

ASSIGNMENT DETAILS AND FEEDBACK

SOUTH WEST WALES CENTRE FOR TEACHER EDUCATION

*Sections marked with * should be completed by module lead*

Student name:	Leah Marie Wright	Student P number:	1301200
Programme: *	PGCE Primary		
Module: *	The Enquiring Teacher	Module Level (6 or 7):*	7
Module code: *	M7X2152	Contribution to Overall Module Assessment (%): *	100%
Module Lead:*	Catherine Morgan		
Assignment Title:*	Write a critical and analytical essay that discusses your practitioner research 'lesson study' in relation to a chosen field.	Assignment No (x of x):*	1/1
Start date:*	09/01/18	Submission deadline:*	16/04/18
Return date of provisional marks & written feedback:*			

Referencing:	In the main body of your submission you must give credit to authors on whose research your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have read or quoted in order to complete this assignment (e.g. for books: surname of author and initials, year of publication, <u>title of book</u> , edition, publisher: place of publication).		
Submission:	All assignments must be submitted to Turnitin unless otherwise instructed by the Lecturer. Note: the Turnitin version is the primary submission and acts as a receipt for the student. Late submission of the electronic version of the assignment will result in a late penalty. Penalties for late submission: Up to one week late, maximum grade D. Over one week late, Refer. Only the Extenuating Circumstances Panel may grant an extension.	Date:	16/04/18
Module lead tick to indicate if a hard copy version of the assignment must be submitted.*			YES
			NO ✓

Learning Outcomes tested (from module syllabus)	Assessment Criteria: To achieve each outcome a student must demonstrate the ability to:
•Design and apply appropriate research methodologies demonstrating a critical understanding of the nature of educational research •Conduct a small scale research enquiry to improve an aspect of personal practice and learner outcomes, showing some originality and rigour in the application of appropriate research skills •Critically evaluate research evidence, showing sound judgement of complex data to support pedagogic decisions •Critically reflect upon the importance of ethical procedures within classroom based research, and apply these procedures appropriately	• Discuss the intended professional data collection justifying its suitability and purpose; • Support the study by referring to a range of relevant literature; • Integrate theory and practice with regard to the pedagogic context; • Undertake a critical evaluation of the study; • Discuss the ethical issues that should be considered during the study • Write a well-structured piece of work in a coherent writing style

TASK DESCRIPTION

Write a critical and analytical essay that discusses your practitioner research 'lesson study' in relation to a chosen field.

This should be 6000 words in length.

Further details regarding the structure of the work will be available on Moodle.

You will also be required to submit an Ethics Form as part of the assessment of this module. This will be submitted on the 28th February.

GUIDANCE FOR STUDENTS IN THE COMPLETION OF TASKS

NOTE: The guidance offered below is linked to the assessment criteria overleaf.

1. Subject Knowledge and Understanding (which includes using research-informed literature and knowledge and understanding of the subject)

Your work must be informed and supported by scholarly material that is *relevant* to and *focused* on the task(s) set. You should provide evidence that you have accessed a wide *range* of sources, which may be academic and/or governmental; these sources may include academic journal articles, textbooks, current news articles, organisational documents, and websites. You should consider the *credibility* of your sources; academic journals are normally highly credible sources while websites require careful consideration/selection and should be used sparingly. Any sources you use should be current and up-to-date, mostly published within the last five years or so, though seminal/important works in the field may be older. You must provide *evidence* of your research/own reading throughout your work, using in-text citations in the main body of your work and a reference list that is alphabetical at the end of your work. Please use the Harvard referencing system.

Your work must demonstrate the growing extent of your knowledge and understanding of concepts and underlying principles associated with the subject area. *Knowledge* relates to the facts, information and skills you have acquired through your learning. You demonstrate your *understanding* by interpreting the meaning of the facts and

information (knowledge). This means that you need to select and include in your work the concepts, techniques, models, theories, etc. appropriate to the task(s) set. You should be able to explain the theories, concepts, etc. meaningfully to show your understanding. Your mark/grade will also depend upon the *extent* to which you demonstrate your knowledge and understanding; ideally each should be complete and detailed, with comprehensive coverage.

2. Intellectual Skills (Analysis)

Your work must contain evidence of logical, analytical thinking, evaluation and synthesis. For example, to examine and break information down into parts, make inferences, compile, compare and contrast information. This means not just describing what! But also justifying: Why? How? When? Who? Where? At all times, you must provide justification for your arguments and judgements. Evidence that you have reflected upon the ideas of others within the subject area is crucial to you providing a reasoned and informed debate within your work. Furthermore, you should provide evidence that you are able to make sound judgements and convincing arguments using data and concepts. Sound, valid conclusions are necessary and must be derived from the content of your work. There should be no new information presented within your conclusion. Where relevant, alternative solutions and recommendations may be proposed.

3. Pedagogic and Professional Applications (Practical Application and Deployment)

You should be able to demonstrate how the subject-related concepts and ideas relate to pedagogic situations or a particular education context. How do they work in practice? You will deploy models, methods, techniques, and/or theories, in that context, to assess current situations, perhaps to formulate plans or solutions to solve problems, some of which may be innovative and creative. This is likely to involve, for instance, the use of pedagogic examples and cases, the application of a model within relevant educational context. You should show awareness of the limitations of concepts and theories when applied in particular educational contexts. Your work must provide evidence of the attributes expected in professional practice. This includes demonstrating your individual initiative and/or collaborative working. Where relevant, you should show awareness of any ethical issues that relate to your discussion.

4. Key Transferable Skills (Skills for Professional Practice)

You must communicate effectively in a suitable format, which includes written and oral presentation. Work should be coherent and well structured in presentation and organisation.

MARKING CRITERIA AND STUDENT FEEDBACK

This section details the assessment criteria. The *extent* to which these are demonstrated by you determines your mark. The marks available for each criterion are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.

Common Assessment Criteria Applied	Grade awarded
1. Subject Knowledge and Understanding (which includes using research-informed literature and knowledge and understanding of the subject) Extent of research and/or own reading, selection of credible sources, application of appropriate referencing conventions. Extent of knowledge and understanding of concepts and underlying principles associated with the discipline.	

2. Intellectual Skills (Analysis) Analysis, evaluation and synthesis; logic, argument and judgement; analytical reflection; organisation of ideas and evidence	
3. Pedagogic and Professional Applications (Practical Application and Deployment) Deployment of pedagogic methods, materials, tools and techniques; application of concepts; formulation of innovative and creative solutions to solve problems. Attributes in professional practice: individual and collaborative working	
4. Key Transferable Skills Deployment of appropriate media; presentation and organisation.	

Assignment Grade (Assessment grades are subject to ratification at the Exam Board. These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)	Late Submission Penalties (tick if appropriate)		
	Up to 1 week late	D Max	
	Over 1 week late	Fail	

Student Self Evaluation Form

This section repeats in brief the common assessment criteria detailed on previous pages. The *extent* to which these are demonstrated by you determines your mark. Using these criteria, tick the box that best indicates the level of achievement you feel you have achieved with regard to each of them.

Common Assessment Criteria Applied	REFER		D	C	B	A
	OUTRIGHT FAIL	UNSATISFACTORY	SATISFACTORY	GOOD	VERY GOOD	EXCELLENT
1. Subject Knowledge and Understanding (which includes using research-informed literature and knowledge and understanding of the subject)	☐	☐	☐	X	☐	☐
2. Intellectual Skills (Analysis)	☐	☐	☐	X	☐	☐
3. Pedagogic and Professional Applications (Practical Application and Deployment)	☐	☐	☐	X	☐	☐
4. Key Transferable Skills	☐	☐	☐	X	☐	☐

PLEASE COMMENT ON AREAS IN WHICH YOU FEEL THAT YOU HAVE PERFORMED WELL		PLEASE COMMENT ON AREAS YOU FEEL THAT YOU NEED TO DEVELOP	
I feel I have performed well in the essay by structuring my argument logically. This is an ongoing target for myself because I know I find it difficult to articulate my thoughts into a structured argument. Moreover, I have tried to place my own opinions in there with the evidence to back them up. Whereas, I can often use a quote to summaries the meaning without fully expressing the significance of it.		I need to develop what I chose to use in an argument. I find that I will read a lot of literature and make a lot of notes on what I have found but I get lost knowing what to use and how to embed the points together. I think this is why I get lost or lose focus of my argument because I try to show all the effort I put in to reading and researching the topic but evidently lose sight of what it is I am trying to say and then it isn't structured logically for the reader to understand.	
Student's Name	Leah Wright	Date	15th April 2018
Student's Signature	L. M. Wright		

Do children use peer learning in a focus task in the foundation phase?

The Enquiring Teacher
ECPP7001-C

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Purpose of research

There were a variety of interests within class that lead to me to the focus of my research. One of the issue that I was interested in was peer learning. During teaching experience, it became clear that assessment for learning (AfL) strategies were not being applied effectively in the classroom. The children had talk partners and their partners were in the same ability groups but it was evident that some children benefited from the experience more than others. I believe the support in the activity from their peers impacted on the learning experience.

Therefore, leading our research to wonder how often children do use peer learning within the classroom and if children can be encouraged to use this strategy to support their learning. Evidently, learning is posited as an approach that is built on the theory of Dewey and Vygotsky who claim knowledge to be socially constructed within a community of learners (Innes, 2004). This lead our research into the interaction of peers and if they could be supported by a strategy to encourage collaborative learning.

Research context

Research was conducted in two Foundation Phase classes in one school. The first research lesson took place in a reception class, there were 50 children in this class. The second lesson took place in a year 1 class, there were 22 children in this class. The study was conducted in the same school in a village, just outside Swansea. Around 16% of pupils are eligible for free school meals, which is lower than the Wales average of 19% (Welsh Government (WG), 2016), the school states that around 27% of pupils are on the additional learning needs register, which is slightly higher than the Wales average of 21% (Estyn, 2017).

My partner and I discussed our research aim to focus on peer learning because it was decided that peer learning was not being utilised in the classroom. Although, the year 1 class displayed some use of peer learning, it was rarely applied. Together we decided our research question is 'Do children use peer support within focus tasks and enhanced provision to help their learning within the foundation phase'? The research will investigate if children do use this strategy to help develop their learning and what effects their interactions on peer learning. For my class this mean that through utilising collaborative peer learning could benefit them because they would learn to understanding how to work together and become resourcefully independent. Equally, The Welsh Assembly Government agree that children should be challenged in the foundation phase to be given opportunities to explore and develop their thinking and this includes encouraging children to sharing their ideas for problem solving (WAG, 2017).

Overview of relevant literature

Peer learning can be defined under collaborative or cooperative learning and it is in activities which pupils can engage in a shared learning experience to support each other's learning, as well as gain knowledge from learning themselves by teaching (EEF, 2018 and Topping, 1996). Humans are social beings, therefore we want interactions and it is these interactions that help us form knowledge. Piaget and Bandura are among theorists who believe that cooperation and social interaction are essential elements in creating knowledge (Secomb, 2008). Although there are still benefits to alternative strategies and individual work, research in the classroom supports the positive impacts of collaboration when working in different levels and experience (Nilson, 2010). I looked further into this by reading books, journal articles, government documents and other on-line material. What this showed me was that evidence from research over the past 40 years indicates how positive the impacts and benefits of collaborative learning can have on pupils (EEF, 2018). The extensive evidence from research examines the added value of collaborative learning to be able to impact progress on pupil development by a further five months (EEF, 2018). Therefore, evidence highlights that when a teacher use strategies such as collaborative learning in the classroom it can have a great impact on how their learning progresses.

According to the research there are three fundamental dimensions of effects collaborative learning has positive results on, which is good relationships, achievement in learning and psychological health (Nilson, 2010). Thus, there are many advantages to collaborative learning and working with peers. When learning from and with peers in similar situations and positions it creates a common language and relaxed climate to experience challenges (Nygren and Carlson, 2016). Studies have shown that the cooperation between two students developed their skills because they helped each other is converting theoretical knowledge into active practise together and it is the coherence of peer learning which induced student independence because they use their peers to support them (Roberts, 2008, Stone et al, 2013). It is the knowledge and understanding of learners to engage in regular opportunities to listen to divergent thinking and challenge perspectives to encouraging learners to teach their peers which grows intelligence through analysis, critiques and questions constantly evaluating what is informed by their own expertise and their peer (Elder, 2012). Through problem based learning students are actively contributing to their learning through creating their knowledge and understanding it by working with peers (Grigg, 2016). Evidently, it is the support of each peer and the individuals knowledge that can help progress the learning forward for each participants own understanding.

In fact, peer learning benefits both parts providing the ideal forum for feedback to flow between learner to learner, from learner to teacher and from teacher to learner. The participants in peer learning alternate the roles as teacher and pupil because research shows that peer learning stimulates student's abilities to reflect and analyse through sharing knowledge and this cognitive development that increases their capacity to learn (Boud, 2001,

Secomb, 2008, Elder, 2012, Nygren and Carlson, 2016). Therefore, understanding our level of learning and how to improve knowledge embeds powerful learning to be received when we have effective feedback with peers. When deep learning is accomplished it builds on past experiences and solidifies knowledge to provide a base for new learning contexts (Budwig, 2013). Therefore, it is the research into collaborative learning working environments that creates opportunities for acquiring new information that enables peers to learn from each other's knowledge and it is the collaboration that deepens the learning experience for pupils (Nilson, 2010, Janssen et al, 2010). This means, that the knowledge communicated and feedback learners receive from their peers is an important factor to developing understanding and further learning.

However, problem based learning can have a negative effect for obtaining the required knowledge (Hattie, 2009). Equally, there are negative aspects of peer learning; mainly conflicts occurring because of lacking cooperation between the students due to different levels of knowledge and personalities (Secomb, 2008). When working collaboratively pupils can often experience competitiveness and some students feel it is easy to not contribute to the learning (Stenberg and Carlson, 2015). Furthermore, statistics highlight that only one percent of teachers would use peer schemes in the classroom (The Sutton Trust and EEF, 2015). In light of this, it is evident that recent experience reflects this but the increased evidence on the benefits of collaborative learning strategy illuminates the impacts of its use on development within the classroom. Similarly evidence acknowledges the benefits of collaborative learning but new teaching strategies are required to incorporate this type of format into the classroom (Barkley et al, 2014). This means that although collaborative learning is arguably a beneficial factor in the classroom, there are also issues ensuring that the strategy is implemented effectively and pupils are equally involved and challenged appropriately.

In recent years there has been an increased focus on pupil learning outcomes (Tremblay et al, 2012) and it is imperative to understand better how collaborative learning can influence outcomes on student learning (Khwaja and Eddy, 2015) because the world in which we are sending out our young people demands for individuals who are collaborative and innovative (Donaldson, 2015). Therefore, there is a need to supply the opportunities for children to practice team-working skills and problem based learning because of the demands of the future. So, all of this reading supported our research questions to understand if children do use peer learning in the foundation phase.

Methodology

This research was conducted in order to understand whether children do use peer learning in a focus task in the foundation phase. It is aimed at collecting qualitative data to investigate what issues could be altered in order to improve the peer learning being used in two different foundation phase classrooms. A variety of methods were used to collect the data for the research because involving various sources will provide comparing and combining

evidence to better understand the validity (Roberts-Holmes, 2014). The learners were observed to analyse how they interact with their peers and measured against Leuven's level of involvement. A lesson study design was conducted between two student teachers working collaboratively to plan, teach and improve a sequence of research lessons.

The methodology used in lesson study research is a form of action research. Action research is a developmental study of progress that includes a process of problem investigation, fact-finding and taking action to discover the result of an action (Lesha, 2014). Teachers are beginning to embrace the importance of action research because it develops an awareness of critical and changeable aspects of classroom teaching and learning (Souto-Manning, 2012). Therefore, the use of action research can enable teachers to adopt appropriate teaching strategies within their own classrooms. In fact, the lesson study is a form of specialised action research which is aimed at developing teacher practice (Dudley, 2014). The methodology in a lesson study involves the collaboration of teachers carrying out research to investigate the impacts of a pedagogical approach on learning through planning, teaching, observing, analysing and reflecting on the learning (Dudley, 2015, DfE, 2009). Arguably, Robinson et al (2009) believes collaborative enquires are one of the most powerful actions teachers can take part in to improve education outcomes for pupils and professional development and knowledge. Evidently, lesson studies are successful in helping teachers develop their learning in the classrooms and improve shared evidence of pedagogical approaches (Dudley, 2014).

According to Brownwell, et al, (2006) when teachers engage in lesson studies their pedagogy is better designed and delivered through instructional practices. Working collaboratively is an effective approach because it can enhance pupil learning and provides opportunities for teachers to improve their practice with the help of their peers (Bower and Richards, 2006, Louis, 2006, DFCSF, 2009). In agreement, Darling- Hammond and McLaughlin (2011) stress that it is the collaboration which encourages appropriate support communities for teachers to improve on their pedagogical knowledge. Vygotsky's (1986) sociocultural theory interprets learning to be adapted towards a strong social motivation, while the process of collaboration in learning is understood as an internalised process which new knowledge is constructed within the social process (Kleine Staarman and Mercer, 2010). As a result, teachers involved in lesson studies learn from their collaborative group because it is acknowledged that learning is a social process.

As I have noted, it is found that the classroom is a powerful, practice-based context where teachers learn to improve and understand the techniques to support learning (Kazemi and Hubbard, 2008; Opfer and Pedder, 2011). Conversely, a teacher is often a lone professional in their classrooms and it is their practice knowledge that is only known to them (Dudley, 2014). Evidently, it is this nature in which teachers practice that affects the professional learning models (Dudley, 2013). It is the lone practice that has affected professional development because seeking advice or help from another could be seen as weakness (Huberman, 1993, Hargreaves, 1999). Also, Dudley (2015) emphasises the sensitivity of a collaborative study and that teachers can feel exposed during the

observations. In addition, the presence of a professional colleague observing is related to inspections or performance management (Dudley, 2013). Thus, the idea of being observed could cause collaboration to feel uncomfortable due to the associations. Although, it is important to stress that the lesson study process is aimed towards the student learning and gathering evidence to support classroom learning and interaction rather than critiquing a teachers behaviour (Puchner and Taylor, 2006, Saito and Atencio, 2013).

Under qualitative research studies the method of data collection will include a variety of techniques. Firstly, data will be collected through the method of observation. The use of observation will allow the observer to gain knowledge of the child (Louis, 2008). In particular, three focus children will be the centre of the observation from three attainment groups (Dudley, 2014). In fact, the importance of the observation method within the study is to provide a lens which will inform analysis and interpretations of the children (Bruce, 2012). The observation will be recorded from the view of the non-participant. The objective of the non-participant observer is to focus on the observation and the focus group. As a result, the non-participant can focus on the aim of the lesson research and not be distracted from other responsibilities (Papatheodorou et al, 2013). In addition, Montessori urged observers to dissociated themselves from the observation because it can offer a perspective on the actual learning observed within a research lesson, rather than our own bias perspective (Papatheodorou et al, 2013, Dudley, 2014). Therefore, using a non-participant will help view alternative perspectives on peer learning in the foundation phase without biasness.

A small group observation form (Gronlund and James, 2013) , in appendices 5, presents how the research is documented and measured against the Leuven scale of involvement. The narrative observation method was decided to record the evidence. The narrative observation offers opportunities to record detailed accounts of the child's actions (Papatheodorou et al, 2013). In contrast the narrative technique can depict what has been observed but is a contemporaneous record within a minimal amount of time to concise the observation (Papatheodorou et al, 2013, Hobart and Frankel, 2009). In light of this, the three focus children will be individually observed to obtain sufficient information. Since the children are being observed on their interactions with peers it is valued that the Leuven scale will provide a complete overview of peer learning as involvement refers to the involvement of the activity and the level of learning and development (Laevers ,2005). Therefore, the observations will provide a recount of open data on the focus children in order to evaluate and analyse their learning and progress.

Secondly, the focus group will provide their feedback on the research lesson through an interview process and taking into account the child's opinion will in turn have an influence and effect on the analysis of the research outcomes (Papatheodorou et al, 2013). The interviews are a semi-structured techniques use in qualitative data because as it provides valid and in depth understanding alongside observation on the topic (Baines et al, 2018). The interviews will be lead by the participant as they will be known to the children to ensure that no unethical distress (Riddall-Leech, 2008) or direct impact from observer on the observed (McCambridge et al, 2014).

Thirdly, the participant and the non-participant will hold post research lesson discussions to evaluate and reflect on the research lesson (Dudley, 2014). This embodies a teachers natural practice and learning process (Dudley, 2014). Thus, the reflection is the central cycle to planning, teaching and monitoring the implementation of change and responsibility for decisions in refining and repeating (Noland and Sim, 2011). The reflective processes that derive from professional conversations with colleagues on observations encourages change (Grigg, 2016). Shulman (1987) argues that teaching is a profession of learning through reforms of comprehension, reasoning, transformations and reflection. As a result, the study will reflect through Brookfield's four lenses as it involves feedback from different collaborations in the reflection (Miller, 2010, Badia, 2017) to inform understanding and analysis. This seems appropriate as the opinions of all involved are reflected and the research embodies collaborative learning.

In final, qualitative research is interested in the complexity and diversity of human interactions and it is these interpretations from the observer, participant and children's views that are equally important (Roberts-Holmes, 2014). Therefore, using these approaches in data collection methods will develop an overall view of peer learning within the foundation phase. It is the triangulation of research techniques which gives qualitative research the validity and ensures findings are more convincing (Mukerji and Albon, 2009). Furthermore, peer learning strategies will also be embedded into our research through our interactions in collaboration of the lesson study.

Ethical Considerations

There are ethical considerations with doing research in a classroom which have been examined and are outlined in the Ethical Approval Form (appendix 1). It is significant to our principles as future teachers to ensure we uphold within the research a duty of care to the participants (The Children's Act, 2004). The British Educational Research Association (2011) informs guidelines on the responsibilities to participants and it is within these responsibilities as the researcher to apply a duty of care to ensure an obligation to the participants anonymity and confidentiality (UWTSD, 2017). To ensure the anonymity of each participants rights to privacy the children's identity will be unknown. It is the recognition of these obligations to ensure the integrity in which the research is undertaken is conducted through appropriate standards and conforms to accepted ethical practices and principles (BERA, 2011, UWTSD, 2017).

The relationship between children and social research emphasises the importance of exercising the children rights as stated in Article 12, children who are capable of forming their own views on matters affecting them should be granted the right to express their views freely and without consequence (UNICEF, 1989). To gain consent a letter (appendices 2) will be provided for parents and guardians but to acquire assent from the child will be achieved through an explanatory statement (appendices 3). It is important to highlight that it is only the children that have been provided with parental consent and volunteered their assent that will

be a participant in the research (David et al, 2001, BERA, 2011). This will be achieved through a register of their names highlighting who has both consent requirements (appendices 4). It is our understanding of the ethical obligations to the participants that both my partner and I ensured that the risks to participants were considered under their ethical rights and guided by a conduct of moral purpose (Grigg, 2016).

Lesson Study 1

As can be seen in appendix 6 it was agreed that we would incorporate activities that would encourage peer support and interactions into both lessons. The first lesson took place in a reception class, taught by my research partner as they are familiar to the children in the class. My role during the lesson was to be the non-participant observer. The aim of the observation was to assess if the focus children will use their peer in a pairs activity to support their knowledge and understanding.

The teacher (SR) began the lesson by reading the explanatory statement to the children (appendix 3). This was important to start the lesson because under ethical consideration children have the right to understand and decide on whether they wanted to take part in the investigation. Once the children had given their assent it was measured against the parental consent. The teacher decided on the three target children based on the consent and assent factor. As can be seen in the non-participant observation (appendix 5), two of the three focus children presented a moderate (3) level of involvement but one child moved between low and moderate levels (2/3). The level of peer learning was as perceived to be within this range due to their experiences with the strategy. However, the learners did not act as predicted.

This is evident in the non-participant observation (appendix 5) that the children need to be prompted to be involved when working with their friend. It was expected that the higher ability would want to support the lower ability. However, in Child Z's observation his peer was in a lower ability group and he didn't engage every time to helping his peer in the task and when he did discuss his answers he simply gave his peer the answers. In contrast, when Child Z did help his peer he would often ignore Child Z as he believed he was correct. This outcome was surprising. However, supporting that children are more likely to question the feedback from their peers (WAG, 2010). Furthermore, highlighting from the literature that children can experience conflict in collaborative tasks due to knowledge (Secomb, 2008).

However, the children did achieve the lesson goals because they did use peer learning in a focus task. In Child A's observation (appendix 5) they understood, without being prompted, to share the role of sorting the animals into categories and agreeing on the categories. Child E also displayed evidence which suggest peer learning by assisting her peer when he asked for her help or working together to read the word (appendix 5). Child Z presented less interest in his peer but when he didn't know an answer his peer helped him and he was able to answer the teachers question. Thus it is evident that the children will and do

use their peers to support their learning and they understand how to work with peers when collaborating.

However, during the observations the children will look for a cue from the teacher. This is reflected, in appendix 7, where a reflective discussion highlights the support of the adult to encourage peer learning behaviour. Moreover, the children wanted the reassurance that they were correct. Bandura believed that a child's self-efficacy can affect their abilities and actions (Macblain, 2015) through observing those around them and understand their expectations of them (Linden, 2005). Thus, the child wants the teachers input to reassure their knowledge and the child understands that the teacher wants a specific response and desires to sharing that achievement with the adult (Riddall-Leech, 2008).

In brief, the observation highlighted that the children do use some aspects of peer learning in a focus task and this lead to how the lesson could be improved. In appendix 7, a reflective discussion evaluated our prediction that the children would use peer learning, but that it would require assistance from the teacher. Therefore, to improve the lesson for the next class, it was decided to aim the lesson towards teaching peer learning to the class. This was identified as a significant aspect to include because training is recommended as an area which can refine the learning (Boon, 2016). Therefore, the it could produce more evidence of peer learning.

The experience from undertaking a research lesson identified three areas of modification in our process methods, discussed in appendix 7. It was identified that the children need to be interviewed individually to ensure that they are honest about their feelings and thoughts because it was evident that they were copying each other's answers (Appendix 5 and 7). Also, it was highlighted, that the observation format needed to changed for the recording of data. The boxes were too small and didn't provide sufficient room to provide a detail account of the observation. In final, for the post-research lesson discussion a reflective model needed to be implemented to focus our collaborative conversation on peer learning in the lesson research (appendix 7a).

Lesson Study 2

The second lesson took place in a year one class and the roles were reversed. The beginning of the lesson followed the same process as the previous lesson to ensure assent and consent were obtained and to choose the three focus children from these factors. The aim of the observation was to asses if embedding some training into the lesson would affect the relationship between peer learning and teacher prompts. While also investigating if the children do use peer learning in a focus task. It was decided that time at the start of the lesson would be provided to the children to discuss with their peers how to be a good work partner and then determine the success criteria. (appendix 6). Studies, have highlighted, that it is important to make students aware of guidelines so they know how to achieve the outcomes (Smith et al, 2002). Moreover, once children are familiar with the success criteria they can

then be trained how to provide focused feedback (Topping 2009; Van Steendam et al. 2010) to peers. Thus, the success criteria is aimed at helping the children to identify how to work effectively with their peers and see if they do use these skills while the non-participant observes. This means that if the children do use the success criteria then training can be embedded to further improve peer learning in the classroom.

It is evident that the children understood the concept of how to work with their peers. This was predicted, that the children in year 1 would have more knowledge and experienced with peer work compared to the reception class. Hattie (2012) identified that achievement will go up as a learners age and maturity and these factors will effect results. In fact, through discussing their ideas with their peers is achieving an aspect of the lesson outcome because the whole class were engaged and discussion was relevant. As seen in appendix 5a, the children engaged with their peers in an assessment for learning strategy and each of the target children were able to contribute an answer to the success criteria on how to work effectively with peers. Thus, communication is identified as key in supporting peer learning.

However, it was clear that even though children were able to identify features of peer learning it was noticeably difficult for children to apply the T.A.G strategy (appendix 8). The strategy was aimed at supporting the children to peer learn through assessing their friend under the success criteria and help them understand their next steps to improve when working with peers. The children could compliment their friend on the work they did well, the 'T' but the other strands 'AG' were difficult to provide an answer for. Although, the 'G', for next steps was evident that some understand the next steps teachers have given previously, for example improve cursive writing (appendix 5a). Thus, a social context of learning has been applied here and understood how to use it in practice. Therefore, there is evidence that training could be implemented to further peer learning through effective communication and peer assessment.

As seen in appendix 5a, Child H and S displayed high levels of involvement when engaged in the task with their peers. They were able to work as a team to problem solve on questions and discuss between them how to take turns in the activity. This provides evidence that children do use peer learning in the classroom. In addition, Child S was able to use strategies to help assist her peer when she made a mistakes and could explain why. In particular, Child H and peer would repeatedly address each other once the teacher had asked a question and were able to have a simple conversation to evaluate ideas and answers. Thus, the outcomes of the research lesson demonstrated a variety of techniques where children were able to work together and use peer learning in the focus task to support their learning. Moreover, Child S's illustrated that she feels confident to ask her friends for support in learning but also requires the teacher input to further reassurance (appendix 5a)

In comparison, Child I shows a moderate to low level of involvement when interacting with peer learning and his partner (appendix 5a). This reflected in his feedback from the interview, possibly explaining his motivation in the activity. Child I preferred to work with his teacher. This is significant as other children have valued a variety of strategies

when working. Although, Child I was in a mixed ability pair and it appears that mixed ability doesn't work as collaboratively as predicted from the previous research lesson and discussed in the literature. The observation presented the children in the same ability group as working more effectively with their pairs (appendix 7a). As well, children in the study who have siblings were better at aiding learning. Therefore, this identifies that the level of knowledge and relationships within peer learning could hold a significant aspect in the support of learning through peers.

It is significant to highlight that the children did achieve the outcomes of the observation as there is evidence that they can and do work with their peers to support their learning. However, under reflection of the lesson it should be acknowledge that some of the questions in the task were not appropriate for peer learning. It was perceived to invoke discussion but the higher ability children could answer some questions without support from their peers. Thus, it is important to relate peer learning to an appropriate task. Therefore, to improve the lesson I would improve the focus task so it focuses on learning from each other. As a result, the activity invited the participants input into the task to sometimes encourage or question the children to influence peer learning. Thus, it is difficult as a teacher to take a step back from the learning to allow the children to explore as it is natural to want to guide their thinking. Hence, future practice will promote more peer learning and engage in process that allows children to take control of their learning.

In final, this experience has identified that through engaging with action research in a lesson study can provide further knowledge into a topic. The non-participant observation and collaborative reflection has informed interpretation and analysis of information to understand our response to the children's needs and development (Riddall- Leech, 2008) to aid future pedagogical knowledge and practice. Naturally, I will use this in future practice but I feel that next time I will undertake a lesson study with a more experienced teacher to support my future development. I feel this technique needs to be practiced so both practitioners fully absorb the experience to aid future teaching practice knowledge. Unfortunately, the research has been carried out on a small sample size. In fact, many of the children in both lessons did not provide assent only the focus children and their peers agreed. Therefore, for better evidence to share with others, there needs to be further research under this study and more case studies to observe.

Discussion

The research lesson identified that communicating collaboratively is a key factor that develops peer learning. Language is significant in order to collaborate because learners are consolidating learning and knowledge through spoken language and it is how teachers teach and children learn (Alexander, 2006). This support from their peer enables the learner to accessing knowledge and understanding. It is argued that approaches which promote talk and collaborative interaction between learners tend to result in better quality outcome for all participants (WAG, 2010, EEF, 2018). As acknowledge in the lesson study, the children did

use lots of communication skills to problem solve, help each other find answers and Child S was able to explain the learning to her peer. Evidently, research suggests that exploratory talk often stimulates and establishes real understanding. It is proposed that, if the learner does not fully understand a concept but articulates their thought process to another learner, then learning is equally clarified for both learners (WAG, 2010). Similarly, William Glasser's studies promote opportunities for pupils to teach what we want them to learn (Williamson, 2013). Statistical findings state that we learn, 70% of what is discussed with others, 80% of what is experienced personally and 95% of what we teach someone else (Bokhari and Nayar, 2017). Consequently, development is linked closely to the articulation of language through a shared peer learning experience. Therefore, the lesson study findings explored the importance of effective communication as a factor within collaborative learning to support peer learning. This identifies with the literature on how children effectively learn by teaching in peer learning opportunities because it is the interactions that aids the talk in learning to develop understanding.

The lesson study findings identifies with the literature proving that as social beings children do have an understanding and a concept on how to work with their peers, and do use peer learning in the foundation phase. However, the literature highlights that when engaging in peer learning activities such as PBL, it requires the support of both peers knowledge and understanding to achieve the outcomes (Hattie, 2009). This means, that the peers need to be able to support each other in the learning process, and a learner who cannot support the knowledge of their peer may affect the development outcomes (Nygren and Carlson, 2016). Research findings present a positive correlation between the effectiveness of peer learning and training (Berg 1999, Van Zundert, et al 2010). Thus, the feedback from peers needs to be embedded in an intervention of training for the children to support one another in peer learning activities. Berg (1999,) agrees that in order for peer response to be effective, training is essential. Furthermore, the study identified that children found it challenging to feedback responses to their peer (appendix 7a) . The focus of the feedback could be children focusing on the irrelevant points due to their lack of understanding (Miller, 2003), self-efficacy affecting actions (Macblain, 2015) or not listening to their partners and displaying strong indicators of pre-concrete and concrete operational thinking, which is common in young children (Macblain, 2014, WAG, 2010). Hence, in order to support the peer learning pupils need to have a common understanding of expectations (Van Gennip et al, 2010). Equally, the literature identified that teachers are less likely to engage with peer learning and that there needs to be strategies incorporated into the classroom to encourage peer learning (Barkley et al, 2014).

In final, the study findings relates to the research question because it identifies that children do and can use peer learning in the foundation phase because it was apparent in their knowledge and observations. However, the research identified that there is not an emphasis on how to effectively use the strategy in class. Furthermore, the two findings incorporate important factors in peer learning. These are that, the children have the foundations of knowledge to effectively use communication to aid their peer's learning but other cases show that children need training to understand how to support their peer. Thus, the lesson study

acknowledges that children will use peer learning in a focus task in the foundation phase but not to its full advantage due to a lack of training.

Conclusion

In brief, this research has concentrated on using the lesson study design to investigate if children use peer learning in focus tasks, in the foundation phase. In particular the study wanted to observe how children interact with their peers in an activity that is aimed at them helping each other consolidate knowledge while learning something new. Specifically, it was identified that peer learning wasn't being used in these classrooms but children had an understanding of the process. Thus, the study highlighted that children have the capabilities to use and learn from peer learning but as highlighted in the literature, teachers do not invest time into effective collaborations in learning and training is required. Therefore, the use of collaborative research in a the lesson study design was aimed at understanding peer learning to help improve future practice and learner outcomes.

The lesson study provided a favourable approach in which to conduct the research. The study illuminates the importance of improving professional development in practice and teacher collaboration (Ronfeldt et al, 2015). In reflection, both researchers identified the importance of collaboration in future learning and practice. Moreover, believed the process of repeating the lesson is truly effective to understand how the process can progress in future lesson research and deepen understanding. As a result, the methods of lesson study is evident that collaborative learning enables each participant to gain and consolidate knowledge through reflecting and refining what is learnt. However, the lesson study process is time consuming (Chokshi and Fernandez, 2004) and timescale effects the extent of data collection (Bella, 2010). Moreover, in the case of the second research lesson it could not be repeated and refined further, as recommended by Dudley (2015). Thus, it is having a small sample size and a convenience sampling selection that affects the results because it shows no relationship or difference, or it can influence the results to find bias (Kucuk et al, 2011). As a result, the issue identified with the study are specific to this research, the lesson were conducted with a different class, year group and attainments, therefore this can alter the results.

Nonetheless, as previously discussed, the data used in a lesson study has multiple methods which gathers information from observations, student's interviews and a reflective discussion. Thus, lesson studies provide teachers with valuable evidence-based insight to performance and understanding to improve practice, pupil work and document progress (Chokshi and Fernandez, 2004). Moreover, the use of multiple methods, as stated previously, is a triangulated research that is effective for qualitative research as it adds an increased depth to the validity and reliability. Although there are methods within the research which cause interesting effect in the outcomes. The observation and interviews seems to contrast, for example, Child Z stated he preferred to work with a friend, and then each child duplicated his answer, but his observation showed he preferred to work alone. Thus, demonstrating the process to have its drawbacks. Observation is acknowledged as a practice that requires skill,

experience and the observer must remain objective when responding to the situation (Griggs, 2015). Therefore, acknowledging that data is open for interpretation.

This study has indicated that children are capable of using and learning from their peers. This study has helped to identify how fundamental language is when understanding peer learning. It is the language through which they can articulate their understanding to each other, in order to learn. Vygotsky's theories underpin the importance of language, social experience and he proved children achieve high standards in collaboration with their peers (Cremin and Arthur, 2014, WAG, 2010). In contrast, the study identified that in order for the children to achieve the outcomes in peer learning there needs to be an intervention into training children in how to support one and another's learning (Boom, 2016). Thus, to improve the lesson I would concentrate on establishing a series of training lessons for the children to achieve effective use of peer learning in the classroom.

In final, this process has developed my continuous interest to develop my knowledge and understand of teaching practice and how to improve pupil achievement in the classroom. The opportunities in undertaking this method of research has emphasised how focusing on an area of pedagogical practice can lead to a deeper understanding on how to improve and observe what is learnt and not perceived it to be learnt. I feel that this process has deepened my understanding of observation, interpretation and analysis. Moreover, through undertaking the process I feel confident to continue action research into my future teaching career to progress my continuing professional development.

Recommendations

If I had the chance to repeat the lesson study, I would choose a focus within peer learning because the study found out that children do use it to support learning but I feel I need further develop an understanding into how to use resources and activities to encourage it in the classroom. When peer learning activities are implemented as an intervention to support learning they are an integrated part of the collaboration (Nanine et al, 2010). Therefore, the task is what connects the peers to the purpose of the collaboration (Sluijsmans, 2002). Thus, the activities in the research lessons need to be further developed to engage peer learning in a purposeful task so that pupils are working together and achieving intended outcomes through learning collaboratively.

Unfortunately, as previously acknowledged this is a small scale study that has been constrained by time scale. Therefore, it is recommended that research should be shared and continued through other professionals. However, the research uncovered appears mostly evident in studies carried out in higher education (Topping, 2010). Therefore, it is suggested that the research should be repeated to discover more around the subject of peer learning in the interactions of young children. However, future research should focus on interventions of training strategies on peer learning and further observe if the training is effective for further support on learner outcomes. Thus, research should specifically focus on providing all

children with good quality peer learning training because establishing a common understanding of knowledge in supportive learning relationships will encourage children's self-efficacy and peer learning outcomes (Boon, 2016, Macblain, 2014).

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Appendix 1 Ethics Form



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Approved

PG2 / E1 FORM

APPLICATION FOR ETHICAL APPROVAL

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity. Please see Checklist for details of process for different categories of application.

SECTION A: About You (Principal Researcher)

Full Name:		Leah Marie Wright	
Tick all boxes which apply:			
Member of staff:	☐	Student:	☒
Honorary research fellow:		☐	
Faculty/School/Centre:		YrAthorfa	
Campus:		Townhill, Swansea	
E-mail address:		1301200@student.uwtsd.ac.uk	
Contact Telephone Number:		07713635589	
For students:			
Student Number:	1301200	Undergraduate	☐
Programme of Study:	Primary PGCE	Taught Postgraduate	☒
Director of Studies/Supervisor:	TET/ Dr. Ceri Lewis	Research	☐

SECTION B: Approval for Research Activity

Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)		YES	☒	NO	☐
		Date			
If Yes, please indicate source of approval (and date where known):	Research Degrees Committee	☐			
	Faculty Research Committee	☐			
	Other (write in) <i>Dr Ceri Lewis</i>	☒	<i>28.2.18</i>		

Approval in principle must be obtained from the relevant source prior to seeking ethical approval.

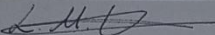
July 2017
1
Ethical Approval Form v6



SECTION K: Declaration

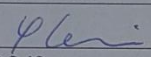
The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants.

In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's [Research Ethics and Integrity Code of Practice](#)

Signature of applicant:  Date: 28.2.18

For students:

Teacher / Senior Mentor:	MRS N. QUICK
Signature:	N.A. Quick
Date:	28.2.18

Supervisor:	Dr. Ceri Lewis
Signature:	
Date:	28.2.18

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

☒	I have read the guidance notes supplied before completing the form.
☒	I have completed ALL RELEVANT sections of the form in full.
☒	I confirm that the research activity has received approval in principle
☐	I have attached a copy of final/interim approval from external organisation (where appropriate)
☐	I have attached a full risk assessment (and have NOT completed Section H of this form) (where appropriate)
☒	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.
☒	I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Head of School.

RESEARCH STUDENTS AND STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name. You will be informed of the outcome of your claim by email; therefore it is important that you check your University and personal email accounts regularly.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

Appendix 2

Letter of Consent



Dear Parent/Guardian,

Your child's school is a partner with Yr Athrofa at University of Wales Trinity Saint David in Carmarthen and Swansea. This school offers placements to students who are learning to be teachers.

The student-teacher in your child's class has been given the task of planning, teaching and evaluating one lesson so that he/she can develop specific strategies to improve their own teaching. As part of this, student-teachers will be observing the children's responses and asking some pupils their views on parts of the lesson. This is designed to inform students' own practice and support children's learning.

Any information collected would remain confidential, and both the school and the children would remain anonymous in work produced. The work undertaken would be in line with the University's ethical guidelines. If, at any time, your child does not want to share ideas, they would not be required to do so.

If you are happy for your child to contribute to the project, please complete the parental consent form below and return directly to the school as soon as possible. If you are interested in the outcome of this project or if you have any questions, please contact the University Partnership Office - partnership@uwtsd.ac.uk.

Yours faithfully,

Catherine Morgan
Module lead – The Enquiring Teacher

As Parent/Guardian of..... (pupil name), I do / do not give consent (please delete) for my child to take part in this project.

Signed.....(Parent/Guardian).

Date.....

Appendix 3

Explanatory Statement

Miss Rodgers and Miss Wright need your help!

We are doing an investigation to help us become the best teachers we can! We are investigating how well children work with their friends. So we are going to watch you and make some notes about what it is you are doing..... But we don't want you to act in a different way. Just be you!

Important: if you do not want to be join in then you don't have too. It is your choice. Miss Rodgers and Miss Wright do not want you to do anything you don't want too. We want our butterflies/ Silkworms to be very happy all the time. Please show us thumbs if you want/ do not want to join in today.

Appendix 4

Children's Assent and Parental Consent

List of children's parents who gave consent and the assent of the children

Child's Name	Parental Consent	Child's Assent	Changed Assent
M1	X	X	X
P2	X	X	X
T3			X
P4		X	
R5	X	X	X
I6		X	X
C7		X	X
C8	X	X	X
H9		Absent	Absent
Child I	X	X	
M11	X	X	X
D12	X	X	X
A13	X	X	X
H14	X	X	X
A15		X	
Child H	X	X	
A17			X & X
Child S	X	X	
I19	X	X	
L20		X	X & X
B21	X		
K22		X	X

Appendix 5

Observation 1 - 27th March 2018

Non- participant observation

Small- Group observation form:

Date: 27/3/18

Time: 1:10

Year/Class: Reception/Butterflies

Activity: Categorising animals into categories (Wild/ Farm/ Pets) in pairs.

Learning Objectives: To work in pairs and listen to each other's ideas.

Aim: Observing Peer learning

Focus Child Z: (Male) - 2/3 Child is sitting cross legged, looking as SR and listening to instructions- he answers a question when asked. -Child Z has a good subject knowledge on animals because is able to instantly tell the teacher where animals can go. - When instructed isn't talking to his friend because his friend is talking over him. - When asked why- Child Z couldn't explain why but he knew the answer. - Child Z seems to have difficulties socially- his head is in his hands- seems withdrawn from the other child. - became very engaged by the technology. -Both children are being very stubborn in their answers- even if SR intervenes- if they think they are right/correct then they won't change their answers but do not give reason's either- not showing listening to each other here.	Focus Child A: (Female) 3 Is very vocal and chatty. - Talking over her friend. - Child A puts the elephant in the farm category and her friends is giggling and saying "Elephants aren't on farms"- but neither child is moving the animal. - Child A sounds out words on her own and is very able too.	Focus Child E: (Female) 3 -Child E and friend needed to be reminded instantly that they needed to together. - sounds out words together. - sounds out words alone, Fred talking. - is looking at the teacher for approval.
Learners interactions with peers: When prompted Child Z will turn towards his partners- tells him the answer. - Agrees with his partner to say the answer at the same time. - turns to chat to his partner when prompted but doesn't engage in conversation. - Child Z attempted to help his peer use the QR dice and them show him how to do it (Child Z displayed a Leuven scale of involvement 3 here.) - Child Z and friends independently turns to each other and both agree on the category the animal should be in. - Child Z is taking control of placing the animals in the correct category, he is doing this very quickly and his friend is not having a turn. - when reading the animal names Child Z competed for the chance to read the animal names out loud - is looking at the teacher for approval- whereas his friend stepped back allowing him to talk over him (maybe because he is a LA child he needed more assistance to	Learners interactions with peers: - Child A is sharing the role of sorting the animals in categories- each picking a card one at a time. - Child A and friend are helping each other sound out the work "lion" together. - Child A explains to her friend how to spot the difference between "guinea pig and pig". - When prompted or instructed the pair will work together to help each other. - Child A notices her friend is counting the animals wrong and decided to recount and says "I'll help you". - is looking at the teacher for approval. - Friend is struggling with sounding the word and Child A sees the word and says it instantly. - friend is looking at the teacher for approval.	Learners interactions with peers: -Child E is sharing the role with her friend to pick up a card each in turns and put it in a category. - Child E when prompted by her friend is asked to help them identify which category the animals belongs too-Child E stops what she is doing and points to the category the animal should be in. - When prompted - Child E works with her friend to read the words before putting them on the pictures. is looking at the teacher for approval. - Child E and friend is working out the word "tiger" together- Child E sounds the letter "T" and the friend says tiger -is looking at the teacher for approval. -Child E corrects herself when sounding out because her friend tells her it is a D not a B.

read the labels). - Child Z does not know where a Polar bear lives but his friend says the answer. Child Z is waiting a few seconds and then answers that Polar Bears live in the wild category- decision made based on his friends answer? is looking at the teacher for approval.		
Learner's response to task: 1.) What did you think of the activity: Enjoyed- reading letters/placing names on cards. 2.) Who do you like working with best- teacher, friend, own? Working with a friend/teacher/own 3.) If you are stuck, who do you go to for help first, a teacher/friend? why? Teacher first- because they are more important. 4.) What is the best part of working with your friend? Likes working with a friend because it is easier to work things out together. 5.) Do you ask certain friends for help in certain subjects? Asks Child B for help because he knows a lot of stuff.	Learner's response to task: 1.) What did you think of the activity: Brilliant- ordering the animals. labelling animals. 2.) Who do you like working with best- teacher, friend, own? Own. 3.) If you are stuck, who do you go to for help first, a teacher/friend? why? Ask a friend first because they can help me. 4.) What is the best part of working with your friend/teacher? Likes working with a friend best but likes to read works herself. 5.) Do you ask certain friends for help in certain subjects? Yes, if someone is good at reading I'd ask them for help because they can Fred talk it with me.	Learner's response to task: 1.) What did you think of the activity: Enjoyed- placing names on cards. 2.) Who do you like working with best- teacher, friend, own? Own/ teacher 3.) If you are stuck, who do you go to for help first, a teacher/friend? why? Friend first- they might know the answer. 4.) What is the best part of working with your friend/teacher? I like to more on my own more. 5.) Do you ask certain friends for help in certain subjects? Ask Child B to help first (same child in Child Z's answer)

Leuven Scale of Involvement:

- 1-Extremely low
- 2- Low
- 3- Moderate
- 4- High
- 5- Extremely high

Appendix 5a

Observation 2- 28th March 2018

Child H - Non-Participant observation 2

Small- Group observation form

Date: 28/03/2018 Time: 1:15-1:30 Year/Class: Year 1 Silkworms

Activity: _ Maths problem solving activity

Aims/Objectives: WALT: Work together and listen to each other

Focus Child's Actions:

- Answer during carpet time 'don't talk too quietly' – able to extend answers – 'because they cannot hear you'.
- $20+3$ – worked out answer in his head, don't need partners help (Leuven's scale 3)
- Showed partner where 23 was on the work sheet
- Looked at partner after answering questions – repeated behaviour
- Worked out code at 'team' - didn't tell partner
- He continued to look at the code worksheet whilst his partner completed TAG
- Couldn't think of an answer for A+G of TAG.
-

Focus Child's Interaction with peers

- Lots of interaction with talk partner during carpet time – staying on task – asking each other relevant questions and giving suitable answers.
- Helped his partner find the code – repeated behaviour
- He wrote answers and partner found the numbers (team work)
- Parallel play
- Agreed with partners answers – repeated behaviour
- Good at turn taking and sharing with his partner
- Looks at partner when teacher asks a question – repeated behaviour
- Helped each other find the numbers on the code worksheet (Leuven's scale 4)
- No prompts needed to work together
- Good team work – checking hands were straight (how tall am I?)
- Worked out code together at 'teamw'
- TAG – good at sharing but some help needed from teacher (answers)
- Little support needed from teacher – more peer support after little prompts were given from teacher

Focus Child's response to task:

1. Activity – I found the activity easy
2. Working with best – teacher because it is a little but challenging
3. When you're stuck – teacher because they'll help you
4. Certain friends for help – yes – T and A (couldn't extend or give reasons for answer)

Leuven Scale of Involvement:

1-Extremely low

4- High

2- Low

5- Extremely high

3- Moderate

Interview questions:

What is the best part of working with your friend/ teacher/yourself?

Who do you like working with the best?

What did you think about the lesson?

If you are stuck, who do you go to for help first, a teacher or a friend? Why?

Do you learn from the children in your group?

Do you ask certain friends for help in certain subjects?

Child S- Small- Group observation form

Date: 28/03/2018 Time: 1:35- 1:50 Year/Class: Year 1 Silkworms

Activity: Maths problem solving activity

Aims/Objectives: WALT: Work together and listen to each other

Focus Child's Actions:

- Answer during carpet time – ‘don’t shout in peoples faces’ – able to extend answer – ‘because it’s not very nice’
- Worked out age in her head – 23
- Pointed to 23 to show partner
- Thinking to herself – little communication with partner (prompt given from teacher once)
- Working with teacher instead of her partner
- Aware of turn taking
- Parallel – sometimes
- Answers teacher’s questions
- Next steps for partner – cursive writing

Focus Child's Interaction with peers

- Lots of interaction with talk partner on the carpet – relevant questions and answers
- ‘do you want to go first’ – referring to writing on the worksheet
- Prompt from teacher to work and talk with partner – once
- ‘no that’s 21’ – then shows partner where number 12 is
- Problem solving together – working out the code to figure out the word (teamwork)
- Good turn taking and sharing throughout the activity – no prompts needed from teacher for this
- Helping each other find numbers when needed

Focus Child's response to task:

1. Activity – I thought it was fun
2. Work with best – not sure – all of them
 - teacher because they can check your answers
 - on my own because I’m happy when I get it right
 - friend because they can help you
3. When you’re stuck – check with my friend because they might know the answers and then ask a teacher to check my answers
4. Certain friends – Yes I ask my friends who are on my table or in my group
 - Lots of thinking time needed

Leuven Scale of Involvement:

1-Extremely low

2- Low

3- Moderate

4- High

5- Extremely high

Interview questions:

What is the best part of working with your friend/ teacher/yourself?

Who do you like working with the best?

What did you think about the lesson?

If you are stuck, who do you go to for help first, a teacher or a friend? Why?

Do you learn from the children in your group?

Do you ask certain friends for help in certain subjects?

Child I - Small- Group observation form

Date: 28/03/2018 Time: 1:55-2:10 Year/Class: Year 1 Silkworms

Activity:_ Maths problem solving activity

Aims/Objectives: WALT: Work together and listen to each other

Focus Child's Actions:

- Little interaction with talk partner during carpet time – looking at floor or around the room – tried to start a conversation with a different group
- Needed reminding of the questions (worksheet)
- Good listening when working in a pair
- Little concentration
- ‘Working as a team’ – during teacher’s introduction (Leuven Scale 3)
- Explained some awareness of turn taking but did not show good examples of this
- Always holding pencil in his hand until partner takes it out of his hand
- Looking at the teacher – repeated behaviour
- Takes paper and puts it in front of him – teacher moves it
- Listens to partner for support but then immediately looks at teacher
- Distracted by surroundings – whiteboard(Leuven Scale 2)
- ‘I’ll find it’ – referring to number on code worksheet

Focus Child's Interaction with peers

- Little interaction with talk partner (carpet)
- Shows partner where numbers are on the worksheet
- Works with partner after prompts from the teacher – repeated behaviour
- ‘count as a team’ – working out age and months in the year – but let’s partner and teacher count(Leuven Scale 2)
- Partner corrects his mistakes – looks at teacher
- Partner shows him where the numbers are on the worksheet – looks at teacher
- ‘TAG’ – partner has good ideas

Focus Child's response to task:

1. Activity – liked it because you had to guess
2. Work with best – teacher because they help you
3. When you’re stuck –teacher because they know what to do
4. Certain friends – yes – Mrs L because she is my friend

Leuven Scale of Involvement:

1-Extremely low

2- Low

3- Moderate

4- High

5- Extremely high

Interview questions:

What is the best part of working with your friend/ teacher/yourself?

Who do you like working with the best?

What did you think about the lesson?

If you are stuck, who do you go to for help first, a teacher or a friend? Why?

Do you learn from the children in your group?

Do you ask certain friends for help in certain subjects?

Appendix 6

Lesson Plan for Lesson Study 1

Name of Trainee: SR		Session ref:(3) 1:30-2:15		Date:27.03.18	Class: Reception	Cyallun Ffocws y Cyfnod Sylfaen 2d	
Targed(au) Hyfforddi Personol		Number of learners:50		Age: 4-5 years old			
Learning objectives/intentions:	WALT: work in pairs or small groups and listen to each other's ideas.	Success Criteria	Main activities		Resources/Key Vocabulary	Meeting learners' needs:	IO to support EF.
	Introduction/planary tasks						Assessment for Learning (strategies and opportunities)
Introduction Carpet time- explain explanatory statement to the whole class. Explain the reasons for your investigation. Gain assent from the children. Recap prior knowledge – where do pets live? Can you name any pets? Ask new questions? – what you think a wild/farm animal is? – talk to your friend.		Trainee focused task (purpose, outline of trainee's role and children's learning): The children will be working in mixed ability pairs. The children will be given a sorting activity to complete – pets, wild animals and farm animals. The children then need to work together as a pair to put the pictures of the animals in the correct category. They will need to use prior knowledge of pets and recall knowledge from their trip to folly farm. The children will then label the pictures with the correct name. they will need to use Fred talk and ask their partner for help. Additional adult tasks (purpose, outline of additional adults' role and children's learning):		Resources • Pictures of pets, wild animals and farm animals • Labels for pets, wild animals and farm animals • iPad • sponge cube • QR codes • Star stickers Key vocabulary • Sorting • Group • Discuss • Help		Where do pets live? Where do wild animals live? Where do farm animals live? Are the children able to use Fred talk within daily activities?	
Planary Recap prior knowledge – where do pets live? Can you name any pets? Which of these animals is your favourite animal?		Independent learning opportunities: QR codes- as an extension, the children will be given a large dice with QR codes attached. They will roll the dice to choose a QR code and then an animal will appear on the iPad. The children then need to discuss where they think that animal belongs.					
Curriculum coverage (range and skills) experiment with new learning opportunities, including ICT, become independent thinkers and learners, communicate about what is right and wrong, demonstrate care respect and affection for other children, adults and their environment, thinking about questions and then asking them and listening to the answers, listening to others' ideas, sorting and grouping information using ICT on some occasions, making links within different elements of Knowledge and Understanding of the world, describing what they have found out and offering simple explanations, expressing their own opinions and feelings, and making decisions while considering the viewpoints of others, reflecting on and evaluating their own and others' work, identify some animals that live in the outdoor environment, identify the effects the different seasons have on some animals,							

Literacy (LNF) talk about things they have made or done, adding some description, talk about things from their experiences and share information, use words, phrases and simple sentences, use a variety of questions, show that they have listened to others, listen to and carry out instruction, answer who? What? Where? And open-ended questions, ask questions about something that has been said, exchange ideas in one-to-one and small group discussions e.g. with friends, take part in activities alongside others, with some interaction, apply prior knowledge of phonics, use pictures to aid understanding of text, DCF work together with a partner on a piece of digital work,	Numeracy (LNF) count reliably up to 10 objects, mentally recall one more of a number within 10, take away objects to find 'how many are left?' Sort and classify objects using one criterion, ESDGC how can we care for these animals? What are their wants and needs? What do they need to survive? What do I need to survive? YCC
---	--

Appendix 6a

Lesson Plan for Lesson Study 2

Name of Trainee: LW		Session ref: TET Research-2 LW	Date: 28.3.18	Class: Silkworms/Year1	Cynllun Ffocws y Cyfnod Sylfaen	
Targed(au) Hyfforddi Personol		SL3.S3.2.6.	Number of learners:	22(9ALN)	Age: 5-6 Years old	2d
Learning objectives/intentions:	WALT: Work in pairs and listen to each other's ideas.	Success Criteria	I can work with my friend. I can listen to my friend. I can help my friend improve (TAG).	Meeting learners' needs:	Children will be working in mixed abilities to support one another. LW- will support groups when needed.	
	Main activities		Resources/ Key Vocabulary	Assessment for Learning (strategies and opportunities)		
Introduction/ plenary tasks 15mins:		Introduction: Talk to the children about the WALT- what does it mean? How can we be 'good' at working in our pairs. What do we need to do? (Talk partners). Listen to their answers- make Success criteria- write on the interactive white board- ask why (children can help- possible see if children will help spelling words on the board). Model 1 question for example Organised: called up in your pairs to work with LW. Explain what I wanted them to do: Play a game- how well do you know Miss Wright! You need to break the code!- Discuss Assent: ask the children for their assent- thumbs up/ down.	Trainees focused task (purpose, outline of trainee's role and children's learning): Working with 2 at a time. Children will be using numeracy and literacy to answer questions about me e.g. $20 + 3 = ?$. They will then use the answer to find out the code. My role is to encourage the children to work the problems out together. Firstly, I will ask them what they think then put the stick note down with the question on it. The children will fill out a sheet with the answer to crack the code word. SR- Observing Additional adult tasks (purpose, outline of additional adults' role and children's learning): DE (TA): Reading in pairs. SR- Observing	Working together, Listening, Choices together. LW: Assent/Consent sheet This is me- Sheet with questions. Answer sheet (code breaker). White boards/ pens/rubbers. Numericon to help LA with math sums. Peer learning assessments: TAG DE: Readers and observation sheet. SR (observer)- needs obs sheets.	What does working in pairs mean? How do you work in pairs? - Talk partners. What are our steps to success? TAG- Children assess their learning- peer learning (in their pairs- teacher focus and at the end of the lesson). - link to success criteria. How could learning to work with your friends help you today, tomorrow or maybe even next year?	
Plenary: White board/ Pen/ Rubber/ Talk partners. What did didn't you like about working with a friend? Ask the children who do they like to work with best- teacher/ pairs/ individual. TAG- for their partners.		Independent learning opportunities: SR: Observing how the children will use the enhanced/ continuous provision in the area and if they use peer learning within the activities.		Curriculum coverage (range and skills) Reflecting on and evaluating their own work and others' work. Work in pairs, Listen to others' ideas, express their own opinions and feelings, and making decisions while considering the viewpoints of others.		

Literacy (LNF): look for clues in the text to understand information, understand the meaning of visual features and link to written text (e.g. illustrations, photographs, diagrams and charts). Apply reading strategies- phonic strategies to decode words, Context clues (e.g. prior knowledge). Take part in activities with others and talk about what they are doing. Contribute to conversations and respond to others, taking turns when prompted. DCF	Thinking - Identify and make links with prior skills and knowledge related to context. - Determine success criteria and give some justification for choice. - Begin to experiment with own and others' ideas. - Link outcomes to success criteria. - Link the learning, with support to other situations.	ESDGC	YCC	Numeracy (LNF): Recall halves up to 10. Recall doubles. Solve one step problems. Use math symbols. Use non-standard units to measure. Weight/mass/ distances/ height.
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Appendix 7

Reflection Discussion points. 27th March 2018

Lesson achievements: Teacher 1- Reception Class

Overall children showed they can work with friends, but they need prompting and want the approval of the teacher. - possibly children in the foundation phase are used to teacher lead activities.

There are moments of peer learning where the children support each other but it is possible that something that needs to be taught/ embedded in the classroom- next lesson incorporate the teaching of peer learning.

The children need prompting/reminding to work with their peers- part of social development?

The Children look towards the teacher for help to check answers- approval?

The Lower ability (LA) child with the higher ability (HA) child would sometimes place the animals in the wrong category but when the teacher prompted their peer to support they would tell him the answer but the LA child would ignore the advice and insist they were right- until the teacher confirmed the answer of the HA child.

Children would notice their friends had placed the answer in the wrong category, but did not correct them, until the activity sorted the animals again and then the child would show/move the animal to a different category. Peer learning seemed to have similarities to parallel play.

Change to be made:

It was decided that the interview questions process would be changed to individual questions because the focus children and their pairs were asked the questions as a group and they seemed to copy each other's answers.

The observation sheet needed to be changed for the next lesson- it was difficult to record the observation in the space of the observation (Boxes were small/ needed short hand. Change to individual sheet for recording observation).

Child Z & Peer- mixed ability group - LA/ HA were opposite personalities and abilities- possibly affects the pair working together- maybe compatibility is a link in peer learning. - the higher ability children didn't help the lower ability (Child E same.)

Child A- is same ability as partner (MA)- worked the best together. - next lesson use two same ability and one mixed ability (Able to compare to this).

Need to build a reflection model to evaluate and analyse the lesson more effectively. The discussion between us helped process the lesson but a reflection model for the next observation will help focus our findings. We decided to use Brookfield's for lenses reflective model.

Appendix 7a

Reflection Model- Brookfield's Four Lenses:

Teacher 2- Year 1 Class

28th March 2018

Autobiography Lens/ Self-reflection:

-In the beginning of the lesson the children understood the concept of teamwork and knew some the success criteria that is needed when working together (decided success criteria together). They also used their peers to support their thinking in AFL strategies.

-The TAG method- was a little too difficult- I needed a more subject base context because some of the children found it tricky to think of a question, but they were able to compliment their friend and chose suitable next steps. Also, children didn't use the success criteria to help feedback (TAG).

-Having a colleague observe me, made me very nervous even though I knew she was observing the children and not me.

-The children demonstrated qualities of working together. The children with siblings in the pairs seem to highlight better peer learning/ helping their friends- Especially Child S as an older sibling.

-Same ability children worked best.

-Unfortunately, I could not complete the whole lesson as it was national Autism awareness day and the Easter hunt was taking place in the research lesson so it was very busy in class so there were activates that were not involved as planned. Also, only 6 children provided their assent which is a very small scale study.

Child H- identified two of the three top readers in class as people he would ask for help- evidence that children know each other's capabilities.

Communication was a key finding in aiding peer learning.

The students eyes:

Children appear to like to work with their friends, teacher and their own. Child identify the teacher as being most knowledge able and like to check with them to know if they are right or wrong.

Colleagues' Experiences:

The children in the year 1 class had a deeper understanding of how to work with their peers, in comparison to the reception class.

Child I looked towards the teacher for prompts- compared to the other children who didn't.

Children from the same ability groups worked more collaboratively and children with siblings- significance in the relationship of the peer?

Children need intervention to training then on how to support their peers in learning and understand effective feedback.

Theoretical Literature

This will be later analysed in the discussion section of the research findings in relation to related literature and research. Some of the findings relate to theories that underpin learning as a social learning context through experiences- therefore is peer learning a process that progresses as we go through education.

Appendix 8

Lesson Study 2 Resources

TAG and Resources

Task & TAG

- **T** – TELL YOUR FRIEND SOMETHING THEY DID WELL TODAY.

- **A** – ASK A QUESTION ABOUT WHAT YOU HAVE LEARNT.

- **G** – GIVE THEM A GOOD IDEA FOR THEIR NEXT STEPS.


Figure Me Out!

My Age

$20 + 3 =$

My Shoe Size

$2 + 2 =$

My Birth Month

I am born in July, it's the _____ month.

My Height

How many hands from my feet to my head?

My Name

Leah + Mare + Wight = ?

My Animals

How many animals do I have?

My Family

$5 + \square = 10$

My Question

How many animals are in the Chinese Zodiac?

