

Appendices

Appendix 1: The observation checklist used when observing the lesson and record the results of the quiz

Date:

Observer:

Teacher:

Lesson:

Class:

Time:

Tick if observed	Child 1	Child 2	Child 3
Not completing any work even if teacher assists			
Not concentrating staring & daydreaming			
Doesn't volunteer any answers for questions, if asked doesn't know the answer			
With extreme guidance from the teacher little work is done			
Only small parts of the work are completed, but is easily distracted			
Offers answers to one or two questions, answers are often wrong			
Some work is completed with some help from the teacher and peers			
Child is completing in the work but not fully concentrating			
Has answers to some questions, answers are sometimes correct			
Most of the work is completed correctly with little help from the teacher and peers			
Mostly concentrated on completing the work			
Has answers to most of the questions, most of which are correct			
All work is completed to a high standard without any assistance from peers or teacher			
Fully concentrated on completing the work			
Eager to answer questions, has an answer for almost everyone			

Results to the quiz – Tick if the team got the answer correct, cross if incorrect

Record the answer	Child 1	Child 2	Child 3
Question 1			
Question 2			
Question 3			
Question 4			
Question 5			
Question 6			
Question 7			
Question 8			
Question 9			
Question 10			
Question 11			
Question 12			
Question 13			
Question 14			
Question 15			

Additional signs of individuals understanding:

- Are they asking questions to the whole room showing extra knowledge and intrigue?
- Are they talking to their peers?
- Are they talking to the teacher?
- Are they responding to directions promptly?

Child 1:

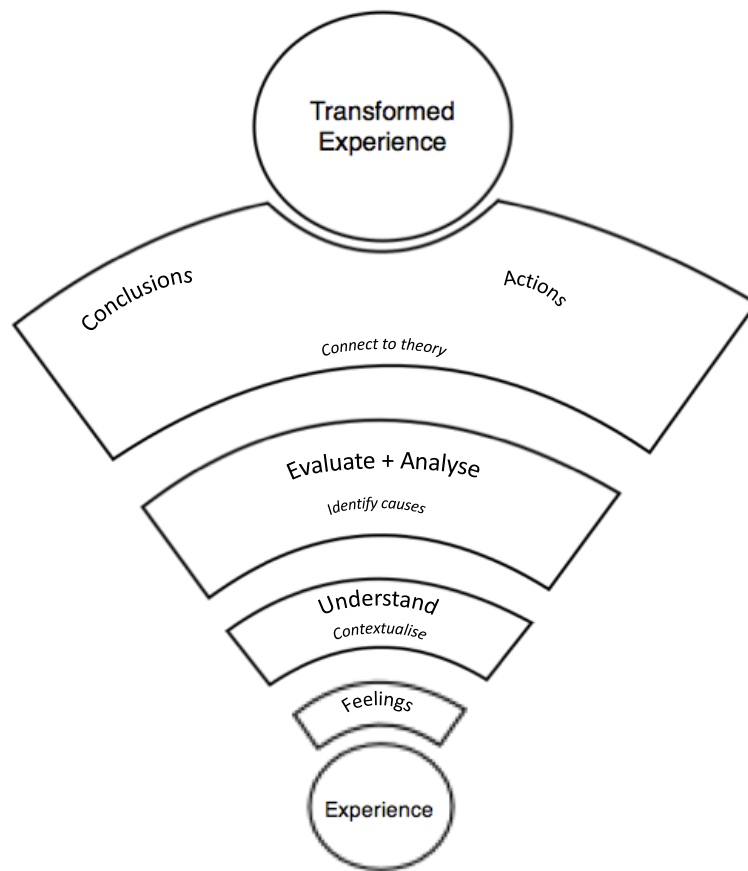
Child 2:

Child 3:

Appendix 2: The interview questions used when interviewing the three observed pupils.

1. Do you feel that you understood today's lesson? (You can use the traffic light system to help)
2. Which bits of today's lesson did you understand the least?
3. Would you like to go over any information in today's lesson again?
4. How do you feel about group activities?
5. During the quiz, did you know the answers to all the questions?
6. Did you give your answers to the group in the quiz?
7. Do you think a final quiz like this can be helpful to better remember/understand what has been taught before?
8. Do you think everyone was involved in the quiz or there was someone who didn't really follow?

Appendix 3: The arc reflection model used to reflect on the lessons observed in this investigation.



Appendix 4: The ethics form which was submitted and approved to allow this study to convene.

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.

Delete the Guidance Notes at the end of the form BEFORE submitting your application

SECTION A: About You (Principal Researcher)

Full Name:		Chloe Bentley			
Tick all boxes which apply:		Member of staff:	☐	Honorary research fellow:	☐
Undergraduate Student	☐	Taught Postgraduate Student	☒	Postgraduate Research Student	☐
Faculty/School/Centre:		Yr Athrofa, Institute of education			
Campus:		Swansea			
E-mail address:		1903084@student.uwtsd.ac.uk			
Contact Telephone Number:		07804882284			
For students:					
Student Number:		1903084			
Programme of Study:		PGCE Secondary Biology			
Director of Studies/Supervisor:		Catherine Morgan			

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): Approval in principle must be obtained from the relevant source prior to seeking ethical approval	Research Degrees Committee	☐		
	Faculty Research Committee	☐		
	Other (write in)	☒	Senior mentor at placement school – Ian Gimbeth	

SECTION C: Internal and 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.	
<u>UWTSD Research Ethics & Integrity Code of Practice</u>	☒
UWTSD Research Data Management Policy	☒
Ethical Guidelines for Educational Research BERA (2018)	☒

SECTION D: External Collaborative Research Activity

Does the research activity involve collaborators outside of the University?	YES	☐	NO	☒	
If Yes, please provide the name of the external organisation and name and contact details for the main contact person and confirmation this person has consented to their personal data being shared as part of this collaboration.					
Institution					
Contact person name					
Contact person e-mail address					
Has this individual consented to sharing their details on this form?	YES	☐	NO	☐	
Are you in receipt of a KESS scholarship?	YES	☐	NO	☐	
Is your research externally funded	YES	☐	NO	☐	
Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary	YES	☐	NO	☐
	Employed	YES	☐	NO	☐
Is the research being undertaken within an existing UWTSD Athrofa Professional Learning Partnership (APLP)	If YES then the permission question below does not need to be answered.	YES	☐	NO	☐

Permission to undertake the research has been provided by the partner organisation	(If YES attach copy) If NO the application cannot continue	YES	☐	NO	☐
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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:	Can the use of a team quiz as a plenary successfully assess individual pupils learning?		
Proposed start date:	03/02/2020	Proposed end date:	21/02/2020
Introduction to the Research (maximum 300 words) Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the three points below: • <i>Purpose of Research Activity</i> • <i>Proposed Research Question</i> • <i>Aims of Research Activity</i> • <i>Objectives of Research Activity</i> Demonstrate, briefly, how <u>Existing Research</u> has informed the proposed activity and explain • <i>What the research activity will add to the body of knowledge</i> • <i>How it addresses an area of importance.</i>			
Purpose of Research Activity To discover whether group tasks such as quizzes can assess the learning of each individual successfully and therefore be used as a plenary in a lesson and inform the teacher if the class is ready to move on. (this box should expand as you type)			
Research Question Can the use of a team quiz as a plenary successfully assess individual pupils learning? (this box should expand as you type)			
Aims of Research Activity - To investigate, using the lesson study method, whether a group quiz can assess pupils learning & inform a teacher of an individual pupil's knowledge and understanding of a topic. - To investigate whether a group activity gives a true reflection of the overall class understanding and not just a few individuals who answer for their peers. (this box should expand as you type)			
Objectives of Research Activity			

- Use the lesson study method to observe a lesson and gauge the three individual's knowledge and understanding during a lesson.
- Use a group quiz, based on the format of 'Who Wants to Be a Millionaire', as a plenary. The class will be divided into four groups, of which our chosen three pupils will be in a different group. Answers will be given as a group and the results of the three pupils groups will be recorded.
- To interview the three pupils after the lesson, asking if they understood the lesson, and if they knew the answers to the quiz, or were relying on their peers.

(this box should expand as you type)

Proposed methods (maximum 600 words)

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.

The lesson study method will be used to conduct this research which originated in Japan (Fernandez, 2002). This method is based around two teachers working together (myself & Giulia Raus, a fellow PGCE student). We will plan the lesson based on our respective disciplines but plan the plenary together as this is the aspect which we are focusing on. One of us will teach it, and one will observe by focusing on three pupils, after the lesson we will both interview them as a group. After this we will then analyse the lesson using the arc reflection model, and then plan a subsequent plenary for another lesson focused on implementing the findings from the prior lesson. Similarly to the first lesson, one of us will teach it, and one will observe by focusing on three pupils, after the lesson we will both interview them as a group. This method will allow us to observe the pupils and gauge their understanding which will be aided by an observation checklist and then talk to them after to fully clarify in the focus group interview.

(this box should expand as you type)

Location of research activity

Identify all locations where research activity will take place.

In my placement school as part of my PGCE course. The school will be referred to as school X, to maintain anonymity as recommended by BERA guidelines, 2018. School X is a secondary school in a large city in Wales. In 2018, the school had 1112 pupils of mixed gender aged 11-19 (Welsh Government, 2018). The primary language in School X is English (Welsh Government, 2018). In 2018, 12.6% of pupils were eligible to free school meals as opposed to the Welsh average of 16.6% (Welsh Government, 2018). Furthermore, 19.6% of pupils in school X during 2018 were recognised to have special educational needs, compared to 14.4% in Wales (Welsh Government, 2018). Moreover, the number of pupils for which English was an additional language in school X in 2018 was half the average for Wales at 1.5% (Welsh Government, 2018). School X was awarded a green grade in 2015 by the Welsh government, which was the top level that could be awarded and was based on a number of factors including a high track record, resilience at all levels and the capacity to lead and contribute to support from the government they would need to improve (Evans, 2015).

(this box should expand as you type)

Research activity outside of the UK

If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural and/or legal sensitivities or vulnerabilities of participants.

N/A

(this box should expand as you type)

Use of documentation not in the public domain: Are any documents NOT publicly available?	NO	☒
	YES	☐
If Yes, please provide details here of how you will gain access to specific documentation that is not in the public domain and that this is in accordance with prevailing data protection law of the country in question and England and Wales.		
<i>(this box should expand as you type)</i>		

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 For example, 'focus groups'. Please indicate the type of data collection method(s) in this box and tick the accompany box.	☒	☐
Details of any other primary data collection method:		
Focus group with the 3 pupils which we will observe as part of the lesson study method (this box should expand as you type)		

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 and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☒	☐
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 specifically any group who may be unable to give consent) please indicate here and tick the appropriate box.	☐	☐
Other – please indicate here: (this box should expand as you type)		

Participant numbers and source	
Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?	
How many participants are expected?	Approximately 60 as a whole (2 classes) but the research will focus on 6 individuals, 3 in one class and 3 in another. <i>(this box should expand as you type)</i>
Who will the participants be?	Pupils at the school where the research takes place. The pupils will be in year seven in band A, aged between 11 and 12 years old. <i>(this box should expand as you type)</i>
How will you identify the participants?	As the classes that I teach as part of my PGCE course, and those that my research partner teaches. The 3 individuals will be identified at random. Consent forms will be given to all pupils in the class. <i>(this box should expand as you type)</i>

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			
<i>(this box should expand as you type)</i>			

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			
<i>(this box should expand as you type)</i>			

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		
Risk to Participant: There may be emotional distress associated with disclosing information of their understanding. Pupils may feel under pressure to give a correct answer. Some pupils may feel left out if not chosen to be interviewed. <i>(this box should expand as you type)</i>	How will you mitigate the Risk to Participant I will explain that all questions are optional, and that participants can opt out of the study at any point. Pupils will be reminded that there is no correct answer. Pupils will be reminded that the choice of pupils is completely random. <i>(this box should expand as you type)</i>	
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		
<i>(this box should expand as you type)</i>		
Risks to investigator For example: personal safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest		
Risk to Investigator: Possible bias due to the relationship with the participants and being accused of favouritisms when choosing the 3 individual participants. <i>(this box should expand as you type)</i>	How will you mitigate the Risk to Investigator: The 3 participants will be chosen entirely at random. <i>(this box should expand as you type)</i>	
University/institutional risks For example: adverse publicity, financial loss, data protection		
Risk to University: The falsification of data which may harm the reputation of the university. <i>(this box should expand as you type)</i>	How will you mitigate the Risk to University: All data will be collected legitimately. <i>(this box should expand as you type)</i>	

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
Does your research require you to hold a current DBS Certificate?	☒	☐	☐

SECTION I: Feedback, Consent and Confidentiality

Feedback

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

I will seek permission for the headteacher to place a small poster on a notice board so that pupils may see the result of the findings. If participants or their guardians specifically request, results will be emailed to them (this is explained in the information sheet). This will be done when the research project is finished on the 20th February 2020. The general poster and email will be anonymous.

(this box should expand as you type)

Informed consent

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

An information sheet will be given to each participant and we will read through it and explain any areas if necessary. As the participants are under the age of 18, a consent form will be sent to their guardians along with an information sheet explaining the research project. Full consent will be acquired as stated in the BERA guidelines.

(this box should expand as you type)

Confidentiality / Anonymity

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

As stated in the BERA guidelines, all data will be anonymous and confidential. The participants will be referred to as Pupil A, B & C. We will never list participants names in the study and collect consent forms from the entire class and not individual pupils. There will be no information disclosed in the research which may enable someone to trace the data back to individual pupils.

(this box should expand as you type)

SECTION J: Data Protection and Storage

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

Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 "GDPR" and the Data Protection Act 2018 "DPA")?	YES	NO
"Personal data" means any information relating to an identified or identifiable natural person ('data subject'). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.	X	☐
If YES, provide a description of the data and explain why this data needs to be collected:		
Consent forms completed by the parents of participants will include names. The information collated will be secured adhering to data protection policies and will be destroyed once the research is complete. Any data collection and storage will adhere to the University's Research Data Management Policy. (this box should expand as you type)		
Does it involve special category data (as defined by the GDPR)?	YES	NO
"Special category data" means sensitive personal data consisting of information as to the data subjects' – (a) racial or ethnic origin, (b) political opinions, (c) religious beliefs or other beliefs of a similar nature, (d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992), (e) physical or mental health or condition, (f) sexual life, (g) genetics, (h) biometric data (as used for ID purposes),	☐	☒
If YES, provide a description of the special category 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 and/or special category 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 the security of the data collected, data confidentiality, including details of password protection, encryption, anonymisation and pseudonymisation:		
Hard copies of data will be stored in a lockable place. However, collected data will be immediately transcribed to an excel spreadsheet stored on my university onedrive account and laptop which is password protected. Original copies of the consent forms will be kept until submission of the research project at which time they will be shredded or placed into confidential waste containers. Data presented in the project will be entirely anonymous.		
<i>(this box should expand as you type)</i>		
All Data Storage		
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 GDPR and DPA (and/or any international equivalent):		
<i>(this box should expand as you type)</i>		
List all who will have access to the data generated by the research activity:		
Myself and my research partner.		
<i>(this box should expand as you type)</i>		
List who will have control of, and act as custodian(s) for, data generated by the research activity:		
Only myself.		
<i>(this box should expand as you type)</i>		
Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		
Hard copies of data will be stored in a lockable place. However, collected data will be immediately transcribed to an excel spreadsheet stored on my university onedrive account and my laptop which is password protected. Original copies will be kept until submission of the research project at which time they will be shredded or placed into confidential waste containers. Data presented in the project will be entirely anonymous.		

(this box should expand as you type)

Please indicate if your data will be stored in the UWTSD Research Data Repository (see <https://researchdata.uwtsd.ac.uk/>). If so please explain. *(Most relevant to academic staff)*

No

(this box should expand as you type)

Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	YES	☒
	NO	☐
Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	YES	☒
	NO	☐

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:	C. Bentley	Date: 17/12/2019
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For STUDENT Submissions:

Director of Studies/Supervisor:		Date:
Signature:		

For STAFF Submissions:

Head of School/Assistant Dean:		Date:
Signature:		

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) ONLY TICK IF YOU HAVE ATTACHED A FULL RISK ASSESSMENT
☒	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.
☒	I have deleted the guidance notes before submitting the PG2 for consideration

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.

Appendix 5: The information sheet given to parents/ guardians so they could provide consent for pupils to take part in this study.

26th January 2020

INFORMATION SHEET

PROJECT TITLE: Can the use of a group quiz as a plenary successfully assess an individual pupil's learning?

Dear Parent / Guardian,

My name is Chloe Bentley and I am studying for a PGCE qualification at Yr Athrofa, University of Wales Trinity Saint David. I am currently a student teacher within Gowerton Comprehensive and am teaching in your child's class.

I would like to invite your child to participate in my research project. The title of the project is 'Can the use of a group quiz as a plenary successfully assess an individual pupil's learning?' and I aim to investigate whether a group quiz based on the format of 'Who wants to be a millionaire?' can assess pupils learning at the end of a lesson & inform a teacher of an individual pupil's knowledge and understanding of a topic.

The investigation will involve myself and my research partner, a fellow PGCE student at Gowerton Comprehensive, observing a lesson, and then interviewing learners in a short group interview at the end of the lesson.

All names will be kept strictly confidential and will only be known by myself and my research partner. Your child's participation in this study is completely voluntary so you or your child can withdraw from the study at any stage. Your child will also be asked to give their consent before the beginning of the study.

After careful and precise analysis of the data obtained from the lesson observation and group interview, I would be happy to provide you with a copy of the findings at your request. The results of the research will be discussed in a university assignment that will contribute to my PGCE course. The results of this study will be stored on a secure laptop & onedrive and all raw data will be destroyed once the assessment has been marked.

I thank you in advance for your time. If any questions do arise, feel free to contact me at your convenience on 1903084@student.uwtsd.ac.uk.

Yours sincerely,

Chloe Bentley

Name of Researcher: Chloe Bentley

Please initial box

1. I confirm that I have read and understand the information sheet dated 26/01/2020 for the above study. ☐
2. I understand that my child's participation is voluntary and that I am free to withdraw my child from the study at any time, without giving any reason. ☐
3. I understand that my child can choose to withdraw at any time, without giving a reason. ☐
4. I understand that the information given by my child will be used in a university assignment. ☐
5. I understand that my child's name will not appear at any time. ☐
6. I agree for my child to take part in the above study. ☐
-

Child's name

Parent signature

Date

When completed, please return in the envelope provided to Miss Bentley by the 31st of January 2020

Thank you.

Appendix 6: The information sheet given to pupils before the study was conducted so they could make an informed decision of whether to participate or not.

Dear pupil,

As you know I have taken over some of your classes as I am a student teacher.

I would like to invite you to take part in my research project entitled 'Can the use of a group quiz as a plenary successfully assess an individual pupil's learning?'. This will involve myself and another student teacher watching one of your lessons, and then at the end to join in in a group quiz based on 'Who wants to be a millionaire?'. For the last five minutes of the lesson, myself and the other student teacher will have a quick chat with a few of you from the class to get your opinion on the lesson.

The results of this will only be shared with myself and my research partner for the use of a project we have to do at university. We will never share the results with anyone else, and we will make sure that no one will know that it was you who took part in the project.

It is completely your decision to take part in this, if you don't want to then you do not have to give a reason why. You can also drop out of the project at any point, by just letting myself know and we will stop.

If you have any questions, you can ask me anytime.

Thank you,

Miss Bentley

Appendix 7: The observation notes from lesson 1.

OBSERVATION CHECKLIST

Date: 3rd February 2020

Observer: Chloe Bentley

Teacher: Giulia Raus

Lesson: French

Class: Year 8 band A

Time: 8:30am – 9:30am

Tick if observed	Pupil 1	Pupil 2	Pupil 3
Not completing any work even if teacher assists			
Not concentrating staring & daydreaming		✓	
Doesn't volunteer any answers for questions, if asked doesn't know the answer		✓	✓
With extreme guidance from the teacher little work is done		✓	
Only small parts of the work are completed, but is easily distracted		✓	
Offers answers to one or two questions, answers are often wrong			
Some work is completed with some help from the teacher and peers			
Child is completing in the work but not fully concentrating			✓
Has answers to some questions, answers are sometimes correct			✓
Most of the work is completed correctly with little help from the teacher and peers			
Mostly concentrated on completing the work			
Has answers to most of the questions, most of which are correct	✓		
All work is completed to a high standard without any assistance from peers or teacher	✓		
Fully concentrated on completing the work	✓		
Eager to answer questions, has an answer for almost everyone			

Results to the quiz – Tick if the observed pupil's team got the answer correct

Record the answer	Pupil 1	Pupil 2	Pupil 3
Question 1	✓	✓	✓
Question 2	✓	✓	✓
Question 3	✓	✓	✓
Question 4	✓	✓	✓
Question 5	✓	✓	✓
Question 6	✓	✓	✓
Question 7	✓	✓	✓
Question 8	✓	✓	✓
Question 9	✓	✓	✓
Question 10	✓	✓	✓
Question 11	✓	✓	✓
Question 12	✗	✓	✓
Question 13	✓	✓	✓
Question 14	✓	✓	✓
Question 15	✓	✓	✓

Additional signs of individuals understanding:

Pupil 1:

- Begins writing eagerly as soon as instructed.
- Finished work before the end of the allotted time and completed extra work.
- Can be chatty when working but it appears to be about the work.
- Keen to check answers when going through them as a class.

Pupil 2:

- Talking with peers during the lesson introduction.
- Does not write any of the key points when instructed and just sits there, only when teacher goes over and says something does begin to write a small amount.
- Very little work completed.

Pupil 3:

- Does not completed the work until given a final three-minute warning and then starts to write a lot.
- Very quiet and does not seem to be engaged with the lesson or other learners.

Appendix 8: The interview questions and answers from the first lesson in this study.

Date: 3rd February 2020
Observer: Chloe Bentley
Teacher: Giulia Raus
Lesson: French
Class: Year 8 band A
Time: 8:30am – 9:30am

1. Do you feel that you understood today's lesson? (You can use the traffic light system to help)

Pupil 1: Green – I understood today's lesson completely.

Pupil 2: Amber – I am mostly happy but would like to recap some things.

Pupil 3: Amber – I am unsure of some information so would like to go over that.

2. Which bits of today's lesson did you understand the least?

Pupil 1: None of it in particular, I am happy with everything.

Pupil 2: The information that was given at the start of the lesson, regarding the names for all body parts.

Pupil 3: I agree with that.

3. Would you like to go over any information in today's lesson again?

Pupil 1: No

Pupil 2: The names of the body parts and the face.

Pupil 3: Yes, all of that the difference between plural and singular.

4. How do you feel about group activities?

Pupil 1: I enjoy them.

Pupil 2: Me too.

Pupil 3: Yeah but only if I am in a group with friendly people and not ones who don't want me in their group.

5. During the quiz, did you know the answers to all the questions?

Pupil 1: Yes.

Pupil 2: Yes.

Pupil 3: Yes.

6. Did you give your answers to the group in the quiz?

Pupil 1: Sometimes.

Pupil 2: Yeah, depending on if someone else said the answer.

Pupil 3: Yeah, the same, I gave some of the answers to the group.

7. Do you think a final quiz like this can be helpful to better remember/understand what has been taught before?

Pupil 1: Yes, it helped to recap the information.

Pupil 2: Yeah it was good fun and useful.

Pupil 3: It helped to cement the lesson.

8. Do you think everyone was involved in the quiz or there was someone who didn't really follow?

Pupil 1: Yeah everyone joined in with the quiz in my group.

Pupil 2: Not everyone, a couple of people just sat there.

Pupil 3: Yeah that was the same in my group.

Appendix 9: The observation notes recorded in the second lesson.

OBSERVATION CHECKLIST

Date: 3rd February 2020

Observer: Giulia Raus

Teacher: Chloe Bentley

Lesson: Science

Class: Year 7 band A

Time: 1:40pm – 2:40pm

Tick if observed	Pupil 1	Pupil 2	Pupil 3
Not completing any work even if teacher assists			
Not concentrating staring & daydreaming	✓ (Beginning of the task)	✓	
Doesn't volunteer any answers for questions, if asked doesn't know the answer		✓	
With extreme guidance from the teacher little work is done	✓		
Only small parts of the work are completed, but is easily distracted	✓		
Offers answers to one or two questions, answers are often wrong	✓		
Some work is completed with some help from the teacher and peers	✓		
Child is completing in the work but not fully concentrating	✓		
Has answers to some questions, answers are sometimes correct			✓
Most of the work is completed correctly with little help from the teacher and peers		✓	✓
Mostly concentrated on completing the work			✓
Has answers to most of the questions, most of which are correct			
All work is completed to a high standard without any assistance from peers or teacher			
Fully concentrated on completing the work			✓
Eager to answer questions, has an answer for almost everyone			

Results to the quiz – Tick if the team got the answer correct

Record the answer	Pupil 1	Pupil 2	Pupil 3
Question 1	✓	✓	✓
Question 2	✓	✗	✓
Question 3	✓	✓	✓
Question 4	✗	✓	✓
Question 5	✓	✓	✓
Question 6	✓	✓	✓
Question 7	✓	✓	✓
Question 8	✓	✓	✗
Question 9	✓	✓	✓
Question 10	✓	✓	✓
Question 11	✓	✓	✓
Question 12	✓	✓	✓
Question 13	✓	✓	✓
Question 14	✗	✓	✗
Question 15	✓	✗	✓
Question 16	✓	✓	✓

Additional signs of individuals understanding:

Pupil 1:

- The pupil was very easily distracted especially at the beginning of the lesson.
- Didn't participate on giving answers.
- Completed the task in the allotted time with only a little bit of help from the teacher.

Pupil 2:

- Often distracted by other things and very chatty.
- But did complete the work.

Pupil 3:

- Participate the most out of the three observed pupils.
- Very focused on the work.
- This pupil said that they participated in the quiz however appeared not to.

Appendix 10: The interview questions recorded after the second lesson.

Date: 3rd February 2020

Observer: Giulia Raus

Teacher: Chloe Bentley

Lesson: Science

Class: Year 7 band A

Time: 1:40pm – 2:40pm

1. Do you feel that you understand the topic so far and today's lesson? (You can use the traffic light system to help)

Pupil 1: Amber, there are some bits that I would like to go over again.

Pupil 2: Yeah amber too.

Pupil 3: Green, I am happy with it all.

2. Which bits of the topic and today's lesson did you understand the least?

Pupil 1: I'm not sure.

Pupil 3: Maybe all the facts about the different planet.

3. Would you like to go over any information in today's lesson again?

All pupils: No.

4. How do you feel about group activities?

All pupils: We like them.

Pupil 2: But only if I am in a good group.

All pupils: Yeah.

5. During the quiz, did you know the answers to all the questions?

Pupil 1: Most.

Pupil 2: Yeah most of them.

Pupil 3: Pretty much all of them.

6. Did you give your answers to the group in the quiz?

All pupils: Yeah.

7. Do you think a final quiz like this can be helpful to better remember/understand what has been taught before?

All pupils: Yes definitely.

Pupil 3: I prefer multiple choice questions though.

Pupil 1: Yeah this quiz was good.

8. Do you think everyone was involved in the quiz or there was someone who didn't really follow?

Pupil 1: There was one person in my group who didn't join in.

Pupil 2: Yeah and in mine.

Pupil 3: Mine too.