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

Introduction.

This essay will explore the relationship between the teacher's subject knowledge and how this impacts the delivery of lessons within primary schools. It will also address the importance of a high-level teacher subject knowledge in order to achieve effective learning. Underpinning different literature which can critically analyse teacher subject knowledge and the relationship it has with delivering effective lessons in primary schools. Furthermore, support and examples will be provided regarding teaching experience, from PTE1 part one. Making close links between theorical knowledge and first-hand experiences addressing how the teacher subject knowledge played a significant role within the delivery of lessons and the importance of lesson plans.

With reference to BERA (2018) the details of the school introduced in this essay will be kept confidential maintaining anonymity throughout, supporting the Data Protection Act (2018). School A is a Pioneer Primary school situated in a high poverty-stricken area. The school has recently been refurbished and has an influx of new pupils; increasing the intake of pupils to above four hundred and eighty. This includes both morning and afternoon nursery pupils (Estyn, 2015). Within this school there are approximately 21% of pupils who receive free school meals, and several children who have been statemented for differing needs. The class which will be addressed throughout this essay will be a Nursery class, which has a morning and an afternoon session. It has three teaching assistants; two of which are part time and divide their

time throughout the week. All members of staff teach specific tasks throughout the week, this can be seen to have a significant role within the learning of the pupils.

Literature review.

It is evident that teachers play a significant part within pupil achievement (Johnston, Halocha and Chater, 2007). Shulman (1987a) states that teachers should be educated in all aspects of teaching. Yet, there are many misconceptions and definitions of what 'teacher subject knowledge' is; therefore, identifying what characteristics a teacher must have in order to achieve an effective learning and teaching can be challenging (Rockoff, 2004). Although, Grigg (2015) argue that teachers have many characteristics that can support their teaching which can have an impact upon pupil learning. Rivkin, Hanushek, and Kain (2005); Aaronson, Barrow, and Sander (2007) supports this suggesting that teachers need to have a profound understanding of pedagogy for pupil achievement. This can be illustrated by teachers being patient with good organisation skills and have positive classroom organisation. Also, a good standard of behaviour management and positive working relationships between with their pupils (Coe *et al,* (2014). This is referred to the pedagogical knowledge. Although, it is evident that these are quality traits in which a teacher must have in order to deliver effective lessons; Bearne and Reedy (2018) note that for effective learning to occur, teachers must have both pedagogical and subject knowledge of the subject, to ensure that their teaching benefits the pupils' achievement and understanding of the topic.

Nevertheless, subject knowledge remains a poorly defined term and there are still debates regarding what impact good teacher knowledge has on learning and pupil achievement. Shulman (1986) states that in order to identify what to teach and utilizing different strategies of teaching a subject requires a high level of pedagogical and

subject knowledge. Shulman (1987a) explores the types of teacher knowledge base, stating there are three different forms of knowledge: ‘propositional, case and strategic knowledge’ (Shulman, 1987 p. 10). All of which are included within the main groups of knowledge, such as pedagogical, subject and curriculum. Regarding subject knowledge, teachers should understand the key principles and facts of teaching and a subject prior to teaching the lessons (Guerriero, 2017). This will develop the teacher’s confidence in teaching and allow pupils to have the opportunity to ask and answer questions and encourage students to be confident in decision making.

Shulman (1987a) further states that teachers must be fully knowledgeable regarding pedagogy. As this encourages teachers to understand the context of the curriculum and what is required to be taught within subjects. Although differences of opinion still exist, there appears to be some agreement that teacher subject knowledge should have a balance of both pedagogical and subject knowledge. As this can allow the teacher to understand how the students learn. Enabling teachers, the opportunity to manage the class such as offering group tasks and enabling students to be confident and independent individuals who can take risks and utilise their skills (Donaldson, 2015).

There are several similarities between what Shulman 1986;1987a;1987b) and Fennema and Loef - Franke (1992) state about teacher subject knowledge. For example, Fennema and Loef - Franke (1992) notes that being confident with the subject you are teaching and teaching the subject will influence students in gaining an understanding of the subject being taught. Which will impact the yearly student outcomes. Aubrey (1993) supports this by stating if there is a lack of teacher subject knowledge this will have a negative impact upon the learning pupils are receiving because of the limited teaching being provided, due to the lack of both pedagogical

and content knowledge. On the other hand, Campbell (2006) has questioned this stating that not all studies confirm a connection between teacher subject and pedagogical knowledge with pupil achievement. Yet, minimal knowledge is essential for teaching of a subject to be effective. So, knowing the basics of a subject is acceptable as teachers will be able to communicate effectively with the learners and encourages learners to have the opportunity to utilise their skills. Similarly, Darling – Hammond, (2000) conducted a study about the impact of teacher subject knowledge and the results indicated that there is a positive yet inconsistent relationship between both teacher knowledge and pupil learning. However, these results were based upon a study which was conducted over nineteen years ago and it is unclear if this is still valuable.

According to Johnston, Halocha and Chater, (2007) understanding different subjects and core subjects are key within teaching. This is supported by Shulman (1987) who states that having a high standard pedagogical subject knowledge will enable teachers to be fully equipped in teaching a specific subject in different ways which illustrates differentiation. This is beneficial as it supports the learning of all students and promotes inclusion throughout challenging and supporting students with differing needs too. The current professional standards encourage teachers to be knowledgeable and reflective professionals (Welsh Government, 2018), who are equipped in order to deliver effective lessons in subjects which can encourage learners to be creative, confident and ‘ambitious capable learners’ (Donaldson, 2015, pp. 29 - 31).

According to DfE (2013) a teacher’s ability to evaluate their own learning and teaching is significant in enhancing their professional development. As this encourages the teachers to learn to adapt their teaching for the pupils to gain a good understanding of

a subject. In contrast to this, Shulman (1987, p. 7a) states ‘teaching necessarily begins with a teacher’s understanding of what is to be learned and how it is to be taught’. Therefore, a teacher must have a substantial amount of knowledge of the lesson and subject they are teaching prior to delivering the session. It is beneficial if a teacher is confident throughout teaching their lessons subjects as this will provide the pupils with a better chance of understanding the subject, a knowledgeable teacher will be able to teach pupils the foundations of a theme/topic if they are well equipped and confident practitioners (Li-Yi, 2016).

Furthermore, DfE (2013) states teachers’ knowledge base and their delivery of teaching is the main indicator which determines the level of children’s academic ability. As it enables teachers to effectively identify what the students can do, in order to make their teaching more challenging. As a result of this, it is argued that the ‘best’ primary schools in the world, employ teachers who have the highest qualifications. Understandably this has had a profound impact upon the outcome’s pupils have achieved within primary schools. Under these circumstances, it is suggested that teachers’ standards need to be raised, primarily in primary schools in the United Kingdom. This will be achieved through Government funding initiatives for trainee teachers who have graduated with a 2.2 grade or above. As this will encourage trainee teachers to have more quality time within classrooms, which will eventually have a positive impact upon the achievement levels and learning from students (DfE, 2013).

Primarily, teachers with confidence and good content knowledge, and experience will ultimately have a positive impact upon a student’s learning because of they are educated with a good knowledge base (Rodrigues 2014). Sutton Trust (2011) supported this by arguing that the difference between a knowledgeable teacher and

an unknowledgeable teacher affects a student learning drastically, costing a years' worth of learning for the student with the teacher with a lack of subject knowledge.

Additionally, Murphy (2006) conducted a study examining if this was true. This study was conducted by two people, it examined mathematical lessons and explored the impact of the learner's academic success. Results indicated that having a good knowledge base positively impacts the delivery of the lesson, and in turn enhancing the learning being provided. In the study there were two teachers; Alan and Charlotte. Results showed that Alan (who had a 'A' qualification in mathematics), had a high understanding of the topic he was teaching, which he was able to demonstrate clearly throughout the delivery of the lesson. This positively impacted on the students learning, as they understood what Alan was teaching. However, Charlotte had a lack of both subject and pedagogical knowledge of the given topic and lacked in confidence. Consequently, the level of teaching was inadequate, and Charlotte did not display effective pedagogical thinking to the lessons which could scaffold children's learning; which could have had a impacted the children's learning.

Constructivist learning is a theoretical approach which illustrates effective teaching. Constructivists argue that effective learning will only occur when the pupils learn from their previous knowledge (Richardson, 2005). Consequently, the constructivist way of learning is becoming more dominant within schools, and it has displayed high success rates in pupil achievement (Mordechai, 2009). Piaget and Vygotsky constructivism approaches are influenced throughout schools today and it has benefited teacher knowledge, by enabling teachers to gain further understanding of a subject before teaching. Plus, ensuring that students are active participants within their learning too. Teachers are encouraged to scaffolding student learning when needed (Mordechai, 2009). Vygotsky's (1978) 'Zone of Proximal Development' enables teachers to

understand what the students can do alone and when a ‘more knowledgeable other’ is required. Therefore, subject and pedagogical knowledge is important.

Finally, research on the relationship between teacher subject knowledge and effective learning and teaching in the primary school has been frequently limited, due to the inadequate amount of studies which have been conducted in recent years. As most evidence is dated. However, arguments suggest that having a high level of knowledge, primarily pedagogical and subject based knowledge will have an impact upon the curriculum aspects of teaching (Shulman, 1986). However, a few researchers as previously discussed have been able to identify that in conjunction to having a high quality of knowledge, teachers have other factors which encourage effective teaching. An example of this would be the teacher’s values and beliefs. Mansour (2008) found that there is a clear link between the teacher’s beliefs and the level of teaching provided. Whereas, research studies to explore the validity of this, is very limited. However, through the exploration of the ‘The Knowledge Quartet’ it can be suggested that there are four components which are used to analyse mathematic lessons and benefits of subject knowledge.

Analysis and Evaluation of Subject Knowledge Section.

Throughout PTE1, it was clear that the school I was situated in was a highly motivated school. It was noticed that my subject knowledge was of a high standard, this is due to the level of work being taught and the age range of the learners. Nevertheless, the standard of work being taught in Nursery was of a great standard. This school focuses and uses the new curriculum which has been recommended by Donaldson (2015). Some subjects the outcomes the learners were working to a more advanced level, such as outcome three in some lessons, which is supported with the Foundation

Phase Framework (Welsh Government, 2015). I have experience and good standard of knowledge of the old curriculum which has seven areas of learning (Donaldson, 2015, p. 34). However, as a result of this I lacked confidence in planning using the new curriculum which is still being written that has six areas of learning now instead, with the promotes four key purposes (Donaldson 2015).

The theme was 'Funny Bones' story this is something I had good subject knowledge of, because this is something I have taught previously. Although, I had a positive subject knowledge it was clear that the curriculum knowledge needed further development, to ensure this session was differentiated and supported the needs of all learners within the setting. As Shulman (1987a) states that teachers need to be equipped in both subject and pedagogical knowledge for the curriculum knowledge to be developed. This is challenged within this session, as I taught a Mathematics and Numeracy lesson, in coherence with the six of the areas of learning instead (Donaldson, 2015).

I focused upon Donaldson's curriculum purposes in my planning. The curriculum purpose was: that the learners were to be 'Ambitious, capable learners who: understand how to interpret data and apply mathematical concepts' (Donaldson, 2015, p. 29). I felt that I had an endless knowledge of how the Foundation Phase planning works, although it was clear with the Donaldson influence planning this was not the case. This had an impact upon my confidence planning the lesson. Therefore, if I improved my knowledge base (Shulman, 1987a) this session could have encouraged the learners to be better problem solvers and critical thinkers (Impact Wales, 2018).

This indicated that I had to ensure that I understood the planning and ensured I differentiated the planning prior to delivering the session. The learners were focusing upon their measuring skills and had to compare, sort and order different bones identifying which bone was the smallest or biggest; depending on the level of the groups. Differentiating the planning (See Appendix A for university planning) is important as it ensured that all learners in each ability group were able to complete the task in question, yet they were encouraged to critically think throughout and verbally communicate the answers with their peers. The students were able to say which bone was bigger or smaller, which enabled myself to be able to assess what the learners were able to do alone, and when it was required for me to support them in their learning. This supports the Vygotsky (1978) approach of Zone of Proximal Development.

To correctly assess the learners, I ensured I included and used assessment for learning strategies throughout the lesson I taught. By providing effective feedback and praise for the children it enhanced their well – being which is vital within education (Assessment Reform Group, 2002) (See appendix A). Questioning is something which I used to ensure that the learners were understanding the topic, this was a good tool in order to support their learning. This activity was then continued throughout the enhanced provision the following week. This can be seen that I have used my foundation knowledge and understanding to further develop the students learning, through the outdoor area. This covers the ‘foundation’ form within ‘The Knowledge Quartet’ *(*Rowland and Huckstep and Thwaites, 2003). I felt I had a good quality of knowledge of what I am teaching and differentiating the planning. I evidenced that I understood how the students were learning throughout the lesson and the enhanced

activities afterwards still were teaching the children. One child was able to order the bones from smallest to biggest and vis versa. This indicated that he was able to achieve what I taught him through my knowledge of the story ‘Funny Bones’ and my understanding of mathematics and numeracy.

Similarly, in an Expressive Arts (Donaldson, 2015) lessons, I planned and delivered music lessons which were sequenced over three consecutive weeks. I planned a music lesson which I used the skills and outcomes from both the Foundation Phase Framework (Welsh Government, 2015) and the Literacy and Numeracy Framework (Welsh Government, 2014). The first session I delivered was with the more able group, I viewed this lesson as inadequate. As some students struggled to copy simple sounds. Although, I had a secure subject knowledge which is essential (Shulman, 1986), I failed in the delivery of the session as many students were confused. However, through reflecting upon my delivery of the session, I was able to use different strategies which supported their learning such as: using the ‘my turn, your turn’ approach.

Using the ‘my turn, your turn’ approach helped overcome any difficulties which was taken. Being reflective was essential part of teaching, as supported by Welsh Government (2018). Although at first there was difficulties within my delivery of teaching (See Appendix B), I asked the children using to copy simple patterns, using clapping, tapping etc. I also asked the children to think of their own ‘sound’ they could make and be the ‘teacher’ in the delivery of the session. This encouraged children to be active participants within their learning supporting the constructivist learning, such as Piaget (Mordechai, 2009). This is supporting the transition stage of The Knowledge

of Quartet (TKQ). As I was able to model and get the more able students in the group to 'model' a pattern for the other children in the group to copy. I was able to explain in simple terms what the learning objective was so the learners were able to understand. Also, I used cross curricula opportunities within the Digital Competence Framework (DCF), this is something in which Donaldson suggests needs to be used within the new curriculum. Donaldson (2015) argues that DCF has a strong influence within today's society and within children in primary schools' life. It enables children and others to communicate, and gain information freely through a variety of technical sources. I fortunately have experience in this and was able to use this in this session, through showing the learners the video clip of the 'skeleton dance' for the learners to facilitate their learning.

As this was an expressive arts lesson, I ensured there was a cross curricular activity and encouraged the learners to count how many times they: clapped/tapped, this was appropriate with reference to supporting the learners in copying a musical pattern. Being equipped and confident in planning cross curricula lessons is something which I felt I was able to do effectively, which supported the learning of the students. This was something which I found that I was doing on a weekly basis with my planning. This is supported by Barnes (2015) who argues that everything in the world around us, physically can be seen in illustrated in multiple ways. In addition to this, I was required to teach a Humanities lesson. According to Donaldson's Successful Futures report (2015, p. 46) Humanities will cover 'historical, geographical, political, economic and societal factors' it will also focus about religious education (R.E). Unfortunately, I did not have a high standard of knowledge in R.E, this is something which I needed to do my own research on prior to delivering the teaching. Guerriero (2017) agrees with

this as it is suggested that teachers should understand the facts of teaching and understanding of the subject content before teaching the lesson, as this has an impact upon the learning.

The learning objective for this lesson was to explore and discuss ‘why we receive and give presents at Christmas?’. It was important that even with the multi cross curriculum links that I do not defer from the learning objective, this is something I had slight difficulties in. However, through gaining more subject knowledge of planning humanity sessions I was able to ensure that the learning objective was not changed and focused upon the religious views. Although this lesson was a Humanities lesson, it had a strong link with Literacy Language and Communication and Personal Social Development. Children were encouraged to discuss and communicate effectively within the task, discussing reasons for having a present at Christmas. The children were given concrete learning experience throughout and received a small chocolate as an understanding of why they had a present and how they felt also, so they were able to understand their own emotions and their friends too, linking to Personal social development. This was the Curriculum Purpose for this session, in connection with Donaldson (2015) the learners were encouraged to be healthy, confident individuals, which show awareness of their own values and beliefs. Having the concrete experience was beneficial as the students were able to make links to the Christmas story and understand why the feel happy/sad when they receive or do not receive a present. This was evidenced when a child said ‘I feel sad when I do not have a present like Baby Jesus’.

It was clear that within my teaching I was able to build upon their previous learning of the Christmas story and link it to their own emotions through concrete experiences, this is reflected within the 'Connection' form of TKQ. Furthermore, with the links of previous experience a student asked 'why he did not get Gold like Baby Jesus'. Admittedly this question was an unexpected yet interesting one, and it made the rest of the children intrigued also. However, throughout subject knowledge of knowing what presents were given to Jesus and using my initiative I was able to answer this question to a level which satisfied the need of the child. Through using examples this child was fully satisfied and understood what I said in connection to his question. This is the final stage of TKQ; the contingency stage.

Furthermore, having a good understanding and a high-quality subject knowledge prior to teaching is vital. However, find the balance between knowing the subject well enough to teach, and including both pedagogy and curriculum links is important with regards to a child's learning (Shulman, 1987a). It is evident that by gaining the knowledge of my R.E topic I was equipped to answer any unexpected questions and challenge the students learning.

Conclusion

This essay has discussed the relationship between teacher subject knowledge and the impact this can have upon a learning and teaching within a primary school. Gaining a simplistic definition of teacher subject knowledge has been a challenging. As there are conflicting views of whether teacher subject knowledge is predominantly the reason for high quality learning and teaching. Grigg (2015) and Rivkin, Hanushek, and Kain (2005); Aaronson, Barrow, and Sander (2007) state that teachers need to have

a good standard of pedagogy, and that teachers should have an adequate amount of knowledge in the subject they are teaching prior to the lesson. As this can ensure that teachers are fully educated themselves, so they can ask questions to enhance the learning of their students and, they can answer unexpected questions. This was evident with teaching practice when students asked a specific question in the humanities lesson, and the level of content knowledge of the subject was beneficial in order to answer the questions effectively.

In addition to this, there have been many studies which have focused upon teacher subject knowledge and how it impacts learning. It is evident that majority of these studies have confirmed that teachers must have a substantial amount of subject knowledge for teaching as this allows students to have a high-level pupil achievement in topics (Sutton Trust, 2011). However (Shulman, 1986) argues that teachers must have a high level of subject and pedagogical knowledge so teachers can understand how knowledge of the curriculum can also influence their teaching styles.

Furthermore, as a target, to ensure teaching is of a high standard, I must further develop my understanding of how important teacher subject knowledge is ensuring that the tasks which are taught are effective and challenging for the learners. Lessons and teaching should also have a high curriculum focus with reference to the four purposes outlined by Donaldson (2015). It is also important to ensure that the lessons are of a high quality, so it will have a positive effect of the students learning and it will encourage the students to become critical thinkers and independent ‘ambitious, capable learners’ (Donaldson 2015, p. pp. 29 -31).

Reference List.

Aaronson, D. and Barrow, L. and Sander, W. (2007) 'Teachers and Student Achievement in the Chicago Public High Schools', *Journal of Labor Economics*, 25 (1), pp. 95–135.

Assessment Reform Group. (2014). *Key questions | Assessment for Learning*. Available at: https://www.assessmentforlearning.edu.au/professional_learning/intro_to_afl/introduction_key_questions.html (Accessed: 9 January 2019).

Aubrey, C. (1993). 'An Investigation of the Mathematical Knowledge and Competences which Young Children Bring into School', *British Educational Research Journal*, 19(1), pp. 19–37.

Barnes, J. (2015). *Cross-curricular learning 3-14*. London: Sage publications.

Bearne, E. and Reedy, D. (2018). *Teaching primary English*. Oxon: Routledge.

BERA. (2018). *Ethical Guidelines for Educational Research*. Available at: https://www.bera.ac.uk/researchers-resources/publications/ethical-guidelines-for-educational-research-2018 (Accessed: 28 December 2018).

Campbell, J. (2006). *Assessing teacher effectiveness*. London: Routledge.

Coe, R. and Aloisi, C. and Higgins, S. and Elliot Major, L. (2014) *What makes great teaching: Review of underpinning research*. Available at: http://www.suttontrust.com/researcharchive/great-teaching/ (Accessed: 7th January 2019).

Darling-Hammond, L. (2000) 'How Teacher Education Matters', *Journal of Teacher Education*, 51(3), pp. 166–173.

Department for Education. (2013) *The Importance of Teaching*. London: Her majesty office.

Donaldson, G. (2015) *Successful Futures: Independent Review of Curriculum - 7 - and Assessment Arrangements in Wales* Crown Copyright available at: http://gov.wales/topics/educationandskills/schoolshome/curriculum-for-wales-curriculum-for-life/why-we-are-changing/successful-futures/?Lang=en

Estyn, (2015). *A report on School*. Available at: https://www.estyn.gov.wales/sites/default/files/documents/[redacted].pdf (Accessed: 10 January 2019).

Fennema, E. and Franke, M. L. (1992) *Teachers' knowledge and its impact: Handbook of research on mathematics teaching and learning*. New York: Macmillan

Grigg, R. (2010) *Becoming an Outstanding Primary School Teacher*. Harlow: Pearson.

Guerriero, S. (2017) *Teachers' Pedagogical Knowledge and the Teaching Profession*. Retrieved from OECD:

http://www.oecd.org/education/ceri/Background_document_to_Symposium_ITEL-FINAL.pdf

Impact Wales. (2018). *Donaldson's 12 pedegogical principles & what you should do with them.*
Available at: https://www.impact.wales/wp-content/uploads/2018/01/12-Pedagogical-Principles-1.pdf
(Accessed: 09 January 2019).

Johnston, J. Halocha, J. and Chater, M. (2007). *Developing teaching skills in the primary school*. Maidenhead: Open University Press.

Li-Yi, J. (2016) *Confident Teachers Make for Confident Learners | singteach | Education Research for Teachers*. Available at: http://singteach.nie.edu.sg/issue56-research02/ (Accessed: 6 January 2019).

Mansour, N. (2008)' Science Teachers' Beliefs and Practices: Issues, Implications and Research Agenda', *International Journal of Environmental & Science Education*, 4(1), pp. 25-48.

Murphy, C. (2006) T*he role of subject knowledge in primary student teachers' approaches to teaching the topic of area*. Available at: http://ife.ens-lyon.fr/publications/edition-electronique/cerme6/wg10-14-murphy.pdf (Accessed: 10th January 2019).

Richardson, V. (2005) *Constructivist Teacher Education: Building a World of New Understandings.* London: The Falmer Press

Rivkin, G., and Hanushek, and Kain, F. (2005). 'Teachers, Schools, and Academic Achievement', *Econometrica,* 73 (2), pp. 417–458.

Rockoff, Jonah E. (2004) 'The Impact of Individual Teachers on Student Achievement: Evidence from Panel Data', *American Economic Review,* 94 (2), pp. 247–252.

Rodrigues, S. (2005) *International Perspectives on Teacher Professional Development: Changes Influenced by Politics, Pedagogy and Innovation*. New York: Nova Science Publishers.

Rowland, T. and Huckstep, P. And Thwaites, A. (2003) 'The Knowledge Quartet in Williams, J. (Ed) *Proceedings of the British Society for Research into Learning*

Shulman, L. (1986) 'Those who understand: Knowledge growth in teaching', *Educational Researcher,* 15 (2), pp. 4-14.

Shulman, L. S. (1987a) 'Knowledge and teaching: Foundations of the new reform', *Harvard Educational Review*, 57(1): pp. 1-22.

Sutton Trust. (2011) *Improving the Impact of Teaching on Pupil Achievement in the UK: Interim Findings.* London: Sutton Trust.

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

Welsh Government. (2014). *Literacy and Numeracy Framework*. Available at: http://learning.gov.wales/resources/browse-all/nlnf/?Lang=en (Accessed: 8th January 2019).

Welsh Government. (2015). *Foundation Phase Framework*. Available at: https://beta.gov.wales/sites/default/files/publications/2018-02/foundation-phase-framework-revised-2015.pdf (Accessed: 8th January 2019).

Welsh Government. (2018). *Learning Wales - Professional Standards*. [online). Available at: http://learning.gov.wales/resources/collections/professional-standards?Lang=en (Accessed: 8th January 2019).

Appendices

Appendix A……19

Mathematic & Numeracy University Planning – More able x1 Middle x1 Support Group x1

Appendix B ……20

Expressive Arts ARC

Appendix A

More able group Am

Name of Trainee:	Miss Keenan	**Session ref:**		**Date:**	13.11.18	**Class:**	Nursery
Targed(au) Hyfforddi Personol				**Number of learners:**	27/8	**Age:**	3 to 4 years old

Cynllun Ffocws y Cyfnod Sylfaen

2d

Learning objectives/intentions:	explore different sounds and use different ways to make our own sound.	**Success Criteria**	I can imitate simple patterns using different sounds	**Meeting learners' needs:**	

Introduction/plenary tasks	**Main activities**	**Resources/ Key Vocabulary**	**Assessment for Learning (strategies and opportunities)**
Introduction Talk about Funny Bones/skeleton dance song the children have heard. Discuss that they are going to make	Trainee focused task (purpose, outline of trainee's role and children's learning): **My turn your turn approach.** Using different sounds such as: clapping/clicking/tapping/stamping/humming introduce this to the learners. Teacher starts with a beat	iPad	**Questioning** • What sound does a clap make? • How can we make sounds using our body? • Can you copy this pattern?

their own music using different sounds. **Plenary** If appropriate	and introduce new beats when able. Children to copy the beat. *choose a helper to play the role of the teacher and make a sound pattern for the rest of the group to copy (If suitable)* **MA (Bumblebees F02)** – Imitate simple musical patterns and using different ways to create a sound (stamping/clapping/humming/clicking /tapping).		• what other sounds can we make? • How many … (Claps/stamps/clicks/hums) did you do? • Can you make your own pattern up? **Feedback** Praise
Curriculum coverage (range and skills) Problem solving, thinking skills, oracy development,			
Literacy (LNF) • participate in discussions with other children and/or adults • N.0C2 take part in activities alongside others. • N.0L1 listen and respond with growing attention and concentration • N.0S1 express some enjoyment or interest.		Numeracy (LNF) • N.N1 Count reliably up to five objects.	
DCF	Thinking	ESDGC	YCC

Appendix A – Middle Group

Name of Trainee:	Miss Keenan	**Session ref:**	**Date:**	**Class:**	Nursery	**Cynllun Ffocws y Cyfnod Sylfaen**
Targed(au) Hyfforddi Personol			**Number of learners:**	**Age:**	3 to 4 years old	**2d**

Learning objectives/intentions:	explore different sounds and use different ways to make our own sound.	**Success Criteria**	I can explore and copy simple sounds of up to 3 (FO1 - M) I can explore and repeat at least one sound (clapping/stamping) MB	**Meeting learners' needs:**	My turn your turn

Introduction/plenary tasks	**Main activities**	**Resources/ Key Vocabulary**	**Assessment for Learning (strategies and opportunities)**
Introduction Talk about Funny Bones/skeleton dance song the children have heard. Discuss that they are going	Trainee focused task (purpose, outline of trainee's role and children's learning): **My turn your turn approach.** Using different sounds such as: clapping/clicking/tapping/stamping /humming introduce this to the learners. Teacher starts with a	iPad	**Questioning** • What sound does a clap make? • How can we make sounds using our body?

to make their own music using different sounds. **Plenary** If appropriate	beat and introduce new beats when able. Children to copy the beat. *choose a helper to play the role of the teacher and make a sound pattern for the rest of the group to copy (If suitable)* **SG (Dragonflies Gold)** – Explore a range of different sounds and how to make sounds - clapping/stamping. IDP MB		• Can you copy this pattern? • what other sounds can we make? • How many … (Claps/stamps/clicks) did you do? • Can you copy me and do [number] of claps? **Feedback** Praise/Stickers
Curriculum coverage (range and skills) Problem solving, thinking skills, oracy development,			
Literacy (LNF) • participate in discussions with other children and/or adults • N.0C2 take part in activities alongside others. • N.0L1 listen and respond with growing attention and concentration • N.0S1 express some enjoyment or interest.		Numeracy (LNF) • N.N1 Count reliably up to five objects.	
DCF	Thinking	ESDGC	YCC

1800434

Appendix A -Support Group

Name of Trainee:	Miss Keenan	**Session ref:**		**Date:**	**Class:**	Nursery	**Cynllun Ffocws y Cyfnod Sylfaen**
Targed(au) Hyfforddi Personol			**Number of learners:**		**Age:**	3 to 4 years old	**2d**

Learning objectives/intentions:	explore different sounds and use different ways to make our own sound	**Success Criteria**	I can explore and copy simple sounds of up to 3 (FO1 - M) I can explore and repeat at least one sound (clapping/stamping) EW	**Meeting learners' needs:**	My turn your turn

Introduction/plenary tasks	**Main activities**	**Resources/ Key Vocabulary**	**Assessment for Learning (strategies and opportunities)**
Introduction Talk about Funny Bones/skeleton dance song the children have heard. Discuss that they are going	Trainee focused task (purpose, outline of trainee's role and children's learning): **My turn your turn approach.** Using different sounds such as: clapping/clicking/tapping/stamping/humming introduce this to the learners. Teacher	iPad	**Questioning** • What sound does a clap make? • How can we make sounds using our body? • Can you copy this pattern?

to make their own music using different sounds. **Plenary** If appropriate	starts with a beat and introduce new beats when able. Children to copy the beat. *choose a helper to play the role of the teacher and make a sound pattern for the rest of the group to copy (If suitable)* **M (Ladybirds F01)** – Copy simple sounds and explore a range of sounds - scraping/shaking/stamping/clapping. IDP EW		• what other sounds can we make? • How many … (Claps/stamps/clicks/hums) did you do? • Can you copy me and do [number] of claps? **Feedback** Praise/Stickers

Curriculum coverage (range and skills) Problem solving, thinking skills, oracy development,			
Literacy (LNF) • participate in discussions with other children and/or adults • N.0C2 take part in activities alongside others. • N.0L1 listen and respond with growing attention and concentration • N.0S1 express some enjoyment or interest.		Numeracy (LNF) • N. N1 Count reliably up to five objects.	
DCF	Thinking	ESDGC	YCC

Appendix B

Assisted Reflective Conclusions (ARC) Model

Dyddiad/*Date*: 12.11.18

Digwyddiad critigol (Ffocws)/*Critical incident (focus):* Creative task - Music session

Profiad/ *Experience*	
Teimladau/ *Feelings* *Beth yw eich teimladau ynghylch y profiad?* *"What are your feelings regarding the experience?"*	I was excited to do this was feeling positive about this session this is because this is something, I have had experience in before. I was excited to see the children's knowledge and understanding of creating different sounds and making a simple musical pattern.
Cofio a Deall/ *Remember and Understand* *Allwch chi restru'r agweddau ar y profiad dysgu a aeth yn dda?* *"Can you list the aspects of the learning experience that went well?"* *Pa elfennau o'r profiad dysgi oedd yn siomedig?* *"What were the elements of the learning experience that were disappointing?"*	**What happened** **…when learners encountered difficulties?** ● It became evident that some learners found this activity a bit challenging for them as they referred to musical 'sounds' as 'sounds' they learn in read write Inc. This could be as a result of the wording of sounds where I could have used another word to substitute this confusion. ● The learners were easily distracted too, through the surroundings and having other children wanting to come and join in from different groups - this was not necessarily something which was beneficial to this session. However, it was a confidence boost for me as other learners were intrigued to come and learn with their friends. ● Eventually, all students were fully engaged and were working nicely with their peers. Some students were able to support their friends in this process too. ● Students were evidently excited to make different sounds and copy a simple pattern with their group. This was displayed throughout their pattern making. ● Students were able to count how many: claps/stamps/taps they have done so the cross curricular opportunities were implemented throughout this session.
Gwerthuso a dadansoddi/ *Evaluate and analyse*	What was the relationship between...? …the behaviour of the class and their learning?

Beth byddwch chi'n cadw'r un fath i sicrhau dysgu 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 siomedig bwysicaf?* *"What was the cause of the most important disappointing element?"*	• Some children were too excited which hindered the full impact of this session. These children were moved to sit next to me which did benefit their learning in the long run. • Some children become distracted easily by their peers in different groups, so I had to ensure that i kept mentioning names to ensure I fully had their concentration. Through discussion with the class teacher it was suggested to do this session again and to have the MA students in the group to show the other students what to do regarding making sounds. (This was something which I did during the second part session the following day and it worked very well)
Casgliadau a chamau gweithredu/ *Conclusions and actions* *Beth yw eich atebion posibl i'r materiaon siomedig a nodwyd?* *"What are your possible solutions to the disappointing issues identified?"* *Beth ydych yn mynd i'w wneud nesaf?* *"What will you do next?"*	• Next session perhaps using musical instruments would benefit all learners in making different sounds. Also, in identifying the different sounds throughout. • Splitting the group into pairs, having partners working together on sounds and then gradually building it up into a pattern with their group may also be beneficial. • Next time, having a student who is more able to do this music session to become the 'teacher' and display these sounds to their friends in order to support them.
Y profiad newydd / *Transformed experience*	