



ASSIGNMENT DETAILS AND FEEDBACK

SOUTH WEST WALES CENTRE FOR TEACHER EDUCATION

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

Student name:	Joshua Seldon	Student P number:	1301023
Programme: *	PGCE Primary		
Module: *	The Enquiring Teacher	Module Level (6 or 7):*	7
Module code: *	M7X2152	Contribution to Overall Module Assessment (%): *	100%
Module Lead:*	Catherine Morgan		
Assignment Title:*	Write a critical and analytical essay that discusses your practitioner research 'lesson study' in relation to a chosen field.	Assignment No (x of x):*	1/1
Start date:*	09/01/18	Submission deadline:*	16/04/18
Return date of provisional marks & written feedback:*			

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

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

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TASK DESCRIPTION

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

This should be 6000 words in length.

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

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

GUIDANCE FOR STUDENTS IN THE COMPLETION OF TASKS

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

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

Your work must be informed and supported by scholarly material that is *relevant* to and *focused* on the task(s) set. You should provide evidence that you have accessed a wide *range* of sources, which may be academic and/or governmental; these sources may include academic journal articles, textbooks, current news articles, organisational documents, and websites. You should consider the *credibility* of your sources; academic journals are normally highly credible sources while websites require careful consideration/selection and should be used sparingly. Any sources

you use should be current and up-to-date, mostly published within the last five years or so, though seminal/important works in the field may be older. You must provide *evidence* of your research/own reading throughout your work, using in-text citations in the main body of your work and a reference list that is alphabetical at the end of your work. Please use the Harvard referencing system.

Your work must demonstrate the growing extent of your knowledge and understanding of concepts and underlying principles associated with the subject area. *Knowledge* relates to the facts, information and skills you have acquired through your learning. You demonstrate your *understanding* by interpreting the meaning of the facts and information (knowledge). This means that you need to select and include in your work the concepts, techniques, models, theories, etc. appropriate to the task(s) set. You should be able to explain the theories, concepts, etc. meaningfully to show your understanding. Your mark/grade will also depend upon the *extent* to which you demonstrate your knowledge and understanding; ideally each should be complete and detailed, with comprehensive coverage.

2. Intellectual Skills (Analysis)

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

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

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

4. Key Transferable Skills (Skills for Professional Practice)

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

MARKING CRITERIA AND STUDENT FEEDBACK

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

Common Assessment Criteria Applied	Grade awarded
1. Subject Knowledge and Understanding (which includes using research-informed literature and knowledge and understanding of the subject) Extent of research and/or own reading, selection of credible sources, application of appropriate referencing conventions. Extent of knowledge and understanding of concepts and underlying principles associated with the discipline.	
2. Intellectual Skills (Analysis) Analysis, evaluation and synthesis; logic, argument and judgement; analytical reflection; organisation of ideas and evidence	
3. Pedagogic and Professional Applications (Practical Application and Deployment) Deployment of pedagogic methods, materials, tools and techniques; application of concepts; formulation of innovative and creative solutions to solve problems. Attributes in professional practice: individual and collaborative working	
4. Key Transferable Skills Deployment of appropriate media; presentation and organisation.	

Level 7	Assessment Criteria Descriptors for Primary PGCE with QTS This format emphasizes the holistic nature of judgements to be made by markers. Equal weighting is given to each section. Plagiarism or non-submission will result in F (0%) grading.				
Assessment Criteria	Fail - grade E	Weak pass- grade D	Pass – grade C	Pass – grade B	Pass – grade A
	Poor	Weak Pass	Satisfactory	Good	Excellent
Overall judgement	Poor understanding, unsystematic, incomplete and/or inaccurate	Understanding of main issues demonstrated	Satisfactory understanding demonstrated with satisfactory analysis	Good understanding of basic principles and relevant evidence, with a coherent and logical argument	Highly thoughtful answer informed by wider reading, showing clarity of thought, personal insight and some originality
Subject Knowledge and Understanding (Conceptual)	Basic misunderstanding, misconceptions, or misinterpretations - Some superficial knowledge in places	Main concepts understood with limited evidence of critical insight	Sound understanding of concepts and critical engagement with ideas	Good understanding of key concepts; knowledge of wider implications; critical engagement	Engaged critically and systematically with the main concepts and theories: excellent engagement
(Reading)	Poor and/or inappropriate literature, lacking accuracy, unsound, limited/dated range of sources	Satisfactory range of reading overall although this may be limited in some way	Satisfactory range of reading drawn from the recommended list and other sources	Good range of relevant literature from a variety of sources beyond recommended list	Clear evidence of independent thinking informed by a selective range of reading from a variety of sources
Intellectual skills (argument)	Little sense of an argument lacks coherence. Generally descriptive or anecdotal	Argument is balanced with some differing viewpoints presented. Some questioning of assumptions	Argument presented shows satisfactory evidence of critical and analytical reflection.	Strong argument developed. Good evidence of critical and analytical reflection	A well-structured critical argument is presented with evidence of synthesis of viewpoints
(professional data collection: research design/data collection)	<i>Professional data collection is inappropriate/ flawed /not discussed</i>	<i>Professional data collection is mainly suited to purpose; beginnings of critical considerations</i>	<i>Professional data collection is suited to purpose and considered critically.</i>	<i>Professional data collection well suited to purpose, justified with clear identified focus</i>	Professional data collection logical and sophisticated; comprehensive understanding of appropriate techniques
(presentation of findings/analysis)	Findings presented with little or no framework or discussion; or discussion of findings is descriptive. Few conclusions are drawn or conclusions drawn are inappropriate.	Findings are presented with basic analysis and some limited but appropriate conclusions	Findings presented with some analysis and criticality with justified conclusions	Findings presented in a critical and analytical framework. Thoughtful conclusions, firmly based upon the evidence presented	Findings presented in a critical and analytical framework. Insightful conclusions, firmly based upon the evidence presented
(critical /reflective evaluation)	Little or no evaluation attempted; no or limited reflection	Evaluation and reflection is present but may be limited	Satisfactory critical evaluation of study; satisfactory reflection	Good critical evaluation of study; good reflection	Critically reflective evaluation of work informed by excellent reflection.
Pedagogic and Professional applications (linking theory to practice)	Little or no evidence of engagement or superficial engagement and understanding with respect to the pedagogic and professional context(s)	Some engagement and understanding with respect to the pedagogic and professional context(s)	Sound engagement and understanding with respect to the pedagogic and professional context(s)	Good evidence of integration of theory and practice with respect to the pedagogic and professional context(s)	Excellent integration of theory and practice with respect to the pedagogic and professional context(s)
(professional reflection)	No evidence of reflection	<i>Some evidence of reflection whilst beginning to make links with own practice and thinking</i>	<i>Satisfactory evidence of critical reflection whilst beginning to make links with own practice and thinking</i>	<i>Good evidence of critical reflection whilst making links with own practice and thinking</i>	Demonstrates an excellent level of understanding of critical reflection as a learning process
(working in a group)	<i>Inability to work with others or works within a group but lacks self direction or group responsibility</i>	<i>Responsibility for planning and developing courses of action; shows awareness of group responsibility</i>	<i>Initiates and occasionally leads tasks/processes for own work and where appropriate for others.</i>	<i>Chooses goals and can self-direct; able to co-operate within a group and can take the lead</i>	<i>Accepts accountability for determining and achieving personal and/or group outcomes</i>
(ethical conduct where appropriate)	Ethical issues not or superficially considered	Some awareness of ethical issues	Appropriate ethical issues raised and discussed; bias/prejudice not noted	Good, clear understanding of ethical issues; awareness of bias and prejudice	Ethical issues have been addressed effectively; bias/ prejudice discussion includes attempts to nullify this
Key/Transferable Skills (presentation)	Poor presentation of written work	Presentation of written work is weak	Satisfactory presentation of written work	Good presentation of written work	Excellent presentation of written work
(spelling, punctuation and grammar)	Significant errors in spelling, punctuation or grammar	Some errors in spelling, punctuation or grammar	Spelling, punctuation and grammar are satisfactory; few errors in written language	Spelling, grammar and punctuation are good; very few errors in written language	Excellent standard of written language. No or very minor errors in written language
(structure)	Poor structure with unclear writing style	Structure is present but may be underdeveloped, writing style is mostly coherent	Satisfactory structure with coherent writing style	Good structure with a coherent writing style	Effective structure and highly coherent writing style which fully engages the reader
(referencing techniques)	No use or limited use of protocols and conventions including Harvard referencing	Some following of protocol and conventions of Harvard referencing	Satisfactory use of Harvard referencing protocols and conventions	Good use of Harvard referencing protocols and conventions	Harvard system used accurately, consistently and effectively with all sources

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

Student Self Evaluation Form

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

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

PLEASE COMMENT ON AREAS IN WHICH YOU FEEL THAT YOU HAVE PERFORMED WELL	PLEASE COMMENT ON AREAS YOU FEEL THAT YOU NEED TO DEVELOP

Student's Name	Joshua Seldon	Date	15/4/18
Student's Signature	J. C. Seldon.		

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TET Assignment

Aim, Focus and Purpose of Research:

An issue that interested me within the classroom setting was the engagement of children throughout a lesson and how activities can impact a child's engagement. Towards the end of my first placement, my class teacher and I decided that it would be good for my development to focus on mini activities, something that we set as a target in my end of week review. My class teacher began to introduce starter activities that could challenge the children, test their previous understanding and engage the children into the lesson, an example for me to follow. We discussed what could be done over a series of lessons and I enjoyed the process, finding it fascinating. Also, in this class, the pupils on occasions would struggle to maintain concentration, therefore I believed that it would be interesting to monitor their engagement, from different times of the lesson and by using different activities. Declercq (2011) suggests that involvement and engagement are both linked to the developmental process and that a challenging learning setting favouring concentrated and intrinsically motivated activities is essential.

Research Context:

Throughout my placement there were 28 pupils in the year 3 class where we would be conducting the lesson study. According to My Local School (2017), the school that I was based in contains 428 pupils, with 9.5 percent of pupils eligible to receive Free School Meals (FSM) and is ranked green in the National School Categorisation System. The two other students in my group were based in the same school, one being placed in a year 5 class and the other in a year 6 class. Estyn (2015) state the school has just over 700 pupils, with just over 11 percent FSM and is currently ranked as good with the prospect for improvement rated as excellent. As a group we discussed our options, including areas that we personally believed to be interesting, coming to the conclusion that our research question would be as follows:

How can pupil engagement be improved through the use of interactive activities in a Key Stage 2 (KS2) classroom?

For my class this meant that we would have to provide them with a number of activities suitable for their age and learning. My class have the capacity to raise the noise level, especially when asked to move around the room, so this had to be considered when planning the lesson. Also, my class were usually sat in ability groups, which might not have been the case in the other classes. The other classes would have to ensure the lesson is suited to their ages, providing challenging activities that enhance engagement. Brooker et al (2014) suggest that the key to engagement of pupils (?) is to provide enjoyable activities, that are interesting and absorbing, something which we would have to consider during our lesson planning. Therefore, we hoped that our findings would produce data where we could analyse how engaging the activities are, allowing us to compare and contrast the different ages.

Literature Review:

It could be argued that engagement is significant throughout education. Farenga and Ness (2015) define engagement in school as active, goal directed, constructive, flexible persistent and focused interactions with their social and physical environment, showing that engaging with learning is essential for achievement and development to occur. Goss and Sonnemann (2017) reinforce the significance of pupil engagement, suggesting that when pupils are engaged in class, they learn more. To sum up, a pupil is going to be more successful if they can remain engaged in the lesson, as

opposed to a child who is not engaged. Christenson et al (2012) argue that schools and families should encourage engagement in learning from an early age. This suggests that engagement is valued as an important aspect within an educational setting and at home. According to Sluss (2018), in the early years children must learn through active engagement and during meaningful play, suggesting that children must be participants in play and activities from an early age, so that cognitive development can occur. Golbeck (2001) supports this interpretation, claiming that without sustained, effortful engagement, children will not learn. Goble et al (2017) state that through engagement, children can improve academic skills and increase social interaction, which will enhance personal development. Therefore, it is acceptable to believe that engagement has an important role in a child's development.

When engaging pupils in the classroom environment it is important to consider the strategies that should be used and the benefits they will provide. Hattie (2012) found that when an instruction was challenging, relevant and academically demanding, all the pupils had higher engagement. Consequently, the children will be more engaged the more they are challenged in the classroom, because if the work is too simple for the pupils, it will be easier for them to lose their focus. In addition, Skiba et al (2016) argue that effective classroom settings offer the pupils numerous opportunities to respond to the instructions set and the curriculum itself. This implies that it is essential there can should be teacher and pupil interactions in class and that the children are working with the curriculum regularly. OECD (2010) suggest that motivation and encouraging engagement can be regarded as important outcomes, because they can affect pupil's quality of life, helping them with their further education. Furthermore, for encouragement and motivation to occur, a practitioner must have a positive attitude to education, ensuring that the subject being taught is appealing to the pupils, so that this attitude can transfer to the children. Zmuda and Jackson (2015) recommend one simple strategy to engage pupils from the start of the session is to provide a statement of the learning objective and allow the children to have the freedom to rephrase it into their own words. This links with the research question and one of the strategies this study has identified as a rewarding engagement tool, that being the use of an efficient introduction.

As previously mentioned, the research question identifies that interactive activities have the potential to improve engagement. This includes using introductions, hooks and activities within the lesson, mini plenaries and a plenary. Donaldson (2015) proposes that good teaching and learning can be done through employing a blend of approaches, such as direct teaching, with a meaningful introduction creating a chance for engagement to occur in the lesson. Engagement from the offset of the lesson can give the children an understanding of the task, with the teacher modelling or scaffolding work, giving the children a basis to follow. This is supported by Beard (2014) claiming that if the first 10 or 15 minutes of the lesson gets off to a bad start, then only an outstanding teacher will be able to regain control and produce a good lesson. In addition, Confer et al (2012) state that an introduction should not just be teacher talk, but include real pupil engagement as well as deep thinking.

Interactive activities throughout the lesson can also encourage engagement. Dunn (2017) supports the idea that fun interactive activities and exercises can break the cycle of sitting, listening and writing. Therefore, children need to be offered these enjoyable experiences, which are different to the norm, making them want to participate in their learning, enhancing engagement and development. In the Foundation Phase Framework (Welsh Assembly Government, 2015) it states that children should be able to explore indoor and outdoor environments that are fun and stimulating, helping them learn through first hand experiences. This implies that the curriculum

intends to provide early years children with exciting, memorable experiences and by doing so will promote engagement in these entertaining activities.

To conclude, evidence exists that shows that engagement during a lesson can have a significant impact on pupil's achievement. In the course of this study, engagement will be analysed and evaluated, in an attempt to understand the impact it has on children's learning. Hopefully this research study will be able to present data that shows activities that are different and enjoyable that will help enhance a child's development.

Explanation of Lesson Study Design:

The methodology of this study is a lesson study research method. The purpose of this paper is to explore how we, as trainee practitioners, can improve our teaching and enhance children's engagement, through using the lesson study research model. According to Vrikki et al (2017) the lesson study is a model of Peter Dudley that is now employed in many countries around the world. Dudley (2013) describes this method as an efficient technique where a group of practitioners can communicate, evaluate and observe each other, enhancing teaching performance.

As we were a group of three trainee teachers we came to the agreement that it would be most suitable for this study to perform the same lesson three times, although we would make adjustments when necessary, to improve the lesson or to suit our pupils. We agreed that it would be relatively easier to do a growth mind set lesson (shown in appendices 2), rather than a core subject, because it could be taught across the different year groups and learning could still occur. The lesson design included a starter activity where we could track the participant's engagement from the beginning of the lesson. After this starter task the children would watch a video explaining what growth mind set is, which was then followed by a carousel of four activities. Our plenary was to show the class each other's work or several examples and then possibly use a growth mind set jar, so that they could share their thoughts on what growth mind set meant to them. O'Leary (2016) suggests that pupil engagement can be observed and heard throughout the lesson. Therefore, we decided that in order to gain reliable data, with enough information to evaluate, we would have to monitor the engagement during the whole lesson. The range of activities would allow us to specifically monitor engagement, although we would look to identify a trend of engagement, throughout the whole lesson period. We monitored engagement in this study basing our model on Laevers' (1994) development known as Leuven's scale of involvement. Woods (2016) says the scales supports the observer in identifying higher or lower levels of involvement in our study of engagement within a variety of observation experiences. Our observations of the target children would be evaluated through this method, ranking them from one to five, one being low activity and five being sustained intense activity. Through using this method each child could be specifically evaluated and given a score. With there being three in our group, it meant that we could compare our findings as non-participants, ensuring that our data is reliable.

The methods that we used to collect the data were observational notes, a focus group interview and audio taping. Palaiologou (2016) states that the most common technique of observation is a written or narrative form, where behaviours and events can be analysed, which was ideal for our non-participant observers. This method is arguably the most commonly used due to its simple nature, making it easy for me and the team to select this method. The focus group interview would provide us with an excellent opportunity to discuss the results with the participants and hear their perspective on the lesson. Vygotsky (1978) reinforces the significance of feedback in education as crucial for encouraging and consolidating learning. Therefore, in this study we as practitioners had to use the focus group interview for our development, just as we would give feedback to children in a

classroom setting. We would perform a focus group interview after each lesson with three children selected from each class. We agreed that we would choose these children based on their ability, one from a higher ability, a middle ability and a lower ability. This was to ensure we received a variety of responses, which gave us a more reliable study, with each child contributing and giving a perspective from different abilities. This means of participant selection is known as purposive sampling and is a non-probability sampling method. Saito et al (2014) claim that the children must be regarded as the main characters in this scenario and what they say, even if it is not what you want to hear, must be recorded. This implies that we must use the data that would be presented to us and allow the children to present their ideas to us without influencing their decisions and answers. The final method of recording the data was to be audio taping. This was to be used during the focus interview, so that we would create a more relaxing environment, without the researchers making notes during the discussion with the participants.

The data in this study that was gathered, using this methodology would be qualitative data, which is subjectively rich written detail. It could be argued that the best technique for collecting this style of data is the focus group interview. However even though this method might be successful it is possible that there are limitations. Hennink (2014) supports this, suggesting that some individuals may not wish to share their opinions in a group setting, meaning they would be best suited to a one to one interview. Carey and Asbury (2016) recommend that the timing of the focus group interview can have an influence on the results, an example being if the interview is held during playtime or lunchtime, then the children may not be as focused on the topic. Even though there are evident disadvantages of using this method it was important as researchers we analysed these potentially negative aspects and do what we could to prevent them from affecting our research. Therefore, we could select our target children in the focus group interview who are usually confident in a group discussion, as well as undertaking the interview during lesson time, so there are no clashes with their free time. Fortunately, Stewart and Shamdasani (2014) suggest that there are many advantages of using the focus group interview technique in research, such as providing quick data, direct interaction between the researcher and participants, the responses provide a rich amount of data and participants can react and build on each other's responses. We believed that this method would be successful enough for the purpose of this study. We devised a set of questions to provoke responses to help us with our lessons and research.

The reflections of our observations were to be captured using a table that we would design. This would allow us to analyse each child and level them on the Leuven scale. It was agreed that each focus child would be levelled on their engagement/involvement during each activity. This would give us specific data about each exercise we had in place for the children, allowing us to identify what alterations we would need to make and which activities are successful. An overall judgement would be made on the whole class engagement.

Ethical Considerations:

In the scope of this assignment it was important to consider the ethical guidelines that would have to be followed. Wilson (2017) claims that there are a number of specific issues that need to be considered when conducting research with children and during the planning of a study. Initially, an ethics form had to be completed (shown in appendices 1), and by doing so it indicates that ethics has been investigated. During this process we had to read through the British Educational Research Association (BERA, 2011) guidelines, the University Guidelines research ethics code of practice (2017) and the Educational Workforce Council Code of Practice (2017). These guidelines would provide relevant information about ethical considerations and it could be argued that without this knowledge, the lesson study cannot be credible. Throughout the ethics form it had to be highlighted

what we were doing and why we were doing it, the information of participants had to be provided and any potential risks had to be contemplated. Confidentiality was also discussed, something which Bell (2010) supports, underlining the significance of maintaining autonomy because it can result in serious misunderstandings between researchers and participants. Once the ethics form had been concluded it had to be sent off, evaluated and if necessary changes would have to be made in order for it to be accepted. In some cases, there might not have been any issues, leading us onto the next steps of ethical considerations.

Before the lesson study it was essential that each class received a consent form, which is where parents and guardians are made aware of the research and allow their children to participate. Once the consent forms were returned then the next requirement was for assent to be obtained. Cohen and Lynch (2014) define assent as a child's agreement to participate, therefore we had to provide an explanatory statement indicating that the pupils could refuse to take part in the study. Their feedback would be provided through the use of a "thumbs up" approach, as the children are used to this Assessment for Learning (AfL) strategy.

Lesson Study 1:

The first lesson study took place within the year 5 classroom. Our goal was to monitor engagement throughout the lesson and assess whether or not the activities that had been chosen would enhance or reduce engagement. In addition, we would observe engagement at the beginning, middle and end of the lesson, with the focus on our target children. The first lesson would include a starter activity with the hopeful outcome of this task being for the children to fail, as they were only given two minutes with a set of difficult instructions, so that they could understand how to react to failure. Once this exercise was completed the children would watch a video to assess understanding. Griffith and Burns (2012) agreed that challenging children can enable them to achieve their full potential, with many children enjoying the competition, indicating it can be successful to challenge children from the beginning of the lesson. Once this exercise was completed the children would watch a video to assess understanding. After the video the children would participate in a variety of carousel activities, where they are required to work independently or as a group, with the core theme being growth mind set. Thomas and Lewys (2016) recommend that the carousel approach, when implemented with a variety of activities, each one with a purpose, can then be classified as best practice. Finally, the class would carry out a written activity based on what they have learned throughout the session.

When considering the engagement of the three focus children during the starter activity within this lesson study it could be argued that we found the children were all highly engaged. Child 1 appeared to be excited at the prospect of taking part in the activity. As a non-participant observer this was encouraging, because the child was immediately interested in the lesson. Gordon and Brown (2016) confirm that good lessons will provide children with enjoyment, leading them to develop an appreciation of their learning experiences and the subject that is being taught. Child 2 did not approach the activity with the same enthusiasm as Child 1, although this child completed the activity, something that as researchers we had hoped not to happen. Once this child had finished the task, they began to assist other pupils in task. As explained by Harris and Meltzer (2015) peer mentoring can strengthen metacognition and cognitive development, however in this situation it could be argued that there was no need for Child 2 to work with other children on their table. This means that even though Child 2 was engaged, had completed the work and was peer mentoring, they were not following the instructions at the time which were to be patient and allow the timer to run out. Child 3 began the task and then requested to start again. This implies that this child was motivated to complete the task, implying that this child is highly engaged.

During the video activity we did not assess the children's engagement in our reflections, although it is worth mentioning that all three children were highly engaged at this time. Palmer (2014) supports the use of videos in the classroom, because videos can help children develop their listening skills, implying that engagement is occurring. Each carousel activity provided the non – participants the opportunity to assess engagement, with each station using a variety of learning styles. This was where we could evaluate if the focus children were more engaged working alone or within a group setting.

The activity known as "all about me" (shown in appendices 5) presented the children with an opportunity to identify their strengths and weaknesses. Therefore, this activity would be personal to the participants, meaning it would be interesting to observe the children, in order to see who can show confidence in their own ability. According to Medwell (2015) target setting can be a useful tool for personal development and setting these objectives can be enjoyable. Child 1 appeared to enjoy this task, working independently and providing answers for each section. This implies that Child 1 enjoyed taking responsibility for their work, by setting themselves goals and revealing their positive characteristics. Child 2 and 3 both performed well in the written tasks, completing their work to a good standard, although Child 2 was often disengaged talking to other children and behaving quite disruptively. The other written activity required the children to write "top tips" (shown in appendices 6) for a child younger than themselves, advising them how to have a growth mind set. It appeared the trend in this class was that the children were more engaged during the individual activities rather than the group work stations. As explained by Maclean (2017) group work skills have to be developed, as they help children trust and respect each other, communicate effectively through speaking and listening, as well as explaining and sharing ideas. This shows that group work can be a powerful method to use in the classroom, if done properly, however the children in this class showed how easy it can turn into a counterproductive activity.

Through the use of the Leuven involvement scale, it was clear that the most popular activity that encouraged engagement was the origami exercise. This was again clear when the children ranked the activities, with all the focus children claiming that this exercise was the most enjoyable. Based on the findings of Hudson (2013) it could be said that challenging activities in education provide enjoyable experiences. As a result of the children participating in an activity where they were supposed to fail, the children were faced with a challenging task to conquer, therefore it could be argued that due to this challenge the children enjoyed the experience the most.

When analysing how the lesson went it was apparent that there would need to be some amendments made for the next lesson to improve. Firstly, it was decided that we would change the timings of the activities, making each one shorter by a minute. The non-participant observers noticed that the children were finishing certain tasks with time to spare. Cremin and Burnett (2018) suggest that during the planning of a lesson you must consider the timings for each activity. Fortunately, in the scope of this assignment, we were able to make these corrections. For the brain sorting activity, due to the class finishing it quickly, we would add an extension task where the children are questioned about scenarios. The scenario activity would now have post it notes for the children instead of writing on the sheet, so it can be recycled. In addition, children's work would be modelled to the class to help with visualising a successful example. Finally, we had to shorten the lesson because the children were going out for an assembly.

Lesson Study 2:

The following lesson study took place within a year 6 classroom. It could be argued that this lesson study was successful in terms of engagement when monitoring the target children. From the start of

the lesson the children appeared to be highly engaged, and during the origami exercise all the children had involvement ratings of either 4 or 5. Male (2012) demonstrates that memorable activities lead to more memorable learning. Therefore, it is justified to say that this activity was a successful one when considering engagement. This is supported by the focus group interview results, as the participants all enjoyed the task, and two children stated it was their favourite task. However only Child 1 completed the task, so again it served its purpose, challenging the children to the point of failure. In terms of a whole class perspective, these children were far more cooperative than the previous class. Children were observed sitting waiting for instruction, there were times where no children were fidgeting with items on their desks and there was, on times, silence among the groups with individual work. This class appeared to be used to routines, which Delaney (2016) explains is when the children begin to do things automatically and it makes teaching simpler because it reduces the number of decisions that a teacher has to make. The advantages of using routines were obvious when observing these children and their behaviour.

Through the observation notes (shown in appendices 4), it could be argued that the children were on average engaged with the lesson. There was no disruptive behaviour from the participants and only Child 3 had an engagement level lower than 4 on an activity. Even though Child 3 was discussing with their peers there were still signs of engagement and this child still produced successful pieces of work, showing a good understanding of the topic. Johnston et al (2007) confirm that children may sometimes be off-task during group work, although recognising this is natural and can occur when adults are participating in a group task. Therefore, without jumping to conclusions, it is important to remember that the children may appear off-task and discussing other topics but the chances are they are still active participants in the activity. Child 1 appeared to be highly engaged with all of the activities. Therefore, it could be argued that this child was learning and thinking throughout the lesson, supported by the findings of Goss and Sonnemann (2017) mentioned in the literature review. As well as being engaged in their own work, Child 1 assisted others during the lesson. It was evident that this Child worked at a high ability, although it was pleasing to see that Child 1 produced positive and engaging interactions with peers, unlike Child 3 who often displayed negative interactions with other pupils. Child 2 was regularly mentioned to be on task, although they had the tendency to interact with their peers. This was evident in the individual work, but other than that this child was highly engaged.

In preparation for the final lesson study we needed to consider what would have to be changed. The first thought to be considered was the difference in participants. For the final lesson study, the children were year 3 students, whereas the previous two lesson studies were high Key Stage 2 pupils. As a team, we believed it would be more beneficial to the year 3 class if we changed the video explaining growth mind set, because personally I felt and the team agreed that my class would struggle with the understanding. Therefore, we found a simpler video with a similar theme to what the children were already used to. Grigg (2014) recommends that you teachers must focus on your intended audience, ensuring the message is direct and engaging, and this research supported our reasoning for changing this aspect of the lesson. Another area we intended to change was the timings for each activity. Due to these children being the youngest, it was probable that they would need more time interacting with the exercises. So instead of going through the lesson at a high tempo, like lesson study 2, we would spend more time on the activities and more time explaining our instructions. Our final alteration for the last lesson study was changing the main written task from a letter to "top tips". This would allow the children to record their ideas, without the hassle of styling a letter, something which the majority would struggle with. From this lesson study we learnt that the fast-paced nature of the lesson helped maintain pupil engagement in each task. Even

though the timings would be changed in the next study, it will be important to consider during the lesson if the children do not need the extra timings, increasing the pace if necessary.

Lesson Study 3:

Upon discussion with the team, there was evidence to suggest that Child 1 was highly engaged during the majority of activities. Child 1 worked well in a group scenario, the “brain sorting activity”, as well as an independent task “all about me”. However, Child 1 did appear to lose focus in both styles of activities in some cases, implying that this child struggles to maintain engagement throughout the lesson. Wiseman and Hunt (2013) indicate that focusing the children’s attention must begin at the beginning of the lesson and be maintained throughout. However, Child 1 did show signs of high engagement, therefore there might be a lack of attention span from Child 1. Child 2 appears to be highly engaged with nearly all the tasks. However, during the “scenarios” exercise, this child is observed to be allowing others to take a lead role, appearing to be less engaged. This could be due to lack of interest for this particular activity, or perhaps Child 2 has been working thoroughly during each exercise and wanted to have a break. Child 3 was observed to be more engaged with the independent activities, rather than the group work, although still displaying a good level of involvement as a whole.

The participants in this lesson study and the class in general were observed to be fussy between activities. Having previously taught this class, my understanding was that there would be high levels of fussiness and possibly noise, especially during the interchanges of activities in the carousel fashion. On more than one occasion, I had to remind the whole class that their noise levels were inappropriate during the movements between activities. Reid and Morgan (2012) suggest that younger children tend to make positive behaviour choices, although have the capacity to be fussy, which was evident throughout this lesson study. From a whole class perspective, the children were engaged with the final written activity “top tips”. They transferred what they had learnt throughout the lesson into the activity, which was pleasing to see as a practitioner.

If this lesson study was to take place in the future, there would be a strong case for it to remain similar to how it was operated during the whole research project. The hook activity provided the pupils with an opportunity of engagement from the outset of the lesson. According to Middleton and Perks (2014) the hook can be used to gain immediate attention, serving as an introduction that can be referred to throughout the lesson, which was the case during these lesson studies. It could be argued that you could edit the activities, although there should be several examples of group work and individual work. In future the methods used to collect the data could be changed. Even though our data collection was efficient, there might be other solutions that are more efficient. An example of this could be filming the lesson instead of making notes, meaning there is a reliable source of data collection.

Discussion of research findings in relation to related literature and research:

It could be argued that a trend that has been displayed, throughout the lesson studies, was that the children were more engaged when working individually rather than working in a group. This is evident (in appendices 3, 4, 7, 8 and 9) because the “brain sorting” and “mind map” activities are both group tasks and the children in this class have a lower involvement level in these stations than the others. Cote et al (2017) argue that working in a group as a developing child can be a positive intervention for enhancing social skills and cognitive development. However, it could be argued that the relationship between engagement level during an individual activity and a group activity depends on the participant. Some children might be more suited to a certain task, something

Hughes (2013) discusses, stating you may find that some children prefer group work with an adult present, or a more independent task. During the lesson studies it could be argued that the higher the participants academic ability, the more likely it is that participants are going to be engaged. However, this was not always the case, as shown in Lesson Study 1, where a more able and talented child was often disengaged with the activities. Kerry (2015) suggests that children of high ability regularly underperform, meaning that they underachieve. However, in order for these pupils to achieve in future, the activities that are planned need to be of interest to the children. Briggs and Hansen (2012) recommend that you need to plan around children's skills, interests and knowledge to maximise engagement.

From my class' perspective, the evidence suggests that each individual has different preferences. None of the children displayed the exact same results on the involvement scale across the evaluation of all the activities. This implies how significant differentiation can exist in any education setting. Tomlinson (2014) highlights the importance of selecting materials that can be used and understood, that challenge children, to ensure engagement is occurring with the activity. Furthermore, my class were not accustomed to using the carousel method on a frequent basis. This meant that they were more likely to be excited by the prospect of doing something different. With this enthusiasm comes noise levels and fussiness, therefore in future this class needs regular exposure to the carousel learning method. Additionally, the children will need to practice the routine of carouselling, so that negative interventions are not needed from the teacher.

There were a number of strengths of the methods we have used during this lesson study. Firstly, the way in which we recorded the data provided us with enough evidence to discuss our findings as a group and form a conclusion on how interactive activities can affect engagement in a Key Stage 2 classroom. However, there are limitations with using the transcript method of collecting data. Shipman (2014) points out that note making in research can only cover a few incidents, therefore valuable evidence could be missed. It is debatable that another strength of our research was that we were a group of three. This enabled us to collect more data and it was helpful when discussing our findings corporately. However, this can also be a limitation, because there might be such a volume of data that the significant findings can be missed. The strengths of using a focus group interview in a research project are described by Stewart and Shamdasani (2014) claiming that the use of focus group interviews can produce powerful insights from a participant's perspective. Limitations of these methods must be considered before use and attempted to be reduced. With the focus group interviews we carefully selected our participants, hoping they would be able to provide us with enough evidence for our research.

Conclusions:

From the data collected in the three lesson studies it could be argued that pupil's engagement can be improved through the use of interactive activities. As shown in appendices () the focus group interviews suggest that the activities were enjoyable for the participants. Even though the participants expressed some opinions that may state otherwise, the general consensus was that the children enjoyed the activities, implying that they were engaged with them. When observing the levels of involvement (shown in appendices 3 and 4), the participants all displayed levels of engagement, with all children at least showing one example of a level 4 involvement. This supports what has been previously discussed, the idea that different individuals have different preferences.

Our findings, in relation to the research question, suggest that an interactive introduction is essential when discussing engagement. Harlen and Qualter (2015) describe the teacher as the energiser at the beginning of the lesson, capturing the attention of the children, creating hooks to

engage the children's interest and get them motivated for the lesson. Our example of a hook, the origami exercise, was praised throughout the focus group interviews and the focus children and whole class observations appeared to be intensely engaged with task. To sum up, this research data indicates that a powerful starter activity or hook can improve pupil engagement in a Key Stage 2 classroom. This links with another engagement influence, described by Richardson and Karabenick (2014) suggesting the teacher's role is to construct enthusiasm, expressing positive emotions, which will enhance engagement in lessons. As a result, interactive activities may improve engagement in lessons although other influences could have a larger impact on pupil engagement, something that can be considered in future research.

In my next school experience, I will consider how effective interactive activities can be in a Key Stage 2 classroom. Furthermore, interactive activities can happen throughout the lesson, not just the beginning with a hook, and be just as effective when engaging learners. Savage (2014) supports this interpretation, suggesting that a teacher, during the planning of a lesson, should consider a selection of engaging activities from a variety of quality resources. As a result of this research study, another element of learning that I will build into my next school placement is observing children. According to Bruce et al (2014) observations help the observer learn about the children and inform their understanding of each individual. This will be beneficial when getting to know the children, as well as keeping a regular written record on each child, helpful when monitoring and assessing children over a period of time. A final thought when heading into the next school experience, which can be taken from this study, is the importance of a child's perspective. Estyn (2016) found that pupil voice benefits pupils and schools, indicating that it is good practice to involve children with their school and education, by allowing them to express opinions and feelings. All of these considerations will help me develop into the best teacher I can possibly be.

Recommendations:

If I were to participate in this lesson study again I would suggest that the method of data collection be changed. I do not disagree with the narrative approach or event scribing, although I strongly believe that a video would be the most efficient way of collecting data. It is more probable that something will be missed when collecting the data when using the written notes form of data collection. Another suggestion that I would recommend is to keep the participants the same age. This provides the researchers the opportunity to be more specific in their evaluations of children of a certain age. During this research we encountered a problem where the younger children might not have understood certain content. With the focus on one year group this issue should not occur. Unfortunately, in the scope of this study, we were only allocated a specific amount of time to conduct this research, over three lessons in our case. A recommendation would be to conduct this research over a further period of time. A final suggestion is that this study only considers engagement in one topic. Therefore, it would be interesting to analyse how interactive activities can effect engagement throughout the curriculum.

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Appendices:

Ethics form (1)

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:	Joshua Seldon		
Tick all boxes which apply:			
Member of staff:	☐	Student:	☒
Honorary research fellow:	☐		
Faculty/School/Centre:	Yr Athrofa		
Campus:	TownHill		
E-mail address:	1301023@student.uwtsd.ac.uk		
Contact Telephone Number:	07377627328		
For students:			
Student Number:	1301023	Undergraduate	☐
Programme of Study:	Primary PGCE	Taught Postgraduate	☒
Director of Studies/Supervisor:	Dr Ceri Lewis	Research	☐

SECTION B: Approval for Research Activity

Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)	YES	☒	NO	☐
				Date
If Yes, please indicate source of approval (and date where known):	Research Degrees Committee	☐		
	Faculty Research Committee	☐		
	Other Dr Ceri Lewis	☒	28/2/18	

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)	☒
University Guidelines research ethics code of practice (2017)	☒
Educational Workforce Council Code of Practice (2017)	☒

SECTION D: External Collaborative Research Activity

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

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

Does this organisation have its own ethics approval system?	YES	☐	NO	☒
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 children's engagement through the use of interactive activities in a KS2 classroom?		
Proposed start date:	March 2018	Proposed end date:	April 2018
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)			
For this research study we have decided to examine how effective an engaging introduction can motivate pupils, making them enthusiastic about their learning. Personally, I am excited about this topic, and hopefully from a practitioner's perspective I can look to motivate and engage in their learning through providing interesting and engaging activities during the introduction. I am certain that this research study will help aid my development as a practitioner because it may indicate the significance of pupil engagement and hopefully find solutions to help children learn more effectively. Donaldson (2015) suggests in the new curriculum that engagement is one of the key principles where practitioners should encourage enjoyment from learning and satisfaction from the subject topic. Therefore it will be beneficial to conduct this study to comply with the new curriculum and enhance my educational development. This project will be consistent the guidelines of BERA (2011).			
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)			
This research study aims to assess pupil engagement after participating in an engaging interactive activity, mainly aimed at the starter task, as well as mini plenaries. Along with my colleagues, two other students, we will use the lesson study process, with each student planning and teaching a lesson in our respective classes. Dudley (2014) explains that a lesson study is conducted by a group of teachers, who work together during their planning and teaching, observing and evaluating their lessons, as this helps enhance teaching standards. After each lesson taught, as a group we will analyse our findings, identifying any concerns that are evident, using the information to adapt and improve the lesson for when the next student teaches. The lesson will be taught three times, with one member of the group teaching whilst the other two are observing, collecting the research data. Within this study we will be using a variety of research methods to collect data for research such as the following:			

Interviews – a group of pupils from the different KS2 classes will be involved in a semi-structured interview where they will be asked some key questions and their responses will be recorded. Examples of these sort of questions are what do you like about history? Do you like history and why? Do you think school trips allow you to learn about history? It is essential that the children will be in an informal setting and that their responses are recorded in notes. The children will not be forced to answer the questions and be involved with the interview. All children will be asked if they wish to take part in the study. If the children wish to leave the interview at any point then they can simply tick the thumbs up or thumbs down participation sheet. I will ensure that there are continuous checks on the children's feelings. There will be no names used during the writing section to comply with confidentiality.

Observations/Notes – I will be making observations of different groups undertaking lessons with their student teacher. These will be made alongside another student, as we are working as a group of 3. Within the lessons we will be observing how the use of interactive activities, such as 'hooks' and 'mini plenaries/pit stops', motivate and engage learners to improve their learning during the session. The observations will be recorded in a notebook form. Confidentiality will not be breached during these observations and the BERA (2011) and UWTSD Ethics Code of Practice Guidelines will be followed.

Video/Audio Taping – I will record sections of the three lessons if necessary in order to obtain a full understanding for the research. I will record the group interviews, to keep the flow of the conversation, rather than making notes after each question. Therefore this will create a more informal atmosphere for the participants, hopefully making them feel comfortable and not under any distress. If any of the children refuse to be in the video/audios then we will make notes in this instance. I will ask permission from all the participants for recording before doing so.

Location of research activity Identify all locations where research activity will take place.
The research study will take place in two different schools both in Key Stage 2 settings, one being a year 3 class with 28 children, whilst the year 5 and year 6 classes. One school is a large, village school in the Vale of Glamorgan, whilst the other is a large, urban school, also in the Vale of Glamorgan.
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.
NA.

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	☐	☒

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

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?

There are 28 children in 1 class and 30 in the other 2 classes. Then 3 children from each class will be chosen based on their ability and from a mixture of genders. This means that there will be 1 low ability, 1 middle ability and 1 higher ability. In total there will be 9 children who are interviewed as a focus group.

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			
N/A.			

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			

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

For this research study the safeguarding process of both schools and the university will be acknowledged and considered during the planning of the lesson and lesson study. The reason for this is to ensure that no child suffers from emotional or physical harm and that there will be no transfer of their personal data or sensitive information. Therefore consent will be needed to conduct the study and confidentiality will be evident throughout the process. It should be noted that no child will be treated differently if they decide that they do not want to take part during the process. All pupils will be treated equally in this lesson study. These risks will be managed according to the Education Workforce Council (2017) guidelines, which state registrants are committed to providing equal opportunities for all learners, regardless of their gender, age, sexual orientation, disability, additional learning needs, race, religion or belief.

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.

Risks to investigator

For example: personal safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest

The risk to the investigator is that I could be accused of unprofessional practice. Therefore I will manage the potential risk by following the BERA guidelines. This means that during the observation I will ensure that I or my colleagues are not alone with participants and the interviews will be in an open area.

University/institutional risks

For example: adverse publicity, financial loss, data protection

I will act in accordance with the ethical, legal and professional frameworks, obligations and standards as required by the statutory and regulatory authorities, as well as with the university's research integrity and ethics code of practice. This will ensure that the good name of the university to be upheld, maintaining the partnerships between the schools and university.

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 manage the potential risk by following the BERA guidelines, the schools and universities safeguarding policies and my plan of ethical practice. I will always ensure that I am adhering with ethical, legal and professional frameworks, obligations and standards as required by the statutory and regulatory authorities, as well as with the university's research. I am aware of the schools safeguarding and health protocols if there was an emergency to occur. For example I know how to school would react to a fire drill.

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?	☒	☐	☐

SECTION I: Feedback, Consent and Confidentiality

Feedback What feedback will be provided to participants, how will this be done and when? Completed essay will be shared with the school head teacher on request. Feedback will be an ongoing process.
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. An Athrofa explanatory letter will be used to request parental consent. Ongoing assent will be reinforced, such as focus pupils will understand their rights. If the refuse to participate that is fine, children can withdraw during the interview and do not have to answer the questions.
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. I will ensure that there are no names included, whether it be the schools, children or teachers. The UWTSD Research Ethics Code of Practice, section 17.6, suggests the significance of confidentiality and anonymity.

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.	☐	☒
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.	☐	☒
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)?	☐	☒
University computers?	☐	☒
Private company computers?	☐	☒
Home or other personal computers?	☐	☒
Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☐	☒
"Cloud" storage or websites?	☐	☒
Other – specify:	☐	☒
For all stored data, explain the measures in place to ensure data confidentiality, including details of password protection, encryption and anonymisation: The information will be stored on a USB stick, which will be password protected to ensure that information is kept safe. Any data used will be archived when the assignment is completed.		

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):		
Data will be archived on the completion of this assignment. I will use password protected memory stick.		

List all who will have access to the data generated by the research activity:
I will be responsible for the data along with my partners.
List who will have control of, and act as custodian(s) for, data generated by the research activity:
I will be responsible for the data.
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.
Data will be archived on the completion of this assignment. I will use password protected memory stick.

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:

Teacher / 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.

RESEARCH STUDENTS AND STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name.

You will be informed of the outcome of your claim by email; therefore it is important that you check your University and personal email accounts regularly.

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

This form is available electronically from the Academic Office web pages:

<http://www.uwtsd.ac.uk/academic-office/>

Application Process

All staff research projects and all research students must submit the Ethical Approval Form to the **University Ethics Committee** via the Academic Office (pgresearch@uwtsd.ac.uk). Staff research directly in relation to personal study for taught undergraduate or Masters programmes should be submitted via the Faculty procedures explained below.

Taught masters and taught undergraduate research Ethical Approval Forms are considered **within Faculties**. Faculties will provide details of the specific processes for this. Where the Ethical issues within any single ethical application are of particular concern the Faculty will refer these to the University Ethics Committee. Any student activity that involves the collection of primary data needs to undergo Ethical approval, this includes assignment work as well as dissertations.

Notes for guidance in completion of this form

Section A: About You

Please complete all relevant sections

Section B: Approval for research activity

Research proposals must be approved in principle before applying for Ethical Approval. The proposal approval only becomes final when the ethical approval is received.

The process for proposal approval varies according to the individual and programme of study:

- Research students, by application on form PG1 to the Research Degrees Committee
- Taught students by review of research proposal within Faculties (Faculties provide specific details of these processes)
- Staff, by agreement by the Head of School/Assistant Dean

Section C: External Ethical Guidance materials

Many discipline areas are required to operate with the discipline specific codes of research ethics (for example health, psychology, education etc.), any such codes must be listed and you must tick to confirm that you have consulted with these.

Section D: External Collaborative Research Activity

Provide details of the external collaborative partners, where appropriate you might want to submit a copy of the external collaboration agreement with the Ethical Approval Form. If the partner requires the research to be subject to its own internal Ethical approval process then please provide details of that process and a copy of any final (or interim) approvals received from the organisation.

Section E: Details of Research Activity

Remember that the individuals reviewing this Ethical Approval Form may not have seen your research proposal, and also may not be experts in the specific area of your research. The information provided should therefore be jargon free and clearly stated.

Indicative Title: please use the same title as used on the research proposal.

Purpose: the Ethical approval process will want to ensure that the methods you propose are adequate and appropriate to address the research aims and objectives. Excessive additional data collection can be seen as unethical.

Proposed Methods: the Ethical approval process seeks to ensure that you understand the methods that are intended, and that the implementation of those methods will be appropriate and without unnecessary impact on respondents. Please be specific.

Location: this needs to mention geographical location and also local situation (for example, within Local Authority Offices in Cardiff, using a private room but close to other individuals). If you are

collecting data within an organisational setting then you need to explain the permissions that you have obtained to do this.

Research Activity outside of the UK: please complete this section in detail, and note any guidance you have received. Also describe your own familiarity (or not) with the location that you will be utilising.

Section F: Scope of Research Activity

Please tick ALL of the research activities that might be undertaken. If any additional types of activity are intended then please add an extra box and describe these.

If you have answered no to all questions in F then sections G and J do not need to be completed. Section H should be considered, and may be completed. Signatures are still required in section K.

Section G: Intended Participants

Please tick all categories that might apply.

Numbers & Source: if you are using a series of different methods or research activities please list numbers for each stage/phase. Be clear about how you will find respondents. Will you use intermediaries, and if so how? How will you ensure compliance with your sampling strategy?

Information for participants: all participants should be appropriately informed about the research, what is expected of them and what will happen to the information that they provide. The Ethical review process does not ask to see this documentation, but requires this to be reviewed and approved by the Director of Studies in the case of research students, the supervisor/module tutor in relation to students on taught programmes and the Head of School/Assistant Dean in relation to staff research.

Section H: Anticipate Risks

All research carries some level of risk. The answers you provide to questions in this section will be reviewed to ensure that you have an appropriate understanding of the type of risks involved and how you can mitigate against these risks. If you have completed a full risk assessment, as required for example for laboratory work, field work, clinical tests, diving operations, or by a collaborative partner, you may append that to this form. In that case, please tick the box indicating this has been provided. You will not then be required to complete Section H.

Risk to participants Think very carefully about how your actions/questions/discussions might affect the people you are involving as participants. You might identify the risk as small but it would still be a risk. Many types of question have the potential to make respondents less content with their life / job; you need to recognise and try to ameliorate any such effects

If these are business owners, time with you may reduce profit.

In some locations physical risk is very real to both participants and yourself, please consider this.

Risk to you, the researcher Think about where you will meet people, if there are any dangers involved in the location. If you are meeting people as individuals think about using a public place. In general do not visit people in their own homes or remote locations. If you are talking to individuals about certain issues think about how their responses might affect you emotionally. What about the risk of collecting insufficient data?

Risk to the University When undertaking your research, you are acting as a member of the University (student or staff). Professionalism is important, so it is important to be well organised and well prepared. Punctuality, clarity etc. are all part of this. What will you do to ensure this? You must ensure you do not harm the good name of the University in any way and do nothing to undermine the reputation of the research it conducts and sponsors. Upholding high standards of conduct and integrity are vital in this regard. You must also conduct the research in such a way to minimise the potential for claims of negligence made against the University, its researchers and any collaborating individual or organisation. In this respect you should always comply with ethical, legal and professional frameworks, obligations and standards as required by statutory and regulatory authorities, as well as the university's Research Integrity and Ethics Code of Practice. Research misconduct in this respect can take many forms, including:

- fabrication: making up results or other outputs (eg, artefacts) and presenting them as if they were real
- falsification: manipulating research processes or changing or omitting data without good cause
- plagiarism: using other people's material without giving proper credit

- failure to meet ethical, legal and professional obligations: for example failure to declare competing interests; misrepresentation of involvement or authorship; misrepresentation of interests; breach of confidentiality; lack of informed consent; misuse of personal data; and abuse of research subjects or material
- improper dealing with allegations of misconduct: failing to address possible infringements such as attempts to cover up misconduct and reprisals against whistle-blowers

Adverse Outcomes. Think carefully about the possibilities, and cover here

Section I: Feedback, Consent and Confidentiality

Feedback to participants: outline your approach. Will interview transcripts be shared with respondents to check accuracy? Will summaries of questionnaire analysis be made available to respondents in some way? Will an overview report be provided? How and when?

Informed consent: Draft letter / e-mail / or heading (or footer) section of questionnaire must be approved by DoS/supervisor (if research student), supervisor/module tutor if taught student, or Head of School / Assistant Dean if a member of staff.

Confidentiality/Anonymity. Explain clearly how you will ensure confidentiality and anonymity.

Section J: Data Protection and Storage

Before completing this section it is necessary to read the University's Research Data Management information. The questions that follow are designed to ensure compliance with the Data Protection Act as well as established research protocols.

Many research activities will involve electronic transfer of data and use of data management systems in the summarisation and analysis of data. You will need to explain these in relation to compliance with the Data Protection Act.

Think carefully about who will have access to your data, this will include supervisors and examiners. Also that a thesis will be made available via the University library and the British Library system. If you are seeking an access bar for a period of time after completion then mention it here. If you will provide a copy of your findings, or intend to give a presentation, to a facilitating/ supporting/accessing organisation then explain that in this section. But also think about the general principle of data sharing, as explained in the Research Data Management information.

In terms of storage of data please ensure security, and also mitigate against loss of data.

Section K: Declaration

Ensure the appropriate countersignatures have been provided

Look carefully at the checklist and ensure that you comply with and tick all that are relevant to your research.



Session Plan – Key Stage 2

Name of trainee:		Session: 27.3.2018 and 28.3.2018	
Personal target(s) in relation to QTS:			
Year group: 6	No. of learners:	ALN:	
Additional Adults:			
Learning objective(s): To write a letter/top tips to a future pupil		Success criteria: - Think of a time when you found something difficult to learn. - Explain to the future pupil how you overcame this difficulty and what this taught you about having a growth mindset. - Advise the future pupil on how they can develop a growth mindset. - Use the correct structure of a letter.	
Links to previous learning:			
Curriculum coverage (range, skills):			
Literacy (LNF)		Numeracy (LNF)	
DCF	Thinking	ESDGC	YCC
Key vocabulary (English/Welsh):			
Growth Mindset Fixed Mindset Strengths Weaknesses Resilience			
Time	Session activities, organization and management		Key questions
	Introduction Hook – Origami challenge - Pupils given 2 minutes to attempt to make the origami rabbit using instructions on the powerpoint. *Pupils not expected to complete* - Growth Mindset quiz (use thumb resources) - TTYP - When you couldn't complete the origami, how did you feel? / When you completed the origami, how did you feel? Explain what a fixed mindset looks/sounds like Video - https://www.youtube.com/watch?v=M1CHPnZfFmU TTYP – What is the difference between a fixed and growth mindset?		- When you couldn't complete the origami, how did you feel? - When you completed the origami, how did you feel? - What are your strengths? - How did you improve?

	Carousel activities – 1 - Change your mindset sorting activity. Match each statement with the correct side of the brain. 2- All About Me (worksheet) Write or draw things you are good at or need improving. 3- Word definition activity. Write on to the bubble maps what each word means to you. 4- Scenario activity. Write on post-it notes how someone with a fixed/growth mindset would respond to each scenario.	
	Main activities Write a letter/top tips to a future pupil advising them how they can have a growth mindset. - Model answer given for guidance.	Assessment for Learning Opportunities Turn to your partner Pit stops Plenary
	Plenary Growth mindset jar - Each child given three pieces of coloured paper - Must write down quotes/mantras or advice for having a growth mindset - Paper folded and placed in jar	Differentiation

Observation Notes Lesson Study 1 (3)

Observation: Year 5

Lesson Study: 1

Leuven Scale for Involvement		
Children	Level (Introductory activities)	Level (Main activity)
Child 1 E	<u>Origami rabbit:</u> Level 5 • Appeared to be excited about the task. • Followed the instructions and remained engaged.	<u>Top tips:</u> Level 4 • The child wrote a satisfying amount. • The child did discuss with her peers.

	<u>'All about me': Level 4</u> - Child worked individually on task. - Did discuss work with others.	
	<u>Brain sorting: Level 3</u> The group appeared to finish early and the child lost interest.	Additional Comments
	<u>Mind maps: Level 4</u> - The child had plenty to write for this activity. - Appeared to be mostly engaged.	Appears to be an enthusiastic child, often on task although at times can be discussing with others.
	<u>Scenarios: Level 4</u> Positive engagement.	
	Level (Introductory activities)	Level (Main activity)
Child 2 L	<u>Origami rabbit: Level 4</u> - Initial engagement. - Followed instructions and completed. - Helped another child. - Showed others when she finished and perhaps put them off task.	<u>Top Tips: Level 3</u> - Produced a good amount of work. - Often chatting with others. - On times looking around the classroom.
	<u>'All about me': Level 3</u> - Appeared mostly engaged. - On times off task.	
	<u>Brain sorting: Level 2</u> - Did not work well in this exercise. - The group work must have put her off. - At one point had to be told by teacher to remain on task.	Additional Comments
	<u>Mind maps: Level 2</u> Again struggled in the group environment.	Initial assessment of this child was that they were very able to do the activities. However it was evident that this child lost interest in certain activities and at times was disengaged.
	<u>Scenarios: Level 3</u> - Gave some good answers. - However again struggled in the group setting.	
	Level (Introductory activities)	Level (Main activity)
Child 3 T	<u>Origami rabbit: Level 4</u> - Appeared to be totally engaged. - However then began to play with the paper at the end.	<u>Top Tips: Level 4</u> - Instant engagement with the activity. - Good standard of work. - Did discuss on times but keen to show new found knowledge of this topic.
	<u>'All about me': Level 4</u> - Performed well in written tasks. - Sometimes looked up around the table.	

	<u>Brain sorting:</u> Level 3 - Completed task early. - Could be argued high engagement. - However appeared to misbehave slightly with peers.	
		Additional Comments
	<u>Mind maps:</u> Level 5 Fully engaged with this task.	This child appeared engaged throughout most of the lesson. Was happy to get on with the task. Sometimes the child would discuss with others, although mostly it was discussion about the activity.
	<u>Scenarios:</u> Level 4 - High level of engagement. - Did discuss and could go off topic.	
Whole class comments:		
- The whole class were mostly cooperative. - All children performed the origami task, some gave up quicker than others. - The paper became a distraction during the lesson. - All appeared to be engaged when watching the video. - There was some fussing during the moving around of activities.		

Lesson Study 2 (4)

Observation: Year 6

Lesson Study: 2

Leuven Scale for Involvement		
Children	Level (Introductory activities)	Level (Main activity)
Child 1 B	<u>Origami rabbit:</u> Level 5 - Completed the task. - Followed the instructions. - Sat and waited for the next instruction.	<u>Letter:</u> Level 5 - Produced a great deal of work. - Was not distracted by anyone. - Showed the teacher their work when finished. - So engaged with this activity.
	<u>'All about me':</u> Level 5 - Got on with their work. - Did not discuss with others. - Appeared fully focused.	

	<u>Brain sorting:</u> Level 4 - The child got on with her work. - With it being group work there was temptation to go off task but she was mostly focused.	
	<u>Mind maps:</u> Level 5 - Wrote down several answers. - Again appeared to be fully on task.	<u>Additional Comments</u> - Pleasing to see how engaged this child was. - Throughout the whole lesson the child appeared engaged. - Evidently bright child. - Appears to be a pleasure to teach as this child follows instructions without fuss.
	<u>Scenarios:</u> Level 5 - Got on with the task immediately. - Read other answers to gain an understanding.	
	Level (Introductory activities)	Level (Main activity)
Child 2 M	<u>Origami rabbit:</u> Level 4 - Appeared engaged during the task. - Showed her peers her work but remained on task.	<u>Letter:</u> Level 4 - Appeared on task. - Completed the work to a good standard. - Did discuss with peers but mostly on task.
	<u>'All about me':</u> Level 4 - Focused on task. - Tendency to discuss with her group. - Most of discussions were about the work.	
	<u>Brain sorting:</u> Level 4 - Completed the task. - Shared her ideas. - Did discuss off topic subjects.	
	<u>Mind maps:</u> Level 4 - Child used other answers to complete task. - Spoke with group about the work.	
	<u>Scenarios:</u> Level 4 - Appeared motivated. - Discussed on this section, unsure if was about the topic.	
	Level (Introductory activities)	Level (Main activity)
Child 3 R	<u>Origami rabbit:</u> Level 4 Did not complete the task.	<u>Letter:</u> Level 4 - Child completed their work. - Produced a lot of work.
		<u>Additional Comments</u> - When doing work was mainly on task. - Often discussed but remained on task.

	Had a good attempt.	Did talk to partner during the activity.
	<u>'All about me':</u> Level 4 - Wrote down some good answers. - Discussed with some of the peers on the table.	
	<u>Brain sorting:</u> Level 4 - Completed the activity quickly. - Did discuss with others on their table.	Additional Comments
	<u>Mind maps:</u> Level 3 - Off topic on times with peers. - Did complete the work.	- Mostly engaged with the task. - Often talked to peers. - Produced good work. - Appeared engaged when teacher was talking.
	<u>Scenarios:</u> Level 3 - On times discussed with others. - Did appear engaged, but off task a lot.	
Whole class comments:		
- The class were engaged throughout the lesson. - They appeared interested by the activities. - No negative incidents in the lesson. - All listened to teacher and participated in the activities.		

All about me (5)

Something I really have to work at is...

Maths

+	x
-	
÷	

Something that comes really easy for me is...

riding my bike a scooter.

This is me!



I need to get better at

swimming lessons.

doing a back slick.

Something I wish I could do better is...

Something I'm not afraid of trying is...

Top Tips (6)

Top tips

- keep trying no matter what.
- Always keep trying.
- Never give up
- keep going
- try again and again.
- If you make a mistake keep trying
- keep trying until you succeed
- be polite
- be friendly and kind.
- don't be rude
- don't be mean

Transcript of Lesson Study 1 (7)

What did you enjoy about the lesson?

1 – I liked sticking the thumbs cards in the air because it was fun and different to what we usually do.

3 – I liked how we had to write down our feelings on every single table and answer the questions

2 – yeah me too

So, you liked the introduction activities?

3 – Yeah

1 – I did too

What did you think about the activities at the beginning of the lesson?

2 – It was really fun that you made us make a bunny

1 – I enjoyed it even though it was complicated

3 – It was fun because it was a challenge

What did you learn in the lesson?

3 – We learnt that even if you can't do something just keep trying

1 & 2 – I agree

Did you feel that the introductory activities improved your understanding of what you were learning?

All – yes

Did you prefer the activities where you worked as a group or individually?

All – groups

Which of the activities where you most and least favourite and why?

2 – I liked the scenario one because you had to give your personal opinion

1 – I liked the origami rabbit

3 – I liked the all about me activity because we got to show what we think

3 – My least favourite activity was sorting the statements on the brain because it was done very quickly

- 1 – And it wasn't much of a challenge
- 2 – wasn't much of a challenge but was still fun

Did you feel that the activities within the introduction of the lesson made you more confident to complete the main activity?

- 1 – Because it gave us different ideas to write down and made us understand more
- 3 – Yes, it made us understand more
- 2 – I agree

This lesson is going to be taught to another class, what do you think we can do to make the lesson better?

- 3 – On the brain activity you could add more questions or make it more challenging
- 1 – ...yes because it was too easy
- 2 – Maybe you could put coloured paper on the origami
- 3 – You could add more questions on the all about me activity

Is there anything else you would like to say about the lesson?

- 3 – It was fun
- 1 – Yeah
- 2 – I agree

Transcript of Lesson Study 2 (8)

Interviewer - What did you enjoy about the lesson?

Child 1 – I really liked all of the activities where we went around the classroom and also making the origami bunnies

Child 2 – Making the bunnies but I didn't get very far.

Child 3 – I liked the quiz activity where we had to put our thumbs down or thumbs up so that you can express your opinion.

Interviewer - What did you think about the activities at the beginning of the lesson, so the activities where we rotated around, what did you think about those?

Child 1 – I think they were quite clever to get to know the things that we know better.

Child 3 – I liked them because they were all short and snappy and fun things to do.

Interviewer - What did you learn in the lesson?

Child 1 – I learnt about growth mindset and fixed mindset.

Child 2 – I learnt the same thing and how they affect different people.

Child 3 – I learnt that if you make a mistake it is not always bad, it is kind of good sometimes so that you learn more,

Interviewer - Did you feel the activities improved your understanding of what you were learning?

All – Yes.

Child 1 – I didn't really know anything about growth mindset.

Child 2 – Yes, I didn't know anything about it.

Interviewer - Did you prefer the activities where you worked in groups or the ones where you worked on your own?

Child 2 – I preferred the groups where we can interact with each other.

Child 1 – I preferred on my own because then I don't get distracted by others when doing my work.

Child 3 – I probably prefer on my own because then you can do it personally.

Interviewer - Rank the order of the activities, so which was your favourite to your least favourite and tell me why?

Child 1 – The favourite was the bunnies because it was fun to begin the lesson.

Child 2 – My favourite one was rotating around but favourite was the bunnies.

Interviewer- With the activities where we rotated around, which one of those was your favourite?

Child 2 – That brain one where we had to match.

Child 3 – My favourite was when you had to draw the pictures or write of what you're good at and what you need to be more confident with.

Interviewer - What was your least favourite?

Child 3 – My least favourite was the one where we had to match them up.

Interviewer - Why was that your least favourite?

Child 3 – Because we were able to do it really quick.

Child 1 – my least favourite was doing the creative things.

Interviewer - Did you feel the activities in the introduction of the lesson, so the ones we did at the beginning, made you more confident to complete the main activity? So, after doing those activities, did it make you want to complete the writing task more at the end?

Child 2 – Yes, because it made me know what I was going to write, because before then I was clueless.

Child 1 – They help us know what to write in the letter.

Child 3 – They changed my opinions on mistakes, before I thought mistakes were bad, but now I know if you do make a mistake to learn from it.

Interviewer – Da iawn. So the lesson is going to be taught to another class, what do you think we could do to make that lesson better?

Child 2 – maybe you could change the letter in to more of a fact file.

Interviewer – Great thinking. Is there anything else you would like to say about the lesson?

All – No.

Transcript of Lesson Study 3 (9)

Researcher – R

Child 1 – 1

Child 2 – 2

Child 3 – 3

R – What did you enjoy about the lesson 1?

1 – It was fun and fixed mindset is about the ... the ... um I can't do it but then you can actually do it again.

2 – My favourite part of the lesson was probably the sticky note activity where you had to like write something down and then stick it on the growth mindset and the fixed mindset thing.

R – What did you enjoy?

3 – The brain one.

R – Ok, what did you think about the activities at the beginning of the lesson?

2 – They were difficult.

R – So what was the activity do you remember? It was the bunny rabbit wasn't it.

1 – It was difficult.

R – Do you all think that?

All children yes.

2 – At first I found it difficult and then when I thought I could try folding it out the other way it was easy, when I figured out that.

1 – I think it was just difficult, it was really hard.

R – What did you learn in the lesson?

1 – A mindset is a thing you can do but a fixed mindset is a thing when you think you have done but you don't need to do that now.

3 – So ummm, a fixed mind set is when you can give up and a growth mind set is when you keep trying at it.

R – Did you feel the activities helped improve your understanding of what you were learning?

All yes.

R – Did you prefer the activities when you worked in groups or on your own?

1 – Groups.

2 – On your own.

3 – Groups.

3 – I liked when you could draw so that's like half each, that was fun.

R – Ok, so half each, what was your favourite activity we did?

2 – Definitely bunny, definitely the bunny.

1 – I think the drawing one the same as 3.

R – Haha ok so what was your least favourite?

1 – I think mine was the bunny rabbit.

2 – The bunny rabbit.

R – That was your favourite wasn't it?

2 – Ye!

R – So what was your least?

2 – I am trying to think of the activities now?

R – So we had the brain one...

2 – Ooo probably the brain one.

R – Why?

2 – Because there was lots of them and it was quite hard. There were 2 ones we were really stuck on.

R – Ok so that was when you had to put them in growth mind set and fixed.

2 – Ye.

R – Ok, did you feel the activities in the introduction made you feel more confident to complete the main activities?

2 – Kind of.

R – Do you think the bunny rabbit one made you more confident?

1 and 3 – No

2 – Kind of.

R – Ok, the lesson is going ... well it's not going to be taught to another class but how can we make it better? Because you guys are the last ones now to do this lesson.

3 – Wow are we?

R – Yes, how can we make it better? What do you think?

1 – I am not so sure about this.

3 – If you talked a little bit more about it.

R – If I talked more about it?

3 and 2 – Ye.

2 – I think if you spent more time on the activities too.

R – More time on each activities, ye ok that's another good answer. Ok, umm, is there anything else you would like to say about the lesson?

1 – It was really tremendous, and we learnt new things.

3 – Ye.

R – Ok thank you everyone.