again reverts to the importance of planning lessons that suit the ability of the children and providing them with opportunities to be challenged. These are important points to consider for my future practice, as the new curriculum is demanding and requires the teacher to be creative in their planning, as well as possess a sound content and pedagogical knowledge (Donaldson, 2015).

Conclusion

Conclusion

In conclusion, it is evident that from both the research and my own experience, that teacher subject knowledge requires a sound PCK and SMK, as the combination of both creates more opportunities to challenge and enthuse learners. Many people may misconceive teacher knowledge as knowledge of what is being taught, this has however, been proved to be false as many key authors surrounding the topic also believe it to be something that drives our pedagogical thinking (Rowland et al., 2003; Shulman, 1987). By reflecting on my own performance whilst out on placement, it has enabled me to highlight areas that I need to further improve upon and areas that are considered strengths. For example, in my future practice the new curriculum by Donaldson (2015) needs to be considered in all aspects of my planning. This would include adopting a student led approach, as research suggests that children become more engaged and interested in the work being taught. Another area I need to improve upon is my overall subject knowledge in literacy, as I don't feel as confident when teaching in comparison to the mathematics lessons, which is where I am most comfortable. This sets myself and many other student teachers the challenge of being creative in planning lessons and constantly thinking of new ways to hook the learners. It is now important that I continue to improve my own practice by in all areas of the curriculum, as the benefits of possessing a sound knowledge base allows children to flourish.

Word Count: 3887

Appendices

Appendix 1

Canolfan Addysg Athrawon De-Orllewin Cymru  The South West Wales Centre of Teacher Education		1B	
Session Plan – Key Stage 2			
Name of trainee: Gareth Price		Session ref: M081118(1-3)	
Personal target(s) in relation to QTS: S3.3.6 - They take account of the varying interests, experiences and achievements of all those they teach to help learners make good progress.			
Year group: 3	No. of learners: 15	ALN: SB may struggle with task, use differentiation resources.	
Additional Adults: Sarah Evans			
Learning objective(s): Adding with renaming using 2 and 3-digit numbers.		Success criteria: Using previously learnt long addition methods to progress from singular numbers to two-digit numbers.	
Links to previous learning: Progression from adding with 3-digit and singular numbers using long addition methods.			
Curriculum coverage (range, skills): - explain the value of a digit in numbers up to 1 000 - read and write numbers to 1000 - use mental strategies to add and subtract 2-digit numbers			
<i>Literacy(LNF)</i> • listen carefully and make connections between what they are learning and what they already know		<i>Numeracy (LNF) -</i> • read and write numbers to 1000 • use mental strategies to add and subtract 2-digit numbers	
DCF	Thinking	ESDGC	YCC
Key vocabulary(English/Welsh): Addition, renaming, hundreds, tens, units.			
Time	Session activities, organisation and management		Key questions & Assessment for Learning opportunities
10 mins	Introduction Recap previously taught work. Practise renaming from the units into the tens. Then show them how to do this using the tens to hundreds. Introduce the guided practice and use the numbers provided to set an example for them. Ensure children choose different numbers to yours to make it more challenging.		What do we need to do if the units column adds up to more than ten? What do we think will happen if the tens column adds up to more than ten?
	Main activities Two groups of children to work on separate tables. Roughly 7 children in each group. Following Singapore maths adding with renaming lesson 8, children must first complete the guided practice using the numbers given to create their own sum (same to previous lesson).		Repeat questions used in the introduction throughout main activity.
30 mins			

	Children then move onto the main textbook of work to complete addition sums with 2 and 3-digit numbers. Differentiation – if children struggle with the step up, use worksheet which reverts to addition with 3 and 1-digit numbers to practise the method further. Children who struggle with the layout of long addition can use templates for the first few questions until they are comfortable with the work.	
5 mins	Plenary Recap what has been taught throughout the lesson and previous lessons. Ask the children for next steps working off the board.	What did you enjoy about the session? What have you learnt during the lesson? What do you need work on more or found difficult during the lesson

Appendix 2
Column Addition Layout

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Appendix 3

Canolfan Addysg Athrawon De-Orllewin Cymru  The South West Wales Centre of Teacher Education			1B	
Session Plan – Key Stage 2				
Name of trainee: Gareth Price		Session ref: L071118(1-3)		
Personal target(s) in relation to QTS: S3.3.6 They take account of the varying interests, experiences and achievements of all those they teach to help learners make good progress.				
Year group: 3	No. of learners: 15	ALN: n/a		
Additional Adults:		Sarah Evans		
Learning objective(s): Use connectives to link different pieces of information from text.			Success criteria: Understand and use connectives to make sentences flow.	
Links to previous learning: Continuing from previous lesson on highlighting key pieces of text in relation to the local area.				
Curriculum coverage (range, skills)				
- read short information texts independently with concentration - skim to gain an overview of a text - use connectives for causation and consequence, e.g. because, after				
Literacy(LNF)		Numeracy (LNF)		
- read short information texts independently with concentration - skim to gain an overview of a text - use connectives for causation and consequence, e.g. because, after				
DCF	Thinking	ESDGC	YCC – Link to the local area and its development throughout time.	
Key vocabulary(English/Welsh): Connectives, sentences, information, highlighted.				
Time	Session activities, organisation and management		Key questions & Assessment for Learning opportunities	
10 mins	Introduction Recap previous lesson, reminding them of some of the key points highlighted about the local area and its development. Input into using connectives to connect pieces of information. Show children the first activity and show them some examples of using connectives.		Can anyone tell me what we did last lesson? Does anybody know why we use connectives in sentences?	
45 mins	Main activities Children will have key points from the previous lesson cut out on the table. The children will also have sentence connectives on the table. They must create more in-depth sentences using the correct connectives. Ask children for their answers and agree on what the class thinks are the best sentences. Children can then correct their predictions.		Why did you choose to use that connective in that sentence? What other connectives could you have used instead?	

	Once the children have done this activity correctly they will then copy the sentences into their books.	
5 mins	Plenary Recap on the importance of connectives and why we use them. Talk about what the children enjoyed and what they need to work on in the future.	Why do we use connectives in our sentences? What did you enjoy? What do you need to work on further?

Appendix 4

Canolfan Addysg Athrawon De-Orllewin Cymru  The South West Wales Centre of Teacher Education				1B	
Session Plan – Key Stage 2					
Name of trainee: Gareth Price			Session ref: L191118(5-7)		
Personal target(s) in relation to QTS: - S3.1.1 They set challenging teaching and learning objectives, which are relevant to all learners in their classes. - S2.2 They know and understand the National Curriculum aims and guidelines. Learners should be given opportunities to develop linguistic characteristics of Wales.					
Year group: 3		No. of learners: 15		ALN: CW, SL.	
Additional Adults:		Sarah Evans			
Learning objective(s): - Use a template to collect and collate for writing a newspaper report.			Success criteria: - Children create success criteria at start of lesson.		
Links to previous learning: - Links to previous literacy lessons on Barry Island and how it has changed over time. - Gathering key points for the sentence starters and connectives used in previous lessons.					
Curriculum coverage (range, skills) - Note down ideas in writing. - Use vocabulary related to the topic or subject context.					
<i>Literacy(LNF)</i> - Note down ideas in writing. - Use vocabulary related to the topic or subject context.			<i>Numeracy (LNF)</i>		
DCF		Thinking		ESDGC	
				YCC	
Key vocabulary(English/Welsh): article, population, weather, temperature.					
Time	Session activities, organisation and management			Key questions & Assessment for Learning opportunities	
10 mins.	Introduction Introduce the learning objective for the lesson. How this will link in with writing a newspaper report in future lessons. Ask the children how this will be achieved and create the success criteria. Show children the template for the research on Barry Island. Explain each section and what needs to be included. Ask children questions to check for understanding of the activity.			How will we achieve this learning objective? Why do you think it is important to collect research before writing a newspaper report? What needs to go in this section? What do you think we will need to search to find these answers?	
40 mins.	Main activities Templates to be given to each individual child to complete. May work in pairs to research but must complete own sheet.			Circle the room to ensure all children have grasped the task and understand what they need to do.	

	The children must complete each section using the iPads to help them research the answer. Differentiation – Template allows all abilities to complete the work as it requires one or two-word answers, or higher ability children can expand on this further with more detail.	What do you think we will need to search to find these answers? What needs to go in this section?
10 mins.	Plenary Collect in children's work to mark. In pairs ask children to think of one fact they have found over the duration of the lesson. Ask volunteers to share facts with the rest of the class, children can then add information to their sheets to work from in future lessons. Ask children what they liked or found easy about the lesson. Also ask for what the children didn't enjoy or found hard to work on lessons to come.	What did your research find for this section? What did you enjoy about the lesson today? What did you find hard and need to work on further?

Appendix 5

Canolfan Addysg Athrawon De-Orllewin Cymru  The South West Wales Centre of Teacher Education				1B	
Session Plan – Key Stage 2					
Name of trainee: Gareth Price			Session ref: I041218(6-8)		
Personal target(s) in relation to QTS: - S3.2.2 They monitor and assess as they teach, giving immediate and constructive feedback to support learners as they progress. They involve learners in reflecting on, evaluating and improving their own performance. - S2.2 They know and understand the National Curriculum aims and guidelines. Learners should be given opportunities to develop linguistic characteristics of Wales.					
Year group: 3		No. of learners: 15		ALN: MP, CB, DL.	
Additional Adults:		Sarah Evans			
Learning objective(s): - To discover how foods in Wales and Hawaii differ.			Success criteria: - Create with children at beginning of the lesson.		
Links to previous learning: Topic work for Inquiry Based Learning on islands.					
Curriculum coverage (range, skills) - Understand aspects of cultural heritage and diversity in Wales. - How cultural values and religious beliefs shape the way people live. - Venn and Carroll diagrams.					
Literacy(LNF)			Numeracy (LNF)		
			- Venn and Carroll diagrams		
DCF		Thinking		ESDGC	
				YCC	
				- Understand aspects of cultural heritage and diversity in Wales. - How cultural values and religious beliefs shape the way people live.	
Key vocabulary(English/Welsh): healthy, unhealthy, Hawaii, Wales, food, culture, difference, compare, da iawn, bwyd, adderchog, bendigedig. Beth ydy hwn? Pa liw ydy hwn?					
Time	Session activities, organisation and management			Key questions & Assessment for Learning opportunities	
10 mins.	Introduction Sit children in a circle by the writing wall. Introduce the lesson by recapping on the previous work completed on islands and Hawaii. Read letter from Bryn Williams (Welsh chef) to the class up until the first activity is set. Ask the children to offer some examples of food from Wales and from Hawaii. Ask for a show of hands. Introduce the learning objective and create success criteria with the children. Ask children to talk in pairs about what they think will make us successful in this lesson?			Can anyone remember what we learnt about in our last inquiry lesson? What foods are grown or made in Wales? What foods are grown or made in Hawaii? What do we all need to do to achieve the learning objective for lesson?	
50 mins.	Main activities			What does the food taste like? What category is that food in?	

	Introduce the first activity set by Bryn Williams. Children are to taste some of the foods left with the letter. These include apple, coconut, mango, pineapple, strawberry and passion fruit. Pass the fruit around for the children try. Question them on whether they liked the fruit. Why did they like or dislike them? Pass more than one around at a time to allow more time for the main activity. Activity 1 - Children must sort the different foods using a Venn diagram. Question the children on previous knowledge of Venn diagrams. Discuss the different categories, which are foods from Wales, foods from Hawaii and foods from both. Model one or two of the answers by researching them with the class. Ask children to share their answers with the whole class, give feedback from research I completed on the different fruits and where they are grown. Children to alter their Venn diagrams. Activity 2 – read next part of the letter out. Children are to take away all the foods that they think are unhealthy, as the chef wants to serve healthy foods. Encourage children to give a reason for their answers. Differentiation - activities are very group led. Group ALN children together and work closely with them throughout the lesson. Assign different jobs to these children to keep them engaged.	Why do you think that? Have you tried this food before or seen it anywhere? What is the difference between food in Hawaii and Barry? Does it taste different? What foods didn't you like and why? What do you already know about Venn diagrams? Why do you think these foods are unhealthy?
10 mins.	Plenary Collect sheets in from the children and recap what has been learnt in the lesson. Question the children knowledge on the topic. Ask for comparisons between Wales and Hawaii. Think, pair, share – give children a minute to reflect on learning individually. They will then share this with a partner and then to the rest of the class.	What did you enjoy in today's lesson? Can you tell me one thing that you have learnt today? What did you find easy? What did you find challenging in today's lesson?

Appendix 6

Canolfan Addysg Athrawon De-Orllewin Cymru  The South West Wales Centre of Teacher Education			1B	
Session Plan – Key Stage 2				
Name of trainee: Gareth Price			Session ref: I091118(3-4)	
Personal target(s) in relation to QTS:				
Year group: 3	No. of learners: 15	ALN: CW, DL.		
Additional Adults:	Sarah Evans			
Learning objective(s): Create a wordfoto on key words related to the First World War.			Success criteria: Think carefully of words that describe the war.	
Links to previous learning: Remembrance of the end of the First World War				
Curriculum coverage (range, skills)				
- explain information and ideas using relevant vocabulary - make links between what they read and what they already know and believe about the topic.				
<i>Literacy(LNF)</i> - explain information and ideas using relevant vocabulary - make links between what they read and what they already know and believe about the topic. -			<i>Numeracy (LNF)</i>	
DCF - save files to a specific location using an appropriate file name.	Thinking	ESDGC	YCC – create a greater understanding of how Britain was affected in the war.	
Key vocabulary(English/Welsh): First world war, soldiers, poppy.				
Time	Session activities, organisation and management		Key questions & Assessment for Learning opportunities	
15 mins.	Introduction Show children 4 photos from the war. Ask them to write on whiteboards what key words they associate with the photos of WW1 and its remembrance. This activity is to be done in pairs or threes. Encourage children to explain why they have chosen words. Get the children to read out the words created on WW1, this will allow them to share their ideas. As this is happening write words on a bigger board for whole class to see and use.		What do you already know about WW1? What do you think is happening in these photos? Why do people wear poppies?	
35 mins.	Main activities Children have a choice of the four photos used in the introduction to the session. Working in pairs or threes, the children must pick 10 words that stand out the most to them. They must include these in their wordfotos created in remembrance of the First World War.		Why have you chosen these photos? What words mean the most to you? Why have you chosen these words?	

	For ALN and children struggling with the session, let them use 5-7 words instead of 10.	
10 mins	Plenary Ask children to share the wordfotos created, talking through the words they have selected and why those words are important. Final task, is for the children to share one fact in their groups that they have either learned in the lesson or during remembrance week.	Can each group please tell me a fact they have learnt on WW1 or remembrance week?

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