

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

Introduction

This assignment will critically analyse the relationship between teacher subject knowledge and effective learning and teaching in the primary school. Shepherd (2013) suggests that a deep knowledge and understanding of subject material taught is important, however the ability to transfer that information in a meaningful way to learners is considered more crucial. For a teacher's subject knowledge to be utilised, it will depend on whether that teacher is able to transfer that knowledge effectively to the children in an understandable way.

In order to support my argument, this assignment will review literature to highlight key points and consider different researchers' perspectives between teacher subject knowledge and children's learning in education. I will draw upon my own subject knowledge as well as referring to my professional teaching experience placement (PTE 1) experience and linking it to relevant literature.

My PTE 1 placement is in a three-form entry large urban school on the outskirts of Cardiff containing 727 pupils. The school has a low free school meals percentage of 12.1%. During my placement so far, I have been based in a reception class containing 30 pupils, with an age range of 4-5 years old. To ensure confidentiality the pupils, staff and name of the school will not be included within this assignment.

Literature review

When discussing the relationship between subject knowledge and effective teaching and learning, it is important to consider that teachers' subject knowledge has always been an integral component within education. Coe *et al* (2014) acknowledges there is strong evidence that Pedagogical Content Knowledge is one of the most important aspects on the success of student's achievement. Whilst it is important to have a strong understanding of the material being taught, teachers must also understand the ways students think about the

content, through students evaluating the subject and identifying any misconceptions they may have.

The future curriculum, *Successful Futures* (2015) by Professor Graham Donaldson, has underlined that subject knowledge has “stood the test of time and remains the best path for a successful education”. Donaldson (2015) has stated that one of the defining features of this new modern curriculum will be the opportunity for teachers to make connections and transfer their subject knowledge and understanding across different contexts. It could be argued therefore that a huge focus of the new curriculum is a teacher’s subject knowledge.

However, a teacher’s subject knowledge doesn’t necessarily mean that they’re an effective teacher. Referring to Coe (2014), first and foremost if a teacher has minimal subject knowledge on a particular subject, then they are unlikely to get the best out of their pupils. A teacher has to realise that to be effective is to identify how their pupils learn and be able to transfer that knowledge to them in a clear and understandable way. This demonstrates that a teacher’s subject knowledge has a significant relationship with effective teaching and learning.

A practitioner’s professional knowledge has been regarded as an imperative indicator of a teachers’ competency (Ding *et al*, 2014), proving to be the main quality of an effective teacher. New evidence is continually being found by researchers within education, and in recent decades substantial evidence has found that the quality of the learning opportunities created by teachers affects students’ learning and motivation (Kleickmann *et al*, 2012). Consequently, there has been particular focus towards teachers’ knowledge of subject matter knowledge and pedagogical content knowledge.

Lee Shulman is an educational theorist commonly referred to when talking about subject knowledge. (Shulman, 1986) acknowledges that there should be a special emphasis placed on the content of teachers’ knowledge. Shulman makes a case that teaching has a knowledge base. He argues that to be an effective teacher, you need to have knowledge of the content you’re teaching; knowledge of the pedagogy and knowledge of the students

(Shulman, 1987). Shulman created a guideline of subject knowledge, known as the “Knowledge Base”, that consists of three content related categories such as: content knowledge, pedagogical content knowledge and curriculum knowledge. It also includes four other categories such as: general pedagogical knowledge, knowledge of learners, knowledge of educational contexts and knowledge of educational purposes (Rodrigues, 2005).

Shulman believed teachers should have an equal subject content knowledge, by not just understanding that something is so but understanding why it is so (Rodrigues, 2005).

To ensure consistency throughout schools, teachers should have an equal understanding of subject content in order for every child to receive the same teaching and learning.

A teacher’s curricular knowledge is becoming increasingly important with the new curriculum being implemented into Wales’ education system. Donaldson (2015), successful futures report states the new curriculum will allow teachers to have more freedom to teach in ways they feel will have the best outcomes on their pupils. Giving teachers the flexibility to deliver in a variety of creative ways will promote higher achievement and engage the interest of all children and young people to help them reach their potential (beta.gov.wales, 2019). A teacher’s curricular knowledge is important as it will provide them with alternative ways to deliver their subjects and topics to their learners, creating an effective teaching and learning environment. By having a good curricular knowledge, a teacher can provide the learners with transferable cross-curricular skills which they can then use in other subjects. Roden & Archer (2014) supports this statement by stating literacy and language play an important role within the subject of science. Developing a child’s competence and confidence in their ability to liaise in scientific language will present them with the opportunity to improve other cross-curricular skills such as questioning, critical thinking and evaluating. This evidence identifies that a teacher with a good curricular knowledge can make cross-curricular links, generating an effective learning environment for learners.

Shulman (1987) argues pedagogical content knowledge is the most important aspect within the seven categories. He identifies this knowledge to be unique within teachers and knowledge that “goes beyond knowledge of subject matter”. Shulman is implying that a teachers’ pedagogical content knowledge is the ability to make an own understanding and

connections of subject matter and be able to provide a range of alternative representations of the concepts of that subject for the purpose of explanation. Haylock and Cockburn (2013), have conducted research on the understanding of mathematics in children. They support Shulman's view of pedagogical content knowledge, stating for a teacher to promote understanding in their children's learning of mathematics, the challenge is to distinguish the most substantial ways of thinking mathematically to understand the subject. Piaget (1958), supports this viewpoint by acknowledging children are born with a very basic mental structure evolved on which all subsequent learning and knowledge are based. Therefore, teachers need to extend their ideas in a way that learners construct and reconstruct knowledge and ideas. It is the learner's construction of these ideas that is crucial (Hattie, 2008).

It is important to consider that effective teaching and learning isn't a straightforward process. Shulman (1986), explains that pupils of different backgrounds and ages often bring conceptions and preconceptions with them to learning, particularly in the frequently taught subjects. However, these preconceptions are often likely to be misconceptions which can make teaching and learning difficult for the teachers and the pupils. Haylock and Cockburn (2013) acknowledge that there has been concern over long-term effects on children's confidence in mathematics which have resulted from their teachers own mathematical misconceptions and limited understanding.

Research shows enthusiasm is an essential attribute for effective teaching, as children respond best to teachers who display a sense of personal interest and passions for the subject (Grigg, 2010). Roden & Archer (2014) looked at subject knowledge within primary science. They claimed that children's preconceptions and misconceptions derive from not fully understanding science as a subject. There is also evidence to suggest that most parents are unaware of the importance of science and the job prospects it can lead to (Archer *et al*, 2013). It could be argued that parents' misconceptions of any subject could have a significant effect on children's learning in school. As a result, it is then up to the teacher to use their subject knowledge to adapt their teaching to raise children's awareness; encourage them to be curious and enjoy the subject to enable effective learning to take place.

Hattie (2003) claims that teachers account for 30% of a learner's academic achievement (figure 1). It is what teachers know, do and care about that is instrumental in this variance. Consequently, teachers' misconceptions and limited understanding of mathematics will be passed through younger generations. This evidence suggests it is imperative to address this issue as it could potentially have catastrophic effects on the learner.

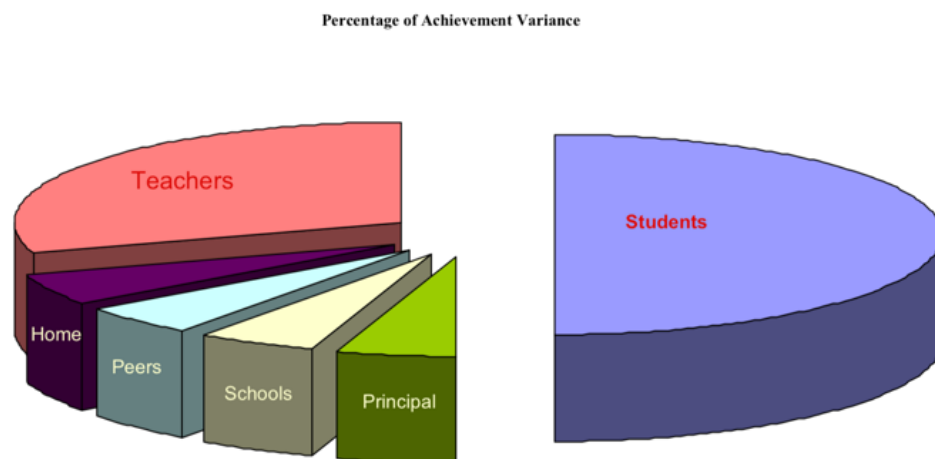


Figure 1: Teachers percentage input on learner's achievement

It could be argued that having a robust knowledge content is not enough to be an effective teacher. Grigg (2014) states that knowledge needs to be viewed as something more than a collection of facts. This suggests that a teacher could know a vast amount of facts about a subject, but it doesn't necessarily mean they are an effective teacher. It is important to consider that an effective teacher isn't just someone who passes on factual information, but who develops children's metacognition which can then be applied to a real-life situation. Shulman (1986) found that novice teachers with a specialist knowledge taught in a way that encourage children to reflect and develop complex ideas of their own, instead of just delivering content that relied on children memorising. In comparison, it is said that an 'expert' teacher has a larger knowledge base from which to draw on and they are more efficient at organising and utilising that knowledge (Grigg, 2014). Hattie (2003) supports this view explaining that expert and experienced teachers do not differ in the amount of knowledge they have. Experts are simply more efficient at organising and applying that knowledge, combining new and existing subject knowledge together. This evidence

emphasis the magnitude of having a vast subject knowledge base and more importantly, it is how it is utilised that makes them an effective teacher.

The aim of the new curriculum is to promote high achievement and engage the interest of all children and young people to help them reach their potential (beta.gov.wales, 2017). Donaldson (2015) believes one of the reasons this will be achieved is by making learning more experience-based. Estyn (2014) strongly believe that children learn best from first hand experiences. In 2014 Estyn carried out a report on a nursery in Bridgend and found there were high quality learning experiences opportunities for children to develop their curiosity, thinking and problem-solving skills. The nursery provided the children with opportunities to experience learning in a real-life context, by arranging visits to banks and 999 services. They found these experiences had a very positive impact on the children's learning. In addition, the experiences allow children to develop skills across all areas of learning in an interesting and constructive way that motivates them to achieve.

Rowland *et al* (2005) also considers that effective teaching and learning go beyond the subject knowledge of a teacher. Rowland *et al* (2005) conducted a research project to identify ways in which a trainee teachers' mathematical content knowledge was applied in their teaching. The focus of this study was to assess both the trainees' subject matter and pedagogical content knowledge. The teachers' subject knowledge was broken down and categorised into four units - foundation, transformation, connection and contingency which is known as The Knowledge Quartet (figure 2). The foundation category consists of the teachers' initial subject knowledge, beliefs and understanding acquired prior to becoming a teacher. As mentioned earlier by Shulman (1986) a teacher's content knowledge should be at a required standard and an equal level with other practitioners in order for all learners to receive the same teaching and learning quality. The transformation category relates to the teacher's ability to transform their content knowledge they initially possess into content the learner can understand. This supports Shulman's pedagogical content knowledge theory, by reiterating the importance of a practitioner being able to create the link between their knowledge and a learner's understanding of the subject. The connection category is the knowledge that teachers have to support the progress of the learner. Teachers use this

knowledge to support their planning of activities, lessons and topics. Here the teachers are required to differentiate activities appropriately for the children and to plan for their next steps Donaldson (2015). The contingency category could be viewed as a 'plan B' for teachers. This knowledge involves teachers' reactions to events that have not been anticipated. It is the ability to respond to children's ideas and to deviate from the original plan set out when the lesson was prepared. The Knowledge Quartet can be used as a tool for teachers to reflect on their own knowledge and identify where improvements need to be made Rowland *et al* (2005).

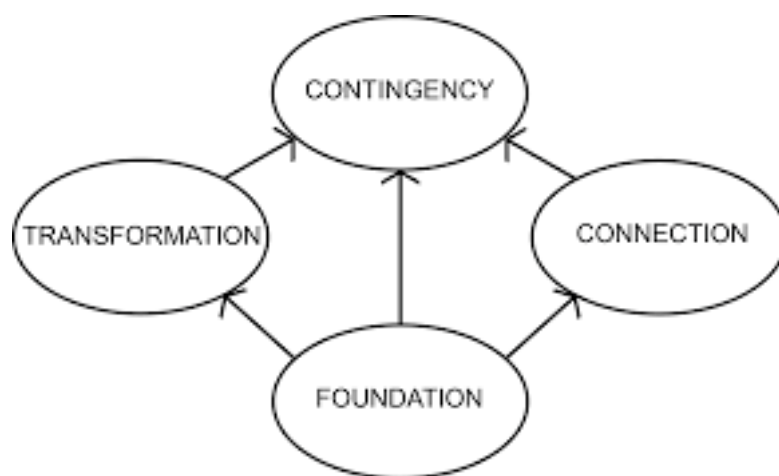


Figure 2: The Knowledge Quartet

It is important to understand that these four categories go hand in hand and link throughout different aspects of teaching. From the evidence shown by The Knowledge Quartet, it is clear to see that a teacher's subject knowledge can be distinguished and audited to help educationalists and practitioners understand what is needed to be an effective teacher.

Reviewing the literature, it is evident that the work of Shulman (1986) and Rowland *et al* (2005) has had a huge impact on determining that subject knowledge is more than just what a teacher knows about the subject. There are subtle differences in the way that subject knowledge is perceived. Despite this, the different theorists have proven that there is a strong correlation between a teacher's subject knowledge and effective teaching and learning. Donaldson (2015) has supported Shulman's and The Knowledge Quartet's work by

constructing a new curriculum which will allow teachers to stretch their own subject knowledge and teach in ways they feel will have the most effective impact on their pupils.

Analysis and evaluation of your subject knowledge for primary teaching

In this section, I will discuss key points about my own subject knowledge by referring to my PTE1 experiences. To support my experiences and key points I will draw upon the key literature mentioned in this essay, whilst making connections to other literature. By critically analysing and evaluating my own subject knowledge and understanding for teaching in the developing curriculum for Wales, I will strengthen my development as a future practitioner. To help structure my discussion I will refer to The Knowledge Quartet and present my analysis and evaluation of my experiences by using sub-headings.

Foundation

The foundational knowledge of a teacher is fundamental as it underpins all the decisions that a teacher makes (Rowland, 2011). As part of my teaching during PTE1, I was asked to deliver a Welsh lesson to the reception class (figure 6). I felt this was a great opportunity to showcase my skills and previous experiences. I wanted to make sure that the children received a better experience in the subject than I did in school by providing a creative and enjoyable lesson. Hall (2018) acknowledges the point of making lessons creative and enjoyable by claiming children learn best through active, hands on experiences which are led by their own imagination and curiosity. As it was my first Welsh lesson, I didn't have a substantial amount of foundational knowledge of the subject itself, however, to ensure the children received effective teaching and learning. I built up my own foundational knowledge of the subject by practicing the weather in Welsh prior to the lesson. An example during this lesson where I felt I was able to draw upon previous experiences was when I planned the focus activity. Donaldson (2017) believes learning should be more experienced based and teachers are to be flexible by delivering more creative ways that suit the learners. I wanted the focus task of this lesson to be a creative and memorable experience for the children, so effective learning could take place. The focus task was to create a televised weather report with the children becoming weather reporters and use a green screen to make it a more

real experience. This was a Welsh oracy based task, so the children were required to say what the weather is in Welsh by looking at the picture card shown, For example, “Mae hi’n Heulog”. It was significant to see that the children were fully engaged within the task, due to the fact they actually believed they were delivering a weather report on television. The fact the children were engaged and enjoying the activity, meant they were able to learn the welsh words/sentences better. From this experience, it is evident that my foundational subject knowledge was used from previous experiences in order for effective teaching learning to take place.

Transformation

Over my PTE1 practice I have found transferring my content knowledge to learners the most difficult aspect. With being placed in reception, it was a challenge to think at their level in order to get information across to them in an understandable way. An example of when I was able to transform my content knowledge to the learners successfully was creating a Christmas calendar (figure 3). This lesson involved the class being split in half, so I could teach one half of the class how to create the calendar. They then taught the other half of the class what they had just learned. It was crucial that I explained the process in a way in which the learners could understand. If the learners did not understand what to do, then the lesson wouldn’t have gone to plan. To ensure the learners were able to understand what I was teaching them, I provided them with step by step demonstrations and examples of other children’s work from other classrooms. Shulman (1986) indicates that a teacher’s ideas should be presented in the form of analogies, illustrations, examples, explanations and demonstrations. I felt this lesson was successful as the other half of the class listened to their partner and produced a good piece of work at the end. However, there were a few other occasions where I wasn’t so successful in terms of transformation. I had planned a numeracy lesson on adding one more (figure 4) to a number by using stars, in relation to our topic. I found it extremely challenging to get the learners to understand what adding one more meant. The learners were able to understand the process of ‘adding one more’ by placing an extra star on, however they couldn’t grasp that they needed to count the stars correctly and know how many there were by adding one more to the total. I felt the learners didn’t understand this activity because the terminology I was using wasn’t

appropriate to their level. I was disappointed with my preparation to this lesson as I felt the resources, I had made impacted the activity as they were not differentiated appropriately to their abilities. Differentiation is key when getting the best out of your learners. Roberts & Inman (2015) states differentiation allows each child to learn and progress on an ongoing basis. Instruction given by the teacher that is differentiated becomes more comfortable, engaging and inviting for the children (Tomlinson, 2017). This demonstrates that learning couldn't occur with my learners due to the task being too challenging or unengaging. Transformation still remains an area I need to develop as a future practitioner to create an effective learning environment.

Connection

Education is moving in the direction of providing children with as many skills as possible to prepare them for current and jobs that don't even exist yet. Therefore, to ensure teaching and learning is efficient, teachers have the responsibility of making their lessons and activities cross-curricular. Donaldson (2015) believes that literacy, numeracy and digital competence should be embedded throughout everyday teaching. To ensure I was following Donaldson's approach, I planned and incorporated cross-curricular links within each lesson. The connection category of a teacher's subject knowledge is the ability to make connections on how to support progress in children's learning (Donaldson *et al*, 2013).

It was critical to ensure that I took careful consideration into planning my activities and lessons. I did this by using my knowledge to make connections with what the children had previously learnt and build on this so their progress could be accelerated. As explained by Glazzard *et al* (2014), it is impossible to advance children's progress without assessing them frequently and accurately. I believe it was essential to regularly assess the children formatively and observationally, to provide me with a knowledge of how effective the lessons or activities were. To gather this information, I used RAG ratings and used green, amber and red colours to represent overall how the child coped with the learning objective. These colours would then identify the next steps for each learner in the classroom. Glazzard *et al* (2014) says assessment is critical and without it a teacher cannot move a pupil's learning forward. An example of a lesson where I made connections to enhance children's learning was in a science lesson I planned. Following the children's previous literacy lesson

about 'How to catch a star', it was important to extend the children's learning and develop their new skills further.

The aim of this lesson was to explore and gain a knowledge and understanding about stars. To ensure I implemented cross-curricular links, I created five enhanced and three focus activities to provide the children with as many skills opportunities as possible. Whilst planning these activities it was important to consider making the skill fun and engaging for the learners. One of the focus activities required the children to create a 2D shape of a constellation using sticks and rocks outdoors. The children were given different 2D shapes to use as a guide. Whilst planning this activity I drew upon previous knowledge of what numeracy skills the children had already practiced in class. This allowed the children to reflect on their prior knowledge of what the shapes should look like and applied it to the activity, whilst developing their physical development, gross and fine motor skills. Research by Hattie (2008), supports this experience by expressing that a major attribute of an expert teacher is that they are able to combine new subject matter content knowledge with prior knowledge to suit the needs and goals of their learners. Throughout PTE1 I believe I have made strong progress in this category through the opportunities I have been given to plan and deliver different subjects and progress children's learning using RAG ratings.

Contingency

Reflecting on my teaching from a contingency standpoint, there have been many situations where I have had to react to events that have not been anticipated. From a personal perspective, I believe a teacher's contingency knowledge comes with experience. Knowledge that can only be acquired through teaching, making mistakes and being presented with different situations. As a trainee practitioner it is difficult to react to events which you haven't taken into consideration in your planning. However, Haydn (2007) states experienced teachers are likely to consider having both a plan A and plan B to prepare for any contingencies. An example where I had to react to an unexpected event was during a science lesson (figure 5). The activity was an experiment based on creating a chemical reaction by melting baking soda stars to show how stars disappear in space. It was critical for this experiment to work in order for the children to make analytical observations and

remain engaged throughout. I had not practiced this experiment beforehand so there was a risk and unfortunately the chemical reaction did not work on the day. Whilst planning this activity, I had not taken any possible considerations on whether the experiment would work or not. Despite this, I was able to react quickly to this situation by reversing the experiment and creating a solution that was used to make the stars in the first place. I was still able to create a chemical reaction for the children to make observations on which didn't negatively impact the lesson. I took the opportunity to reflect upon this experience to look at how I could do things differently to prevent this from happening again in the future. It was an oversight on my part not to have practiced this experiment whilst planning or before the activity started to assure myself of the outcome. Evidence suggests effective teachers are able to develop lesson plans, and continuously adjust them to fit the needs of the learners (Stronge *et al*, 2008)

I will view this experience as a positive, which has helped me develop as future practitioner. As mentioned earlier by Haydn (2007), an experienced teacher will have a plan B to ensure the lesson or activity is not affected. Therefore, I will ensure I carefully consider what the different possible outcomes are that could affect the lesson and the contingencies I need to put in place as part of my planning.

Conclusion

To conclude, this essay has increased my awareness of subject knowledge and provided me with a better understanding of the relationship between teacher subject knowledge, effective learning and teaching. Evidence from Shulman (1986) Knowledge Base and The Knowledge Quartet has made it clear that a teacher's subject knowledge is far more than what they know about the subject. Their research has proved to be a useful tool for all practitioners to use. Whilst using The Knowledge Quartet to reflect on my experiences on PTE1, I have been able to identify areas to improve on and set targets. An area where I could significantly improve on is by being able to transfer my subject knowledge to the children in a clear and understandable way. Both Shulman (1986) and Rowland *et al* (2005) have indicated that a teachers pedagogical content knowledge is a core aspect of effective

teaching and learning. To improve this area, I will focus on using better terminology when explaining things and also provide appropriate materials for the children in my activities. This will be done through differentiation where I will liaise with my mentor to ensure the activities are enhancing the children's learning.

Whilst being satisfied with my own subject knowledge, there is still a lot of room for improvement. This essay has analysed strong evidence to suggest that subject knowledge is a crucial element being an effective teacher and creating an effective learning environment.

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Appendix

Figure 3:



Figure 4:



Figure 5:

Profiad/ Experience	
Teimladau/ Feelings Beth yw eich teimladau ynghyd â'r profiad? "What are your feelings regarding the experience?"	My feelings regarding this experience were both positive and negative. The science experiment very exciting for the children. The children were engaged and were able to participate in the activity practically. The activity, however, unfortunately did not work. Therefore, to solve this issue I used my initiative and came up with a plan B to keep the focus of the children.
Cofio a Deall/ Remember and Understand Allwedd chi restru'r aweiddau a'r profiad, dwsau a oeth yn dda? "Can you list the aspects of the learning experience that went well?" Pa elfennau o'r profiad dda oedd yn siomedus? "What were the elements of the learning experience that were disappointing?"	- Feedback from my tutor, was that my activity was very creative, relevant, appropriate and fun. The children were engaged throughout and were able to get their hands dirty by participating in the activity. The experiment was relevant because we were learning about stars and within the experiment, we learnt about how stars die/disappear. So, we used a chemical reaction to make this happen and the children were amazed by what they saw. - It was disappointing that the experiment did not go to plan and the chemical reaction did not happen. This was a mistake by me as I did not test the experiment prior to the lesson to see if it actually worked or not
Gwerthuso a dadansoddi/ Evaluate and analyse Beth fyddwch chi'n codw'r un foth i sicrhau dwsau ac addysgu effeithiol yn y dyfodol? "What will you keep the same to ensure effective teaching and learning in the future?" Beth oedd achos yr elfen siomedus fwyaf? "What was the cause of the most important disappointing element?"	- I will ensure that I keep the lesson activity structure the same to enable children to participate and enjoy it - I will ensure that I have a plan B on standby, in case of a situation where the activity does not go to plan in any situation. - Fortunately, the plan B fitted in well with the activity and made it even more successful - The cause of the activity not going to plan was due to a lack of preparation. I did not test the experiment before delivering it, therefore, meant I had to solve the situation quick.
Casgliadau a chamau gweithredu/ Conclusions and actions Beth yw eich atebion posibl i'r materion siomedus a nodwyd? "What are your possible solutions to the disappointing issues identified?" Beth fyddwch chi'n mynd i'r waed nesaf? "What will you do next?"	- My solution to this issue would be to always have a plan B, in case plan A doesn't go to plan. - In future practices where experiments are involved, I will make sure I test it before I teach it
Y profiad newydd / Transformed experience	
Casgliadau a chamau gweithredu/ Conclusions and actions Beth yw eich atebion posibl i'r materion siomedus a nodwyd? "What are your possible solutions to the disappointing issues identified?" Beth fyddwch chi'n mynd i'r waed nesaf? "What will you do next?"	My solutions are to make better use of the children and I's time by providing with other learning opportunities whilst waiting to do the activity. Such as, talking to a partner or thinking about what they are going to talk about
Y profiad newydd / Transformed experience	

Figure 6:

Name of Trainee: Joe Bushell		Session ref: 3.12.18(9) Welsh	Date: 3/12/18	Class: Reception	Cynllun Ffocws y Cynnod Sylfaen 2d
Targed(au) Hyfforddi Personol	To develop competence in using and teaching welsh as a second language	Number of learners: 30	Age: 4-5		
Learning objectives/intentions:	To learn the weathers in welsh	Success Criteria	Must: be able to recognise and pronounce the weathers Should: be able to say the sentence 'Mae hi'n.....' / Could: be able to say the sentence 'Mae hi'n.....ac.....'	Meeting learners' needs:	Activities will be differentiated to their level of ability 1:1 Support with child with ASD

Introduction/plenary tasks	Main activities	Resources/ Key Vocabulary	Assessment for Learning (strategies and opportunities)
Introduction - Start introduction by introducing a MORFO of Tedi Twt. - Tedi Twt is going to say he is going on holiday to travel to different countries - There are lots of different types of weather in the countries Tedi Twt is going to, but the weather <u>forecast</u> is all in Welsh! - Tedi Twt needs help translating, so he can pack for his travels - Can you help Tedi Twt pack his suitcase? - Before we can help Tedi Twt we need to learn what the weathers are in welsh - Introduce song <u>sut mae tywydd heddiew</u>- practise this a few times	Trainee focused task (purpose, outline of trainee's role and children's learning): Packing Tedi Twt's suitcase- 5 children - I Will introduce the activity by showing the children a UK weather report on the ipad - We will discuss what weather we can see happening around the UK - The children will pick what weather they would like to say for their weather report - Ask child the question 'Sut mae tywydd heddiew? - Child will answer either 'mae hi'n heulog' or just 'heulog' depending on ability - To extend this task the child would say 'Mae hi'n.....ac poeth/oer'	Resources - Variety of clothes in a bag - Suitcase - Weather flash cards - Ipads - Green screen 90 x number weather sequencing sheets 90x Drawing the weather sheets - Variety of weather cards and words - map Key Vocabulary - Sut mae'r tywydd heddiew- what is the weather like today? - Mae hi'n- it is - Oer- cold - Wyntog- windy	Introduction - Use my turn your turn for the children to show they understand and can pronounce the words - Ask the children sut mae tywydd heddiew? Ask individual children the same question- children must either use a full sentence mae hi'n.... or just say the weather. Tedi Twt's case - What clothes does Tedi Twt need? - Ask the children why Tedi Twt needs those clothes? Explain your answer - Ask children to talk to each other and discuss why he needs those clothes? Is it poeth or oer? Mae hi'n heulog ac poeth- it is sunny and hot
- Use flash cards and actions to help children learn the weather, e.g. show a picture of the sun and say <u>mae hi'n heulog</u>- it is sunny- wave both hands - Repeat actions for other weathers- do my turn/your turn - Explain activities	Additional adult tasks (purpose, outline of additional adults' role and children's learning): Filming a weather report (green screen)- 5 children - Show children a map of what destinations Tedi Twt is going to Mrs B. will work with a group of children. Their task is to pack Tedi Twt's suitcase for his holiday and explain why they chose those clothes - Mrs B will say Tedi Twt is going to..... and the weather is what clothes should he pack and why? E.g. Tedi Twt is going to Scotland and the weather is 'Mae hi'n Oer'	- Stormus- storm - Bwrw glaw- rain - Cymylog- cloudy - Heulog- sunny - Bwrw eira- snowing - Enfys- rainbow - Niwlog- foggy - Sych- dry - Poeth- hot	Peer-assessment - Children will discuss decisions with each other on what clothes Tedi Twt needs to pack Weather report - What weather is happening in this weather report? - What clothes would you need if you were going to this place? - Ask child sut mae tywydd heddiew? The child will respond with either one word, full sentence or extended sentence with an action. Enhanced - Could you tell me how you worked this out? - What did you do here? - Show me how you did this? Plenary - Ask children to go to the corner of the room to the emoji to show whether they found learning the weathers in welsh tricky, learnt one or two new things or learnt a lot of weathers
Plenary - Ask children 'who can tell me what this weather is in welsh?' show flash card of weather - Use emojis to determine whether the children know their weathers in welsh, knew one or two or found it a bit tricky to learn some.	Enhanced activities- Mrs D will support the enhanced activities - Matching activity- children match the weather card with the clothing card - Temperature- children say the weather then say if it is hot or cold by putting them into either 'oer' or 'boeth' piles - Drawing the weather- children pick a card with the weather and word on then they have to draw it - Weather number sequencing- - Counting activity- count the weathers and put the total number in the box - Colour the weather word - e.g. heulog, colour it yellow - Weather puzzle- match the correct number with the number of weather symbols		

Curriculum coverage (range and skills)			
- Welsh: Oracy: adopt a role, making a conscious use of movement, gesture and speech, using language appropriate to a role or situation - Welsh: Reading: use context to perceive the meaning of familiar words and decode new words by means of clues in pictures, letter sounds and word forms			
Literacy (LNF)		Numeracy (LNF)	
Reading strategies: make meaning from visual features of the text, e.g. illustrations, photographs, diagrams and charts		- Temperature: use direct comparisons when describing temperature, e.g. hot/cold - Number facts: use ordinal numbers to 10 in daily activities and play	
DCF	Thinking	ESDGC	YCC
Select appropriate software from a limited range to create multimedia components; create and explore the use of text, image, sound, animation and video.	Linking and lateral thinking	N/A	N/A