

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 the overall research project went well. I feel I engaged with the work well and worked effectively with my research partner. We carried out a successful lesson study and have found out some useful tips that will help me moving forward into PTE2.	I feel that I need to be more critical in my analysis but the word count limited this. I feel this project could've easily been a full dissertation which would have allowed me to go into a lot more detail and a deeper level of analysis. My time management could also improve as I was also trying to plan for PTE2 whilst writing this.

How can we improve exploratory talk through different groupings in a KS2 classroom?

1702336

Group 4

Word count: 6546

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1. Introduction

During my time on Professional Teaching Experience (PTE1), my placement school adopted a Foundation Phase approach across the whole school and did not group children based on attainment. Lessons in Key Stage 2 (KS2) would be planned around a carousel with certain tasks being teacher-led and others being independent, similar to focused tasks and enhanced and continuous provision in the Foundation Phase. Throughout the school day, the children would work on these tasks in mixed attainment groups and with the implications of Successful Futures soon to be implemented (Donaldson, 2015), I believe this is the way forward for teaching in the primary school. This approach of mixed attainment groups was new for me, but one I found worked really well as certain children were able to scaffold the learning of others within the group when an adult was not present. I found that the children would engage with each other in a critical but constructive way when discussing a topic and the variety of knowledge and understanding within the groups promoted a wider range of ideas and thinking.

Therefore, the focus of this research project will be placed upon how grouping children in different ways can impact the type of talk they use when working in groups. This will help to enhance my own practice as a trainee teacher by gaining a better understanding of how I can promote exploratory talk (Mercer, 1995) within my classroom by grouping children in specific ways to foster positive and constructive discourse. The rationale behind this focus has been explored within the literature, which I will later critique, and is an area of personal interest. For many years, the idea of grouping children based on attainment has been accepted as good practice as there is an argument that this avoids the more able children in a group being held back by the less able children, and the less able children becoming discouraged by the more able children (Kyriacou, 2007).

My experiences during PTE1 contrast those of my research partners, whose class used attainment to group children. However, exploratory talk was also observed in this class when pupils of similar attainment engaged in constructive discourse. Many believe that talk is a key factor in education (Vygotsky, 1978), as Bodrova and Leong (2003) explained that children use talk and social interaction as a way of verbalising

ideas and thoughts, and through conversation, new and existing knowledge can be created (Pritchard, 2015).

By looking into the current literature, myself and my research partner were able to refine our research question, therefore, the aim of this research project was to carry out a lesson study (Dudley, 2011) to see how we could improve exploratory talk through different groupings in a KS2 classroom.

1.1. Research Context

This research took place over two one-hour lessons in two different schools, with the findings from the first lesson being implemented in the second to try and promote exploratory talk. Both of the schools involved in this project are within the Yr Athrofa partnership with UWTSD. One school is located at the lower end of the Swansea Valley and currently have around 202 pupils aged three to 11 on roll, of which, 10% are entitled to free school meals. The other school is located in a small village in the Neath Valley and cater for 130 pupils aged three to 11 years. Currently, approximately 19% of their pupils are entitled to free school meals. (References removed to ensure anonymity).

2. Literature review

Based on the early work of Barns and Todd (1977) who explored the idea that children can learn through interaction with each other, Mercer (1995) identified that children use one of three types of talk when interacting with each other:

- **Cumulative talk** – agreeing with everything that is said and not challenging ideas or suggestions. This is seen as just ‘going along’ with the conversation without really engaging with it.
- **Disputational talk** – disagreeing with everything that is said and not providing a rationale for why. This can be seen as confrontational or argumentative.
- **Exploratory talk** – critically engaging with a conversation in a constructive way. This involves challenging ideas and providing a rationale for why.

Mercer and Sams (2006) suggested that when children engage in exploratory talk that is critical but constructive, it helps help to improve knowledge and understanding. This is backed up by the findings of Rabel and Woolridge (2013) who found that when a mixed attainment Year 4 class engaged in exploratory talk, their understanding in mathematics improved. Rojas-Drummond and Zapata (2004) also found that those children who engaged in exploratory talk improved their capacity for knowledge construction and problem solving. However, if talk starts to become disputational or cumulative, despite the overwhelming research that shows the importance of talk within the classroom, research has shown that it can be detrimental to learning (Kutnick and Manson 2000; Williams 2008). This shows the importance of trying to promote the correct type of talk within the classroom.

Lev Vygotsky, the father of social constructivism, placed a very high value on social interaction and talk within the classroom as he saw it as vehicle for learning unlike other educational theorists like Piaget and Pavlov. Vygotsky (1978) believed that for learning to take place, there must be a more knowledgeable other present to facilitate the learning. He developed the Zone of Proximal Development (ZPD) which is a concept that describes the difference between what a child can achieve independently and what they can achieve under the guidance of an adult or more capable peer (Vygotsky, 1978). Fani and Ghaemi (2011) put this into context by explaining that two children who exhibit the same IQ scores might perform differently if they were under

the guidance of a more knowledgeable other as the difference between their actual and potential development is different. This difference is known as their ZPD. There is plethora of research validating the work of Vygotsky, such as Freund (1990) who conducted a study looking at where children placed furniture into a doll's house. Each child preformed the task without any guidance before some children were allowed the support of a parent, whilst others were allowed to explore the problem and come to a decision on their own (which links with the work of Piaget (1970) and a discovery learning based approach). This study found that those who had worked with a more knowledgeable other performed better on the task, showing that social interaction improved the learning.

A more capable other in an educational based setting is normally perceived to be the teacher, however, this is not always the case. This support can be provided by another child in the class who has a higher level of understanding of a particular topic. Vygotsky's work implies that for learning to take place, there must be an asymmetrical level of knowledge or understanding between the children working together. This could imply that mixed attainment groups could be more effective at promoting positive talk and social interaction as those within the group have different levels of understanding. However, there is research that contradicts this argument. Cowie and van der Aalsvort (2000) argue that learning can also occur as a result of social interactions between children of a symmetrical level of understanding, therefore implying that attainment groups would be better at fostering constructive talk and promoting learning. There is research that backs up both sides of the argument, with Fawcett and Garton (2005) finding that collaborative learning and positive discourse was more beneficial for lower attainment children working with peers of a higher attainment, supporting the argument of grouping children in mixed attainment groups. However, work by Light et al. (1994) showed that all children can improve their understanding through social interaction and talk providing that those within the group are of the same attainment as they are able to scaffold each other's learning better.

Scaffolding is a term that is used to describe the support that is given to a learner to help solve a problem or improve understanding that they may not have been able to do alone (Bruner, 1978). Fernandez et al. (2015) explained that scaffolding can involve prompting a discussion, asking questions and providing feedback, which are all

characteristics of exploratory talk. This therefore suggests that through exploratory talk, learners are able to scaffold each other's learning and help to improve understanding. Even though Light et al. (1994) found that children of similar attainment were able to scaffold each other's learning, in my opinion, based on the work of Vygotsky, mixed attainment groups should be better at facilitating exploratory talk and enhancing learning as the more knowledgeable children in the group would be able to scaffold the learning of the less knowledgeable children. This opinion is based on research that shows when children are placed into attainment groups, those in lower attainment groups 'lose ground' so to speak, where those in higher attainment groups see an increase in development (Kerckhoff, 1986; Educational Endowment Foundation, 2018). There is also other evidence in the literature that shows that grouping children based on attainment can lead to lower levels of self-concept, which can directly impact their motivation for learning and engagement in lessons (Ireson and Hallam, 2008).

Therefore, based on the argument above, and evidence showing how important talk and collaborative learning is (Springer et al., 1999; Kuh et al., 2007), our first lesson will look at how prevalent exploratory talk is in both attainment and mixed attainment groups, and based on the results, we will tailor our groups and the lesson when teaching it again to try and promote exploratory talk and enhance the learning.

3. Methods

In order to gather data to inform our research question, myself and my research partner carried out a specific type of action research called lesson study. Dudley (2011) explained that lesson study involves working with others, in this case a research partner, and together planning, teaching, observing and analysing a lesson to improve understanding of a particular area. Lesson study has been shown to not only improve the skills and knowledge of the teachers carrying out the action research, but also as a method of improving teaching as a profession as good practice and new knowledge can be shared with others (Fernandez and Yoshida, 2012). In countries like Japan, lesson study has long been seen as a crucial way of supporting and informing innovation and change in education (Lewis and Tsuchida, 1997).

As lesson study involves delivering lessons in a real-world context, myself and my research partner contacted our schools from PTE1 and arranged two dates where we could come in and carry out our lesson study. Dudley (2011) suggested that a lesson study should take place over a period of at least three lessons, however, due to time constraints, myself and my research partner were only able to carry out two one-hour lessons. When planning our lesson study, we followed a specific process (Figure 1) to improve our chances of getting reliable and valid results from our observations (Dudley, 2011; Fernandez and Yoshida, 2012).

This process began by collaboratively planning a lesson with my research partner which would allow us to observe the type of talk children used when working in different groups (Appendix 1). In order to record this data, we created an observation schedule (Appendix 2) which was used during the lesson to observe what type of talk the children were using when working in their groups.

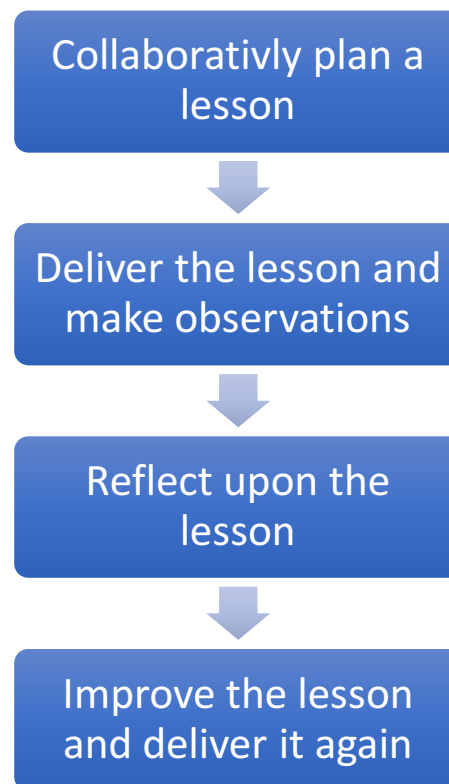


Figure 1. The process of a lesson study (Dudley, 2011; Fernandez and Yoshida, 2012).

An observation schedule was used as research has shown that it is an effective data collection method that is less threatening than other methods such as video or audio recording (Waxman et al., 2004). We did identify limitations of using an observation schedule such as scoring behaviours comes down to individual interpretation, it is easy to miss behaviours when observing more than one child and teachers can feel pressured when they know they are being observed. Based on these limitations, we planned strategies to try and reduce the likelihood of them negatively impacting our results. In order to reduce the risk of missing behaviours, we decided that when observing the children, we would spend an equal amount of time with each before rotating around to observe the next. This would eliminate the chance of observing one child for too long and missing what the others were doing. We also practised using the observation schedule by carrying out mock observations on each other, then comparing results to ensure we both had the same interpretation of each behaviour on the schedule. We also focused the observation schedule on the behaviours expressed by the children, rather than the teacher. This meant that there was no pressure on us as teachers as we were not being observed, rather, it was the

behaviours the children were expressing as a result of our teaching. Our observation schedules were used to collect qualitative data, however, the observer tallied the prevalence of each behaviour so we could quantify which type of talk was being expressed. This is sometimes referred to as mixed methods research (Driscoll et al., 2007).

The first lesson took place in a Year 5 class of 29 children. At the beginning of the lesson, the children were split up into 6 attainment groups (2 higher, 2 middle and 2 lower) so we could observe the type of talk they expressed when working with others of similar attainment. Grouping the children into higher, middle or lower attainment was informed by our tracking and daily observations that we had been making on the children throughout our time on PTE1. We chose one child from a higher attainment group, one from a middle attainment group and one from a lower attainment group (three in total) to be target children and be observed for the duration of the lesson. These target children were chosen at random to avoid any bias and were only accepted if parental consent and assent was given. Three target children were chosen as this number was manageable to observe by a single observer. If more observers were available, using a larger sample size would have been beneficial as it would have resulted in a more reliable dataset, however, as no statistical analysis was conducted on the data to look for statistically significant results, a sample size of three was considered acceptable (Driscoll et al., 2007).

Half way through the lesson, the groups were then changed from attainment to mixed attainment groups. We strived to give each group an equal amount of higher, middle and lower attainment children in order to best represent mixed attainment groups. Throughout the lesson, the observer spent one minute observing each child against the observation schedule before moving onto the next. The observer was a non-participant in the lesson and acted as a 'piece of furniture' as we did not want to influence the results in any way (Chesterfield, 1997). The observer used a separate observation schedule when the children were in attainment groups and mixed attainment groups so the different behaviours expressed in the different groups could be compared.

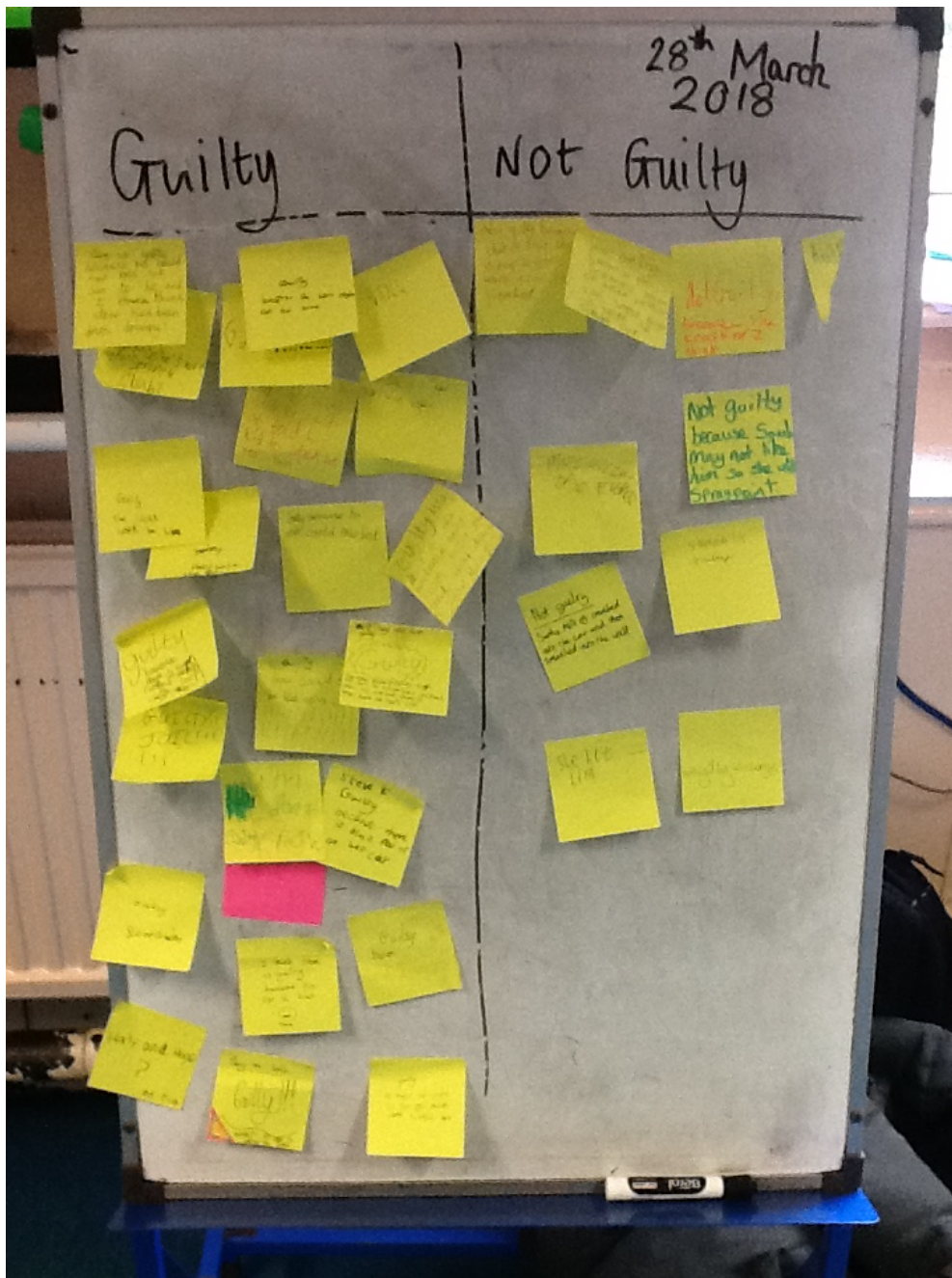


Image 1. An image taken during lesson 2. Following discussions in their groups about evidence that they were provided with, each child had to decide if the defendant was guilty or not guilty.

Following the lesson, a focus group interview was conducted with the three target children. This type of data collection has been shown to be one of the most common methods of gathering information in an educational setting (Bloor et al., 2001; Krueger and Casey, 2015) and is an effective and efficient method of collecting qualitative data (Cheng, 2014). The observer carried out this focus group interview in an informal

manner in an open space where the children felt comfortable and happy to share their responses. An audio recording of the interview was made for later analysis and the questions were predetermined (Appendix 3) to ensure there was consistency when the interview was conducted again with the new target children after the second lesson. Due to time constraints and the length of the audio recordings, summaries of each point made by the children were created instead of a direct transcription.

After the lesson, we reflected on-action (Schön, 1983) to identify how we could improve the lesson before we taught it again. This was an important step in the lesson study process and according to Brookfield (1998) is what makes an excellent teacher and improves practice. Many models were considered for this reflection such as Kolb's (1984) Learning Cycle, Gibbs' (1988) Reflective Cycle and Brookfield's (1998) Four Lenses Model but it was decided that the Assisted Reflective Conclusions Model (ARC) would be used due to its familiarity and amalgam of different approaches (Bloom, 1956; Kolb, 1984; Gibbs, 1988; Rolfe, 2001). This reflection was completed within an hour of finishing the lesson to ensure everything was still fresh in our minds.

Following this, all of the data from the observation schedules were inputted into an Excel spreadsheet so they could be analysed. From this, improvements were suggested for the second lesson where myself and my research partner swapped roles and the same process was then followed the next day in a new classroom to see what impact our reflection and data analysis had on the lesson. The second lesson was taught to a mixed Year 4 and 5 class of 36 children and the same observation schedule and focus group interview questions were used to ensure the validity of our results. The changes that were made to the lesson to try and promote more exploratory talk will be explained in the results section of this assignment.

4. Ethical considerations

There were a number of ethical considerations that were taken into account before, during and after this research project. I abided by both the university's Research Ethics and Integrity Code of Practice (UWTSD, 2017) and the British Educational Research Association Guidelines (BERA, 2011). An application for ethical approval was sent to the UWTSD ethics committee and was accepted before any research took place (**Appendix 4**). Care was taken to avoid any potential risks to the participants, the researchers and the university.

As this research project involved working with children, I was required to have a valid DBS certificate and both parental consent (Appendix 5) and pupil assent (Appendix 6) was obtained before any research was conducted. The participants were also made aware that they had the right to withdraw from the project at any time without consequence and were made aware of what the research project involved. In accordance with BERA (2011), as the research involved children, Articles Three and Twelve of the United Nations Rights of the Child (Unicef, 1989) were also upheld throughout the research process.

In order to abide by the Data Protection Act (1998), steps were made to keep the data confidential and maintain the anonymity of those involved. In order to comply with Swansea City Council guidelines, no portable memory devices were used at any point during the project as all data was stored on a password protected computer. In order to ensure anonymity, pseudonyms were used on the raw data and all names have been omitted from this assignment.

5. Results

5.1. Lesson One

Following the first lesson, the observation schedules, the focus group interview and the lesson itself were analysed to see how we could improve the lesson before teaching it again. As research partners, we reflected upon the lesson study process to see if we could answer our research question based on the evidence we had gathered (Lewis et al., 2006). As mentioned previously, the aim of this lesson study was to find out if grouping children in a specific way enhanced the likelihood of exploratory talk being used. When reviewing the literature, the research was contradictory as certain studies showed that mixed attainment groups were better at fostering exploratory talk (Fawcett and Garton, 2005), where others showed that attainment groups were more effective (Light et al., 1994). Our results, in short, were consistent with Fawcett and Garton (2005), as on average, when the target children worked in mixed attainment groups they showed more exploratory talk behaviours than when they worked in attainment groups.

	Attainment Groups			Mixed Attainment Groups		
	Disputational Talk	Cumulative Talk	Exploratory Talk	Disputational Talk	Cumulative Talk	Exploratory Talk
Child 1 <i>Lower</i>	0	3	3	1	0	7
Child 2 <i>Middle</i>	1	3	0	0	4	1
Child 3 <i>Higher</i>	2	2	5	2	0	14

Table 1. Results from lesson one. The amount of points given to each target child for each type of talk when they were working in both attainment and mixed attainment groups.

Table 1 shows the results from the observation schedules collected during our first lesson study. As you can see, the amount of points given to each child increased when they started working in mixed attainment groups. The largest increase was seen in child 3, who was our higher attainment child, as they only scored a total of 9 points when working in an attainment group, then scored 16 points when working in a mixed

attainment group. This suggests that when children work with others of mixed attainment, the amount of talk they use increases. This idea is backed up by literature as a four-year longitudinal study by Boaler et al. (2000) found that when pupils were grouped based on attainment, their involvement in lessons decreased. Saying this, our lesson study was not focusing on the amount of talk being used, rather, the effectiveness of that talk and in particular, the use of exploratory talk.

On this point, our results were mixed. Both child 1 (lower attainment) and child 3 (higher attainment) used more exploratory talk when working in a mixed attainment group. This is what we expected to see as we believed that the higher attainment children in the group would scaffold the learning of the lower attainment children and therefore, foster more constructive and critical talk as a group (Bruner, 1987; Vygotsky, 1978). Kress et al. (2005) explained that when lower attainment children work together, the amount of talk they use is far less than when higher attainment children work together as they are not able to scaffold their own learning and hold a constructive and critical conversation. Therefore, by working in mixed attainment groups, the more knowledgeable children in the group could encourage the less knowledgeable children to engage in positive discourse. However, we found that child 2 (middle attainment) used more cumulative talk when working in both an attainment and a mixed attainment group. The amount of talk they used when in different groups did not differ much either. Therefore, based on our results, it appears that lower and higher attainment children may work better together in mixed attainment groups and grouping does not seem to impact middle attainment children. We were not satisfied with these results, in particular the results for child 2 (middle attainment), as they seemed inconsistent with the literature. Therefore, we decided that in lesson two we would keep the same structure as lesson one in terms of placing children into attainment groups for the first half of the lesson and mixed attainment groups for the second half of the lesson to see if the results would be different in a different setting.

Our focus group interview also highlighted some important points that informed changes for our second lesson. Both the middle and higher attainment children said they preferred working in mixed attainment groups. The children were not aware at any point that the groups were organised based on attainment but both of these target children said they had more opportunity to talk when working with others of different

attainment. For the lower attainment target child, this was the opposite. This child said that they preferred working in attainment groups as they felt everyone was more considerate and listened to each other's ideas. This could come down to confidence. As the class teacher normally grouped the children based on attainment, the lower attainment target child might have felt more confident working with those they normally work with. Boaler et al. (2000) found that when children are 'set' into attainment groups, those in the higher groups can feel more pressure whereas those in the lower groups can feel more confident as they are used to receiving extra support, which may have been the case here.

This could also be put down to the choice of task. All of the target children said they enjoyed the lesson and in particular, enjoyed arguing their points with someone who disagreed with them. Research has shown that for a child to be engaged in a task, they must first and foremost, enjoy it (Coltman et al., 2002). For child 2 (middle attainment) and child 3 (higher attainment), both of their groups always had someone who disagreed with their points so there was always an opportunity for debate. However, child 1 (lower attainment) reported that when they were working in attainment groups, half of the group disagreed with their view point. This gave them an opportunity to argue their point of view and kept them engaged with the task. However, when placed into a mixed attainment group, everyone had the same view point, which meant the conversation became stagnant. This however does not correlate with the results from the observation schedule, which showed that child 1 (lower attainment) used more exploratory talk when in a mixed attainment group.

Therefore, an argument can be made that what a child perceives and their actual achievement can be different. The literature on this is mixed as certain texts tell us that when a child is intrinsically motivated and thinks they are doing well, this positively impacts their academic achievement (Taylor et al., 2014) where other texts say the link is not that strong, like in our case (Soenens et al., 2005; Walls and Little, 2005; Louw and Dumont, 2009) as child 1 (lower attainment) thought they worked better in their first group but the results showed they worked better in the second group. Nevertheless, the point still remains, the task must be enjoyable to keep the children engaged. Based on this, moving forward to our second lesson, we decided that we

would try to balance out the groups as best as possible so each has at least one child who disagrees with everyone else to encourage debate and exploratory talk.

The final observation we made from the focus group interview, and maybe the most important, was the fact that child 1 (lower attainment) said they did not understand all of the information they were given during the lesson, and as a result, could not engage fully as they did not feel confident arguing a point they did not fully understand. This point was also highlighted in the post lesson reflection as my research partner did not explain each piece of information before giving it to the class, instead, gave it to each group individually without explaining what it meant. This resulted in my research partner having to go around each group on multiple occasions and interrupt the conversation to explain certain points to certain members of the group. Barnes and Todd (1977) identified that frequently, teachers did the majority of talking during a lesson, yet the most successful lessons can often be the ones where the teacher has little input (Brookfield, 1995). Johnson et al. (2014) also said that for a lesson to be successful, learners must understand the learning outcomes and what they are expected to do. Therefore, we decided that to improve our second lesson, we would quickly introduce each piece of information before giving it to the class so everyone understood it. We hoped that this scaffolding would then mean we would not have to interrupt groups to give input for those who did not understand and it would also help to improve the talk within the groups as everyone would understand each point.

5.1.1. Recommendations for Lesson Two

1. Use both attainment and mixed attainment groups during the lesson to see if the results differ from lesson one.
2. Each group must have at least one person who disagrees with everyone else to promote a debate and in turn, exploratory talk.
3. Provide scaffolding by explaining each piece of information to the class so every child understands what they are discussing.

5.2. Lesson Two

Following lesson two, again the observation schedules, the focus group interview and the lesson itself were analysed to see if the changes we had made to the lesson had any impact on the learning that took place. As you can see from Table 2, the amount of talk each target child used increased when they moved from an attainment group to a mixed attainment group. Interestingly, when compared with lesson one, both the lower and middle attainment children used more talk in lesson two. This suggests that the extra scaffolding that was provided by myself when teaching the lesson may have benefited both the lower and middle attainment children, as overall they engaged with the lesson more.

	Attainment Groups			Mixed Attainment Groups		
	Disputational Talk	Cumulative Talk	Exploratory Talk	Disputational Talk	Cumulative Talk	Exploratory Talk
Child 1 <i>Lower</i>	0	2	5	1	2	8
Child 2 <i>Middle</i>	0	3	4	0	6	4
Child 3 <i>Higher</i>	1	1	4	0	1	9

Table 2. Results from lesson two. The amount of points given to each target child for each type of talk when they were working in both attainment and mixed attainment groups.

Looking at exploratory talk specifically, by providing more scaffolding and ensuring that each group always had children who disagreed, the amount of exploratory talk expressed by both the lower and middle attainment children when in attainment groups increased from lesson one. When you look at the results for the mixed attainment groups, even though child 2 (middle attainment) expressed more cumulative talk than any other type of talk, the amount of exploratory talk they expressed, as well as child 1 (lower attainment), increased from lesson one. Therefore, the results showed us that the amount of exploratory talk, and talk overall that was expressed by the lower attainment and middle attainment children increased from lesson one to lesson two, indicating that something that we changed may have been the catalyst for that. In terms of the higher attainment child, they engaged in far more exploratory talk

compared to the other target children no matter which group they were in during both lesson one and lesson two, however, they expressed more exploratory talk when in a mixed attainment group. Overall, the results from the observation schedules from both lesson one and lesson two told us:

- More talk is expressed when in mixed attainment groups.
- Both lower and higher attainment children used more exploratory talk in mixed attainment groups.
- Middle attainment children used more cumulative talk when in mixed attainment groups.

To give the observation schedule results some context, we analysed the recording from the focus group interview and found some interesting results. All of the target children said they felt they worked better in a group when there was someone arguing against their point. This is something we tried to improve from lesson one so it was positive to see it had an impact on lesson two. Both the lower and middle attainment children said they worked better in mixed attainment groups as those within the group argued their points much better than those in their attainment groups. This is in line with Fawcett and Garton (2005) and Vygotsky (1978) as this could tell us that through working with more knowledgeable others, their learning was scaffolded and as a result were able to engage with the conversation in a more critical and constructive way. However, like in lesson one, even though child 2 (middle attainment) said they worked better in mixed attainment groups, the results from the observation schedule indicated they were more effective when working in attainment groups. Again, this could come down to the argument that if a child perceives they are doing well, it does not necessarily mean they are (Soenens et al., 2005; Walls and Little, 2005; Louw and Dumont, 2009). An argument can be made however, that if a child constantly feels like they are doing well, and in turn become intrinsically motivated towards their learning, this could have a positive impact on their achievement in the future (Taylor et al., 2014).

Another comment that was made during the interview which was common with comments made during the first interview was that all of the children thought the lesson

would be better if the groups were smaller. Due to practicality, we were unable to make the groups any smaller during our lessons but most of the target children from both lessons said that at certain points during the lesson, they found themselves engaging with only a few in their group and found this beneficial. According to Blatchford et al. (2006), optimal group size depends on the age of the children and the task being carried out however Wheelan (2005) found that in general, groups of 3-4 members were significantly more productive and likely to show development when compared with groups made up of more members. This is in line with what we found and could be something that we overlooked as a way to improve our lesson.

5.2.1. Recommendations Moving Forward

1. Use smaller, mixed attainment groups as this is more likely to promote more exploratory talk and more talk in general.
2. Organise groups so there are multiple viewpoints in each to promote discussion and debate.
3. Scaffold the learning to ensure each child understands the task.

6. Discussion

Our lesson study informed our practice in a number of different ways. We were able to answer our research question as we found that smaller, mixed attainment groups were more likely to promote exploratory talk when teaching oracy based lessons in a KS2 classroom. Our findings were in line with a proportion of the current literature that also informed us that mixed attainment groups are better at fostering exploratory talk (Fawcett and Garton, 2005). This was a positive finding as mixed attainment groups not only improve exploratory talk, but also improve confidence (Francis et al., 2017) and academic achievement (Wilkinson and Penney, 2013). This means that adopting this approach in the classroom has many benefits in terms of improving development.

Scaffolding also plays a key role in facilitating exploratory talk as each child needs to be able to understand the work given in a lesson and in turn, engage in constructive and critical conversation about it. This can be done in a number of different ways. Research has shown that with practice, mixed attainment groups can allow children to provide themselves with their own scaffolding. Vygotsky (1978) said that for learning to take place, there must be a more knowledgeable other present. Mixed attainment groups offer this as there is an asymmetric level of understanding within groups which in turn can help to improve understanding. However, we found that the teacher still plays an important role in scaffolding the learning that takes place. Mariani (1997) found that there is a link between the scaffolding you provide and the amount of challenge you can offer a child. Too much scaffolding with a lack of challenge can lead to a child becoming too comfortable, however, scaffolding coupled with challenging tasks can enhance learning and engagement. This links with the ZPD and the amount of learning that can take place with the aid of a more knowledgeable other (Gibbons, 2002). This means that mixed attainment groups are able to 'self-scaffold', but a teacher still plays an important role as the challenge of the task provided is still key. Taking all of this into account, I will be able to use this new-found knowledge to inform my future practice when trying to promote exploratory talk in the future.

7. Conclusion and Recommendations

Throughout the lesson study process, steps were taken to ensure that the data we obtained would be reliable and valid. There were a number of both strengths and limitations to this action research that had an impact on the overall results. When creating our observation schedule, we identified a number of potential limitations as mentioned in the methods section, and took steps to try and prevent these impacting our results. A strength of using an observation schedule was that it decreased the chance of subjectivity by the observer as there was a set of behaviours they were specifically looking for instead of just observing everything each target child was doing (Scarth and Hammersley, 1987). This method was chosen over others such as video or audio recording as these methods have been found to be more threatening (Waxman et al., 2004), and in turn more likely to influence the results. We used the same observation schedules and focus group interview questions for both lessons to ensure that our results would be valid.

The sample size in this research was one weakness that was identified. Due to the time and personnel available, it was not possible to collect data on a larger sample which would have given us more reliable results. As only six target children were used over the two lessons, I feel that it is hard to generalise the results as the sample was not large enough. Saying this, as our results were similar over the two lessons, I feel that it would be beneficial to carry out another lesson study in the near future on a larger scale to validate the results. If I was to do this process again, I would try to observe more children over more lessons which would give me the opportunity to repeat the cycle of teaching and reflecting to improve my practice further.

Based on what we have learned from our lesson study, I would recommend that taking into consideration the way children are grouped when taking part in work that requires an element of oracy is important. Research has shown how important group work and collaborative learning can be for development (Vygotsky, 1978; Springer et al., 1999; Kuh et al., 2007) and how important exploratory talk can be in that process (Mercer, 1998; Fawcett and Garton, 2005). I suggest, whilst acknowledging the limitations within this research, the use of small, mixed attainment groups has the potential to promote exploratory, and in general, more talk within the classroom. It is also important

to take into account that disputational talk has the potential to negatively impact learning (Kutnick and Manson 2000; Williams 2008), however, it is still important that those working within a group have opposing views as this encourages debate and discussion. Finally, scaffolding plays a key role in any element of teaching (Bruner, 1978) and group work is no different. Allowing each child to access the work in a way they can understand it is important when promoting talk as we found when a child does not fully understand a topic, they find it hard to fully engaged with it. Taking everything into account, through the process of lesson study, we were able to reflect upon and improve our lessons which has helped to inform my practice as a trainee teacher moving forward into the profession.

8. References

Barnes, D. and Todd, F. (1977) *Communicating and learning in small groups*. London: Routledge.

Blatchford, P., Baines, E., Rubie-Davies, C., Bassett, and Chowne, A. (2006). 'The Effect of a New Approach to Group Work on Pupil–Pupil and Teacher–Pupil Interactions'. *Journal of Educational Psychology*, 98, 4, pp.750–765.

Bloom, B. S. (Ed.). M. D. Engelhart, E.J. Furst, W.H. Hill, D. R. Krathwohl, (1956). *Taxonomy of Educational Objectives: The Cognitive Domain*. New York: David McKay Co Inc.

Bloor, M. (2001) *Focus Groups in Social Research*. California: SAGE.

Boaler, J., William, D. and Brown, M. (2000) 'Students' Experiences of Ability Grouping: Disaffection, Polarisation and the Construction of Failure', *British Educational Research Journal*, 26, 5, pp.631-648.

Bodrova, E. and Leong, D. J. (2003) Learning and development of preschool children from the Vygotskian perspective, in Kozulin, A., Gindis, B., Ageyev, V. S. and Miller, S. M (eds.) *Vygotsky's educational theory in cultural context*. Cambridge: Cambridge University Press, pp. 156-174.

British Educational Research Association (2011). *Ethical guidelines for ethical research*. London: BERA

Brookfield, S. D. (1998) *Becoming a critically reflective teacher*. San Francisco; Jossey-Bass Publishers.

Bruner, J. S. (1978). The role of dialogue in language acquisition. In A. Sinclair, R., J. Jarvella, and W. J. M. Levelt (eds.) *The Child's Concept of Language*. New York: Springer-Verlag.

Chesterfield, R. (1997) *Classroom Observation Tools: Improving Educational Quality*, Washington: US Agency for International Development.

Cheng, W. K. (2014) 'A Study on Applying Focus Group Interview on Education', *Reading Improvement*, 44, 4, pp.194-198.

Coltman, P., Petyaeva, D. and Anghileri, J. (2002) 'Scaffolding Learning Through Meaningful Tasks and Adult Interaction', *An International Journal*, 22, 1, pp.39-49.

Cowie, H. and van der Aalsvort, G. (2000). *Social Interaction in Learning and Instruction*. Oxford: Pergamon.

Donaldson, D. (2015) *Successful futures: Independent review of curriculum and assessment arrangements in Wales*.

Driscoll, D., Appiah-Yeboah, A., Salib, P. and Rupert, D. (2007) 'Merging Qualitative and Quantitative Data in Mixed Methods Research: How to and Why Not. *Ecological and Environment Anthropology*, 3, 1, pp.19–28.

Educational Endowment Foundation (2018) Setting or streaming. Available at: <https://educationendowmentfoundation.org.uk/evidence-summaries/teaching-learning-toolkit/setting-or-streaming/> [Accessed on 2nd April 2018]

Fani, T. and Ghaemi, F. (2011) 'Implications of Vygotsky's Zone of Proximal Development (ZPD) in teacher education: ZPTD and self-scaffolding'. *Social and Behavioural Sciences*, 29, pp. 1549-1554.

Fawcett, L. M. and Garton, A. F. (2005) 'The Effect of Peer Collaboration on Children's Problem-Solving Ability', *British Journal of Educational Psychology*, 75, 2, pp.157-169.

Fernandez, C. and Yoshida, M. (2012) *Lesson Study: A Japanese Approach to Improving Mathematics Teaching and Learning*. New Jersey: Lawrence Erlbaum.

Fernandez, M., Wegerif, R., Mercer, N. and Rojas-Drummond, S. (2015) 'Re-conceptualizing "Scaffolding" and the Zone of Proximal Development in the context of symmetrical collaborative learning'. *Journal of Classroom Interaction*, 50, 1, pp. 54-72.

Francis, B., Connilly, P., Archer, L., Hodgen, J., Mazenod, A., Pepper, D., Sloan, S., Taylor, B., Tereshchenko, A. and Travers, M. C. (2017) 'Attainment Grouping as Self-fulfilling Prophecy? A Mixed Methods Exploration of Self-confidence and Set Level Among Year 7 Students', *International Journal of Educational Research*, 86, 1, pp.96-108.

Freund, L. S. (1990). 'Maternal Regulation of Children's Problem-Solving Behaviour and Its Impact on Children's Performance'. *Child Development*, 61, 1, pp.113-126.

Gibbons, P. (2002) *Scaffolding Language, Scaffolding Learning*. New Hampshire: Heinemann.

Gibbs, G. (1988) *Learning by Doing: A Guide to Teaching and Learning Methods*. Oxford: Oxford Polytechnic.

Ireson, J. and S. Hallam. (2001) *Ability Grouping in Education*. London: Sage.

Johnson, D.W., Johnson, R.T., and Smith, K.A. (2014). Cooperative Learning: Improving University Instruction by Basing Practice on Validated Theory. *Journal on Excellence in College Teaching*, 25, 4, pp.85-118.

Kerckhoff, A. C. (1986) 'Effects of Ability Grouping in British Secondary Schools', *American Sociology Review*, 51, 1, pp.824-858.

Kolb, D. A. (1984) *Experiential Learning: Experience as the Source of Learning and Development*. New Jersey: Prentice-Hall.

Kress, G., Jewitt, J., Bourne, J., Franks, A., Hardcastle, J., Jones, K. and Reid, E. (2005) *English in Urban Classrooms: a multi-modal analysis of classroom interaction*. London: Routledge.

Krueger, R. A. and Casey, M. A. (2015) *Focus Groups: A Practical Guide for Applied Research*. (5th ed) California: SAGE.

Kuh, G.D., Kinzie, J., Buckley, J., Bridges, B. and Hayek, J.C. (2007) *Piecing Together the Student Success Puzzle: Research, Propositions, and Recommendations*. San Francisco: Jossey-Bass.

Kutnick, P., Blatchford, P., Clark, H., MacIntyre, H. and Baines, E. (2005) 'Teachers' understandings of the relationship between within-class (pupil) grouping and learning in secondary schools', *Educational Research*, 47, 1, pp.1–24.

Kyriacou, C. (2007) *Essential Teaching Skills*. Oxford: OUp Oxford.

Legislation.gov.uk. (2018). *Data Protection Act 1998*. [online] Available at: <http://www.legislation.gov.uk/ukpga/1998/29/contents> [Accessed 3rd April 2018].

Lewis, C. and Tsuchida, I (1997) *Lean and friendly: How Did Japanese Elementary Science Textbooks Get That Way?* New York: Teachers College Press.

Lewis, C., Perry, R. and Murata, A. (2006) 'How Should Research Contribute to Instructional Improvement? The Case of Lesson Study', *Educational Researcher*, 35, 3, pp.3-14.

Light, L. L. and La Voie, D. (1994). Adult Age Differences in Repetition Priming: A Meta-analysis. *Psychology and Aging*, 9, 4, pp.539-553.

Louw, J. and Dumont, K. (2010) 'Adjustment to University and Academic Performance: Brief Report of a Follow-up Study'. *Journal of Educational Psychology*, 30, 1, pp.369–375.

Mercer, N. (1995). *The guided construction of knowledge: Talk amongst teachers and learners*. Clevedon: Multilingual Matters.

Mercer, N. and Sams, C. (2006) 'Teaching Children How to Use Language to Solve Maths Problems', *Language and Education*, 20, 6, pp. 507-528.

Piaget, J. 'Piaget's Theory, in P. Mussen, (Eds), (1970) *Carmichael's manual of child psychology*. New York: John Wiley & Sons.

Pritchard, A. (2015) *Ways of learning: Learning theories and learning styles in the classroom*. London: Routledge.

Rabel, S. and Wooldridge, I. (2013) 'Exploratory talk in mathematics: what are the benefits?', *International Journal of Primary, Elementary and Early Years Education*, 41, 1, pp.15-22.

Rojas-Drummond, S., Zapata, S. and Peon, M. (2004) 'Exploratory Talk, Argumentation and Reasoning in Mexican Primary School Children', *Language and Education*, 18, 6, pp.539-557.

Scarth, J. and Hammersley, M (1987) 'More questioning of ORACLE', *Educational Research*, 29, 1, pp.37-46.

Schön, D. (1983) *The Reflective Practitioner: How Professionals Think in Action*. London: Temple Smith.

Soenens, B., Vansteenkiste, M., Duriez, B., Luyten, P. and Goossens, L. (2005) 'Psychological Control and Adjustment: The Mediating Role of Maladaptive Perfectionism. *Personality and Individual Differences*, 38, 2, pp.487–498.

Springer, L., Stanne, M. E. and Donovan, S. S. (1999) 'Effects of Small-Group Learning on Undergraduates in Science, Mathematics, Engineering, and Technology: A Meta-Analysis'. *Review of Educational Research*, 96, 1, pp.21-51.

Taylor, G., Jungert, T., Mageau, G. A., Schattke, K., Dedic, H., Rosenfield, S. and Koestner, R. (2014). 'A Self-determination Theory Approach to Predicting School Achievement Over Time: The Unique Role of Intrinsic Motivational orientations and self-determination theory', *Contemporary Educational Psychology*, 39, 1, pp.342-348.

UN General Assembly (1989) *The Convention on the Rights of the Child*. New York: United Nations.

University of Wales Trinity Saint David (2017). *Research Ethics and Integrity Code of Practice*.

Vygotsky, L. (1978) *Mind in Society*. Cambridge: Harvard University Press.

Walls, T. A. and Little, T. D. (2005) 'Relations Among Personal Agency, Motivation, and School Adjustment in Early Adolescence', *Journal of Educational Psychology*, 97, 1, pp.23–31.

Waxman, H. C., Tharp, R. G. and Hilberg, S. R. (2004) *Observational Research in U.S. Classrooms: New Approaches for Understanding Cultural and Linguistic Diversity*. Cambridge: Cambridge University Press.

Wheelan, S. (2009) 'Group Size, Group Development, and Group Productivity', *Small Group Research*, 40, 2, pp.247-262.

Wilkinson, S. D. and Penney, D. (2013) 'The Effects of Setting on Classroom Teaching and Student Learning in Mainstream Mathematics, English and Science Lessons: A Critical Review of the Literature in England. *Educational Review*, 45, 2, 1-17.

Williams, P. (2008). *Independent Review of Mathematics Teaching in Early Years Settings and Primary Schools*. Nottingham: Department for Children, Schools and Families.

9. Appendix

Appendix 1. Lesson plans for the first and second lessons of our lesson study

Canolfan Addysg Athrawon De-Orllewin Cymru  The South West Wales Centre of Teacher Education			1B	
Session Plan – Key Stage 2				
Name of trainees:		Session ref: Lesson 1 - 27/03/18		
Personal target(s) in relation to QTS: S3.1.4 - Team teaching. S3.2.1 - Monitor and assess the lesson and use this to inform planning.				
Year group:	Year 5	No. of learners:	29	ALN: n/a
Additional Adults:		TA to facilitate discussion		
Learning objective(s): Can I contribute to a group discussion to build an argument?			Success criteria: Vote guilty/not guilty on post-it notes Support arguments Respect other opinions and arguments	
Links to previous learning: n/a				
Curriculum coverage (range, skills) Oracy <i>Listening</i> - listen to others, asking questions and responding to both the content and the speakers' viewpoints <i>Listening</i> - Contribute to group discussion, taking some responsibility for completing the task well <i>Collaboration and discussion</i> - express opinions about topics <i>Collaboration and discussion</i> - build on and develop the ideas of others in group discussions <i>Speaking</i> - explain information and ideas, exploring and using ways to be convincing				
Literacy(LNF) See above		Numeracy (LNF) N/A		
DCF N/A	<i>Thinking</i> Asking questions. Activating prior skills, knowledge and understanding (oracy, reading skills & problem solving). Gathering information ("evidence"). Generating and	ESDGC N/A	YCC N/A	

	developing ideas. Valuing errors and unexpected outcomes (evidence that contradicts what they originally thought). Entrepreneurial thinking. Thinking about cause and effect and making inferences. Thinking logically and seeking patterns. Considering evidence, information and ideas. Forming opinions and making decisions.		
Key vocabulary(English/Welsh): English: Evidence. Opinion. Talk. Listen. Explain/support. Welsh: Da iawn. Bendigedig. Barod, Dwylo y fyny. Dwylo y lawr. Sefwch yn dawel. Eisteddwch yn dawel. Gwrandewch.			
Time	Session activities, organisation and management	Key questions & Assessment for Learning opportunities	
10 mins	Introduction Discuss LO & success criteria – a problem to solve. Give scenario - I am back today to find out if you can help with a problem. Sarah had a scratch on her car. Thinks it was Steve as he was parked next to her in the car park. Sarah noticed that Steve had one too. Give post-it notes (pink) to chn, write a reason and vote guilty or not guilty and stick on board. Split into groups (ability groups) Discuss the topic. Half way through – vote again using post it notes Then swap groups around Debate again	Resources Witness statements per group Evidence per group Post it notes Paper for notes PowerPoint with witness statement and evidence Questions Follow up evidence with questions; Is this a reliable source? Can we trust the evidence? Have you supported your arguments? Why? Did you change your mind? What made you change your mind? (Evidence/discuss	

	Vote last time at end of lesson	AfL Post-it notes Questioning Allow thinking time
	Main activities Children to discuss the scenario with their groups. Encourage them to support arguments & disagreement is ok. Everyone must offer an opinion – respect even if different. Immediately provide evidence #1 (in favour of Sarah). ~5 mins Evidence #2 (Steve). ~5 mins discussion. Evidence #3 (Sarah). ~5 mins Evidence #4 (Sarah) After a few mins of more discussion - vote again on post-its (yellow) to put on board. Split into mixed ability groups and give evidence #5 Again, assess how discussion is going and drip feed the evidence to each group. Prior to closing the lesson, have the chn vote on post-its (green) for the last time and place on board. Evidence; Steve is Guilty 2) A member of public saw a car that looked like Steve's reversing into the space next to Sarah's car and the driver was on his phone.	

	4) The claim was for bumping into someone else's car, so Steve has a history of reckless driving. 6) CCTV footage from the scene yesterday showed Steve entering the car park driving very fast. 8) The scratch on Sarah's car and Steve's car are the same size and closely match each other. Coincidence? 10) There was blue paint on Sarah's car. Where could this have come from? Steve is not guilty 1) Steve says the scratch happened last year. Do you believe him? 3) Steve has proof that the scratch on his car happened last year as he claimed from his insurance. 5) CCTV footage from last year's incident showed that Steve swerved into the road to avoid a dog and skimmed a car parked on the other side of the road. 7) Steve's son was with him all day and gave a statement saying his dad never hit Sarah's car. 9) A member of public said they saw Sarah bump into a wall before driving into the parking space.
10 mins	Plenary Bring discussion to a close. Ask each group their collective thoughts. Unanimous agreement? Who disagreed? Why?

Canolfan Addysg Athrawon De-Orllewin Cymru  The South West Wales Centre of Teacher Education			1B	
Session Plan – Key Stage 2				
Name of trainees:		Session ref: Lesson 1 - 28/03/18		
Personal target(s) in relation to QTS: S3.1.4 - Team teaching. S3.2.1 - Monitor and assess the lesson and use this to inform planning.				
Year group:	Year 4/5	No. of learners:	36	ALN: ZP – TA will support this pupil during the lesson
Additional Adults:		TA to work with ZP		
Learning objective(s): Can I contribute to a group discussion to build an argument.			Success criteria: Vote guilty/not guilty on post-it notes Support arguments Respect other opinions and arguments	
Links to previous learning: n/a				
Curriculum coverage (range, skills) Oracy <i>Listening</i> - listen to others, asking questions and responding to both the content and the speakers' viewpoints <i>Listening</i> - Contribute to group discussion, taking some responsibility for completing the task well <i>Collaboration and discussion</i> - express opinions about topics <i>Collaboration and discussion</i> - build on and develop the ideas of others in group discussions <i>Speaking</i> - explain information and ideas, exploring and using ways to be convincing				
Literacy(LNF) See above			Numeracy (LNF) N/A	
DCF N/A	<i>Thinking</i> Asking questions. Activating prior skills, knowledge and understanding (oracy, reading skills & problem solving). Gathering information ("evidence"). Generating and developing ideas. Valuing errors and unexpected		ESDGC N/A	YCC N/A

	outcomes (evidence that contradicts what they originally thought). Entrepreneurial thinking. Thinking about cause and effect and making inferences. Thinking logically and seeking patterns. Considering evidence, information and ideas. Forming opinions and making decisions.		
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Key vocabulary(English/Welsh):

English: Evidence. Opinion. Talk. Listen. Explain/support.

Welsh: Da iawn. Bendigedig. Barod, Dwylo y fyny. Dwylo y lawr. Sefwch yn dawel. Eisteddwch yn dawel. Gwrandewch.

Time	Session activities, organisation and management	Key questions & Assessment for Learning opportunities
10 mins	Introduction Discuss LO & success criteria – a problem to solve. Give scenario - I am back today to find out if you can help with a problem. Sarah had a scratch on her car. Thinks it was Steve as he was parked next to her in the car park. Sarah noticed that Steve had one too. Give post-it notes (pink) to chn, write a reason and vote guilty or not guilty and stick on board. Split into groups (ability groups) Discuss the topic. Half way through – vote again using post it notes Then swap groups around Debate again Vote last time at end of lesson	Resources Witness statements per group Evidence per group Post it notes Paper for notes PowerPoint with witness statement and evidence Questions Do you understand the evidence? Follow up evidence with questions; Is this a reliable source? Can we trust the evidence? Have you supported your arguments? Why? Did you change your mind? What made you change your mind? (Evidence/discuss AfL

		Post-it notes Questioning Allow thinking time
	Main activities Children to discuss the scenario with their groups. Encourage them to support arguments & disagreement is ok. Everyone must offer an opinion – respect even if different. Explain each piece of evidence before giving it out. Immediately provide evidence #1 (in favour of Sarah). ~5 mins Evidence #2 (Steve). ~5 mins discussion. Evidence #3 (Sarah). ~5 mins Evidence #4 (Sarah) After a few mins of more discussion - vote again on post-its (yellow) to put on board. Include reasons why guilty/not guilty. Feedback some of the reasons to the class and discuss. Split into mixed ability groups and give evidence #5 Again, assess how discussion is going and drip feed the evidence to each group. Prior to closing the lesson, have the chn vote on post-its (green) for the last time and place on board. Include reasons why guilty/not guilty. Feedback some of the reasons to the class and discuss.	

	Evidence; Steve is Guilty 2) A member of public saw a car that looked like Steve's reversing into the space next to Sarah's car and the driver was on his phone. 4) The claim was for bumping into someone else's car, so Steve has a history of reckless driving. 6) CCTV footage from the scene yesterday showed Steve entering the car park driving very fast. 8) The scratch on Sarah's car and Steve's car are the same size and closely match each other. Coincidence? 10) There was blue paint on Sarah's car. Where could this have come from? Steve is not guilty 1) Steve says the scratch happened last year. Do you believe him? 3) Steve has proof that the scratch on his car happened last year as he claimed from his insurance. 5) CCTV footage from last year's incident showed that Steve swerved into the road to avoid a dog and skimmed a car parked on the other side of the road. 7) Steve's son was with him all day and gave a statement saying his dad never hit Sarah's car. 9) A member of public said they saw Sarah bump into a wall before driving into the parking space.
10 mins	Plenary Bring discussion to a close. Ask each group their collective thoughts. Unanimous agreement? Who disagreed? Why?

Appendix 2. Observation schedule used to collect data for our lesson study.

Observation Schedule

	Pupil 1	Totals	Pupil 2	Totals	Pupil 3	Totals
They are disagreeing with the others in the group and making their own decisions.						
They are not offering constructive criticism.						
They are competitive rather than co-operative.						
Their responses are over powering with no justification (Yes it is! No it's not!).						
They are just accepting and agreeing with everything being said.						
They are sharing ideas but in an uncritical way.						
They are repeating the ideas of others.						
They are responding very quickly without thinking about the answer.						
They are asking questions to gain clarification on a point made by someone else before responding.						
They are challenging the ideas of others and justifying why.						
They are contributing to and building on what others have said.						
They are welcoming and respecting the ideas of others, even if they disagree with what is being said.						
The points they are making are relevant to the topic.						

Appendix 3. Interview questions used in our focus group interviews.**Interview Questions**

1. Which group did you feel better sharing your points with? Why?
2. What was different between the groups?
3. How did you back up your points if you agreed or disagreed?
4. Did anybody change your mind? Did you change anybody else's mind? How did you/they do it?
5. How could I improve this lesson if I taught it again? What could I do differently or keep the same?

Extension questions

- Which group do you think gave better points? Why?
- Which group did you feel more comfortable in?
- Which group did you feel better sharing your points with? Why?
- Did you feel like you made good points?
- Which group do you think you made better points with? Why?
- Did you feel like your points were listened to?
- Did you agree or disagree with any points?
- If you disagreed, did you share why? Or give a different point of view?
- Do you think discussion groups are useful to talk about different topics?
- Did you keep any thoughts to yourself? Why?
- Did anybody change your mind? Did you change anybody else's mind? How did you/they do it?
- How do you think the lesson could have been better?
- Do you think another set of groups would give better arguments? How would you sort these groups?
- Do you think you would have been able to say as much if there were more/less people in the group?
- What sort of questions did you ask in your groups? Were they answered?
- How comfortable did you feel making your points in both groups? Which was better?
- What did you do when you disagreed with somebody?

Appendix 4. Ethical approval application 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:					
Tick all boxes which apply:					
Member of staff:	☐	Student:	☒	Honorary research fellow:	☐
Faculty/School/Centre:	Yr Athrofa				
Campus:	Townhill Campus, Swansea				
E-mail address:					
Contact Telephone Number:					
For students:					
Student Number:		Undergraduate	☐		
Programme of Study:	Primary PGCE	Taught Postgraduate	☒		
Director of Studies/Supervisor:		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	☐
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			Date
If Yes, please indicate source of approval (and date where known):	Research Degrees Committee	☐	
	Faculty Research Committee	☐	
	Other (write in) TET Module Team	X	28/02/18

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

SECTION C: External Ethical Guidance Materials

Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines.	
British Educational Research Association (2011). <i>Ethical guidelines for ethical research</i> . London: BERA	X
University of Wales Trinity Saint David (2017). Research Ethics and Integrity Code of Practice	X

SECTION D: External Collaborative Research Activity

Does the research activity involve collaborators outside of the University?	YES		NO	X
If Yes, please provide the name of the external organisation and name and contact details for the main contact person:				
Institution	N/A			
Contact person name	N/A			
Contact person e-mail address	N/A			

Where research activity is carried out in collaboration with an external organisation

Does this organisation have its own ethics approval system?	YES		NO	N/A
If Yes, please attach a copy of any final approval (or interim approval) from the organisation				

SECTION E: Details of Research Activity

Indicative title:	How can we improve exploratory talk through different groupings in a KS2 lesson		
Proposed start date:	27/03/18	Proposed end date:	29/03/18
Purpose of research activity (including aims and objectives) Outline the purpose, aims and objectives of the research activity, including key research questions. Show briefly how existing research has informed the proposed activity and explain what the research activity will add and how it addresses an area of importance. (Maximum 300 words)			
The aim of this research activity is to assess how I can enhance my own practice by encouraging exploratory talk in my lessons by grouping children in different ways. This will help to inform my future practice as it will allow me to encourage my pupils when working together			

to challenge each other's ideas in a constructive and critical manner. Mercer (1995) used the term exploratory talk to describe this type of collaborative talk and research by Fernandez et al. (2015) found that exploratory talk increases the likelihood of learning taking place. By grouping the children differently across two lessons, with ability levels being a factor that I will control and adjust, I hope to discover the ways in which I can promote and enhance exploratory talk. Mercer's (1995) categorisation of talk is deeply rooted within Vygotsky's (1978) social constructivism where talk is an important aspect of learning. Vygotsky believed that there must be an asymmetric level of understanding between those working together as there must be an adult or more capable peer present for learning to take place, however, research has also shown that learning can occur as a result of symmetrical interactions between children who have similar levels of understanding (Cowie and van der Aalsvort, 2000). By adjusting the groups the children work in, therefore changing the levels of understanding within the group, I aim to analyse which groupings are able to cultivate more exploratory talk. Therefore, this study aims to find out if exploratory talk is more likely to occur in groups where the children are of similar ability compared to groups where the children are of mixed ability. This will help to inform my future practice as it will provide me with a better understanding of how to group children if I want to encourage exploratory talk in my classroom.

(this box should expand as you type)

Proposed methods

Provide a brief summary of all the methods that **may** be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. (Maximum 600 words)

I will be working collaboratively with a research partner when carrying out this research. We will be using a lesson study to carry out action research to develop our understanding of our research question (Dudley, 2011). Our study will involve two lessons, one in each school, with the first planned and delivered whilst observations are being made. Following the lesson, the observations will be analysed and we will reflect on the teaching and learning (Lewis, Perry & Murata, 2006) so we can improve the second lesson. Before carrying out any research, we will gain parental consent and pupil assent. Each pupil will also be reminded that they have the right to withdraw from the study at any point before, during or after the research has been carried out.

Lesson 1

The children will be categorised into ability groups (higher, middle, lower) based on the tracking and observations that have been made over the last 6 weeks of placement on PTE1b. We will then split the class up into six equal ability groups (2 higher ability groups, 2 middle ability groups, 2 lower ability groups) and give them a topic to debate. We will randomly select 1 target child from each category (1 higher ability, 1 middle ability, 1 lower ability) to be observed for the duration of the lesson against an observation schedule. We will be using an observation schedule to observe the type of talk the 3 target pupils use when working in ability groups. The observation schedule will include the typical characteristics that are exhibited when engaging in exploratory, disputational, and cumulative talk. When the target pupil demonstrates these characteristics, the observer will mark it against the relevant item on the observation schedule. The observer will spend 1 minute with each target child before moving on to the next for the duration of the task. This will reduce the risk of bias and ensure each pupil is observed for the same amount of time. After 20 minutes, the groups will then have a chance to share their points with the rest of the class.

For the second half of the lesson, the six groups will be adjusted so they are all mixed ability. The pupils will then be given a different topic to discuss to try and avoid repetitive discussion that might end quickly. The observer will now repeat the same process of observing each target pupil. This will allow us to observe the talk being used when the target pupils are in both ability and mixed ability groups to see which encourages more exploratory talk.

Following the lesson, the observer will carry out a focus group interview with the three target children in an informal manner. The questions for this interview will be decided before the interview takes place and the interview will be held in an open space where the pupils feel comfortable and happy to answer the questions. The observer will record the audio of the interview to be analysed later. Following the lesson, we will analyse the results of the observations and based on this, we will tailor our next lesson to try and promote exploratory talk.

Lesson 2

The findings from lesson 1 will inform our approach towards lesson 2. The task in lesson 2 will be identical to the task in lesson 1, but the roles of teacher and observer will be reversed. We will again randomly select a higher, middle and lower ability pupil to be observed. We will use the same observation schedule and interview questions as in lesson 1 to ensure our results are valid.

The observer will have no input into the lesson when carrying out the research.

Location of research activity Identify all locations where research activity will take place.
Two small primary schools within Yr Athrofa partnership with UWTSD.
(this box should expand as you type)
Research activity outside of the UK If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural sensitivities or vulnerabilities of participants.
N/A
(this box should expand as you type)

SECTION F: Scope of Research Activity

Will the research activity include:	YES	NO
Use of a questionnaire or similar research instrument?	☐	☒
Use of interviews?	☒	☐
Use of diaries?	☐	☒
Participant observation with their knowledge?	☒	☐
Participant observation without their knowledge?	☐	☒
Use of video or audio recording?	☒	☐
Access to personal or confidential information without the participants' specific consent?	☐	☒
Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒
Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
Investigation of participants involved in illegal activities?	☐	☒
Use of procedures that involve deception?	☐	☒
Administration of any substance, agent or placebo?	☐	☒
Working with live vertebrate animals?	☐	☒
Other primary data collection methods, please explain in this box	☐	☒

SECTION G: Intended Participants

Who are the intended participants:	YES	NO
Students or staff at the University?	☐	☒
Adults (over the age of 18 and competent to give consent)?	☐	☒
Vulnerable adults?	☐	☒
Children under 18?	☒	☐
Prisoners?	☐	☒
Young offenders?	☐	☒
Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
People engaged in illegal activities?	☐	☒
Others (please identify):	☐	☒

Participant numbers and source

Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?

The children involved in this research will be from the classes we have been in for the last 6 weeks on PTE1. 65 children will be present in total over the two schools when the research is taking place. However, only 6 children will be chosen as target pupils, therefore be observed or interviewed. There will be 3 target pupils in each school. We will split the classes up into three categories, higher ability, middle ability and lower ability and place each child into one of three based on the assessments and observations we have been making on each child over the past 6 weeks on PTE1. The children will not be made aware at any point during the study which category they have been placed in. To choose our target pupils, we will randomly select one child from each category.

this box should expand as you type)

Information for participants:	YES	NO	N/A
Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
Will you tell participants that their participation is voluntary?	☒	☐	☐
Will you obtain written consent for participation?	☒	☐	☐
Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
If the research is observational, will you ask participants for their consent to being observed?	☒	☐	☐
Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☐	☐	☒
Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐

Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
If NO to any of above questions, please give an explanation			
(this box should expand as you type)			

Information for participants:	YES	NO	N/A
Will participants be paid?	☐	☒	☐
Is specialist electrical or other equipment to be used with participants?	☐	☒	☐
Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☒	☐
If YES to any question, please provide full details			
(this box should expand as you type)			

SECTION H: Anticipated Risks

Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them.

If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.

Full risk assessment completed and appended?

Yes

☐

No

☒

Risks to participants

For example: emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information

I have read both the University guidelines on ethical research (UWTSD Research, Ethics and Integrity code of professional conduct practice, 2017) and BERA Ethical Guidelines for Educational Research (2011). Based on the knowledge I have gained from reading these documents, I will take the following steps to ensure that no risk is posed to the participants during this research:

I will obtain assent from the children taking part in the research and adult consent from parents or legal guardians before any research is carried out. I will ensure that each participant is made aware that they will not be treated differently if they choose not to take part in this research or withdraw before, during or after the research is carried out. I will ensure each participant is made aware that if they are feeling uncomfortable, physically or emotionally, they have the right to withdraw immediately.

I will ensure that participants will not be placed under any circumstances that are different to normal school situations. Both observers will comply with the legal requirements in relation to working with children. We will both read the schools safeguarding and health and safety policies before any research is carried out. I will ensure that the methods chosen to obtain the data required are fit for purpose to reduce the impact of intrusion and distress on the participants. No incentives will be offered to any participants to ensure pupils do not feel pressures into taking part. The focus group interviews will be carried out in an open space that the participants are familiar with. All doors will be left open and the participants will be reminded that they can leave at any time without any consequences. The questions used during the interview will not be leading. We will use open questions and allow pupils to answer honestly.

I will comply with the legal requirement of storage and use of data. All data will be saved onto a password protected computer. No portable pen drives will be used to comply with the requirements of Swansea City Council.

(this box should expand as you type)

If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities

N/A

(this box should expand as you type)			
Risks to investigator			
For example: personal safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest			
Throughout the research project I will adhere to the safeguarding policy of the schools in all aspects to ensure I do not put my personal safety or professional name at risk. I will conduct the focus group interview in an open area and keep all doors open. I will treat all participants equally in accordance with the school's safeguarding policy which I will familiarise myself with before carrying out any research. If any participant feels they are being treated unfairly by not being a part of the focus group interview, I will explain that the participants were chosen at random but they are welcome to also take part if parental/legal guardian consent has been given. As I have worked with the children before, I will stress the point to both the children and parents they have no obligation to take part in this research as it will have no impact on them what so ever if they wish not to participate. I will also make it clear that if pupils wish to take part, they will receive no preferred treatment from myself or the school. Before any research is carried out, I will make sure that I explain in detail what will occur during the research so each participant is aware of what they are involved in. All research will be conducted with another adult present.			
(this box should expand as you type)			
University/institutional risks			
For example: adverse publicity, financial loss, data protection			
I will ensure that I conduct myself professionally throughout this research project as I am aware that I am not only representing myself, I am also representing the University. I will ensure that I uphold the good name of UWTSD and do nothing to jeopardise the partnership between the University and the schools where the research will be carried out.			
(this box should expand as you type)			
Adverse outcomes			
List measures put in place to limit any adverse effects or outcomes of research activity where appropriate. Include any emergency protocols.			
I will read the schools policies on safeguarding and health and safety before any research is carried out so I am aware of what to do if anything adverse is observed. I will also familiarise myself with the school's fire safety policy and be aware of fire escapes and meeting points in the event of a fire. In the event of a child disclosing something with me, I would follow the school's safeguarding policy and report anything to the school's designated safeguarding officer.			
(this box should expand as you type)			

Disclosure and Barring Service			
If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	YES	NO	N/A
Has a DBS certificate been obtained?	X	☐	☐

SECTION I: Feedback, Consent and Confidentiality**Feedback**

What feedback will be provided to participants, how will this be done and when?

Our assignment will be shared with the Head of both schools if they request after it has been submitted and assessed by the university.

(this box should expand as you type)

Informed consent

Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded.

Before any research is carried out, informed consent will be obtained from parents or legal guardians. Each child will be given a letter to take home that explains the nature of the research and what it involves. This has to be signed by a parent or legal guardian and returned before they are allowed to take part in the research project.

Pupil assent will also be obtained before any research is carried out. I will explain to the participants in detail what the research project involves and what will be required if they are chosen as a target pupil. Following this, the pupils will be given a form that explains all of this information again which they have to sign to give their assent to taking part.

(this box should expand as you type)

Confidentiality / Anonymity

Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.

No names will be used in the write up of this research. No names will be placed on the observation schedule or focus group interview notes. Instead, pupils will be given an ID number which will be used to identify who they are. The list of ID and names will be stored on a password protected computer. No personal information will be used on any document that could make a participant identifiable. All data will be stored on a password protected computer and backed up on a password protected cloud. No portable pen drives will be used to comply with Swansea City Council guidelines.

(this box should expand as you type)

SECTION J: Data Protection and Storage

In completing this section refer to the University's Research Data Management Policy and the extensive resources on the University's Research Data Management web pages (<http://uwtsd.ac.uk/library/research-data-management/>).

	YES	NO
Does the research activity involve personal data (as defined by the Data Protection Act)? "personal data" means data which relate to a living individual who can be identified— (a) from those data, or (b) from those data and other information which is in the possession of, or is likely to come into the possession of, the data controller, and includes any expression of opinion about the individual and any indication of the intentions of the data controller or any other person in respect of the individual.	☐	X
If YES, provide a description of the data and explain why this data needs to be collected: (this box should expand as you type)		
Does it involve sensitive personal data (as defined by the Data Protection Act)? "Sensitive personal data" means personal data consisting of information as to – (a) the racial or ethnic origin of the data subject, (b) his political opinions, (c) his religious beliefs or other beliefs of a similar nature, (d) whether he is a member of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992), (e) his physical or mental health or condition, (f) his sexual life, (g) the commission or alleged commission by him of any offence, or (h) any proceedings for any offence committed or alleged to have been committed by him, the disposal of such proceedings or the sentence of any court in such proceedings.	☐	X
If YES, provide a description of the data and explain why this data needs to be collected: (this box should expand as you type)		
Will the research activity involve storing personal data on one of the following:	YES	NO
Manual files (i.e. in paper form)?	☐	X
University computers?	☐	X
Private company computers?	☐	X
Home or other personal computers?	☐	X
Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☐	X
"Cloud" storage or websites?		X
Other – specify:	☐	X
For all stored data, explain the measures in place to ensure data confidentiality, including details of password protection, encryption and anonymisation:		

No personal data will be collected during this research project.		
(this box should expand as you type)		
Will the research activity involve any of the following activities:	YES	NO
Electronic transfer of data in any form?	☒	☐
Sharing of data with others at the University?	☒	☐
Sharing of data with other organisations?	☐	☒
Export of data outside the European Union or importing of data from outside the UK?	☐	☒
Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☐	☒
Publication of data that might allow identification of individuals?	☐	☒
Use of data management system?	☐	☒
Data archiving?	☒	☐
If YES to any question, please provide full details, explaining how this will be conducted in accordance with the Data Protection Act (and/or any international equivalent):		
The audio from the focus group interview will be recorded on a recording device. This will then be transferred from the device to a password protected computer then deleted from the device. Names or personal information will not be used during the interview to ensure anonymity. I will be sharing data with my research partner throughout the project. We will not use portable pen drives to comply with Swansea City Council guidelines. We will store all data on a cloud that only myself and research partner have the password to. We will download the data from the password protected cloud to a password protected computer. Data will be archived on password protected cloud. It will not be destroyed unless otherwise told to do so by the university.		
(this box should expand as you type)		

List all who will have access to the data generated by the research activity:
(this box should expand as you type)
List who will have control of, and act as custodian(s) for, data generated by the research activity:
(this box should expand as you type)

Give details of data storage arrangements, including where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.

All data will be stored on a password protected cloud that only myself and research partner has access to. We will only download that data if we are on a password protected computer and re upload the data when we are finished using it. The data itself will be stored on a password protected word or excel file that only myself and research partner has access to.

Data will be archived on a password protected cloud. It will not be destroyed unless otherwise told to do so by the university.

(this box should expand as you type)

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:

For students:

Headeacher / Senior Mentor:	
Signature:	
Date:	

Supervisor:	
Signature:	
Date:	

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.

Appendix 5. Consent form.

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 6. Assent form.

Year 4/5,

██████ is going to be teaching a lesson to find out how he can make his lessons better in the future. ██████ will have a partner, Mr Henry, who will be in the classroom to watch how the lesson is going.

No information about you (name, age, class) or the school will be shared with anybody other than ██████ and ██████.

You do not have to participate if you do not want to.

You can drop out at any time – we won't mind!

We will ask 3 children some questions about the lesson when it has finished. The 3 children will be chosen at random.

Please write your name and circle one of the smiley faces to let us know if you are taking part:

Name: _____



I do want to take part.



I do not want to take part.

Year 4/5,

██████ is going to be teaching a lesson to find out how he can make his lessons better in the future. ██████ will have a partner, Mr Henry, who will be in the classroom to watch how the lesson is going.

No information about you (name, age, class) or the school will be shared with anybody other than ██████ and ██████.

You do not have to participate if you do not want to.

You can drop out at any time – we won't mind!

We will ask 3 children some questions about the lesson when it has finished. The 3 children will be chosen at random.

Please write your name and circle one of the smiley faces to let us know if you are taking part:

Name: _____



I do want to take part.



I do not want to take part.