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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:		Joanne Davies			
Tick all boxes which apply:		Member of staff:	☐	Honorary research fellow:	☐
Undergraduate Student	☐	Taught Postgraduate Student	☒	Postgraduate Research Student	☐
Faculty/School/Centre:		University Trinity St. David's			
Campus:		Swansea			
E-mail address:		1601919@student.uwtsd.ac.uk			
Contact Telephone Number:		07974801693			
For students:					
Student Number:		1601919			
Programme of Study:		PGCE – Primary			
Director of Studies/Supervisor:		Catherine Morgan			



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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): <i>Approval in principle must be obtained from the relevant source prior to seeking ethical approval</i>	Research Degrees Committee	☐		
	Faculty Research Committee	☐		
	Other (write in) Catherine Morgan, Senior Lecturer	☒	17/12/19	

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.	
UWTSD Research Ethics & Integrity Code of Practice	☒
UWTSD Research Data Management Policy	☒
BERA (2018; Ethical Guidelines for Educational Research)	☒

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:	Measuring the children's response to the teacher: 'Using 'Hands up', 'Clap, Clap' or Copycat approach		
Proposed start date:	3 rd February 2020	Proposed end date:	4 th February 2020
The purpose of this activity is to determine which of 3 chosen methods of attracting attention will be most effective in gaining the children's response to the teacher. This will be achieved through the proposed research question, which is – "Measuring the children's response to the teacher: "Using 'Hands up', 'Clap, Clap' or Copycat approach". The aim of the research is to improve my practice as a teacher. The objectives of the research will be to use the qualitative and quantitative data collected in this investigation to assist my writing and inform my future practice. Through the learner's participation, I hope to ascertain an understanding of behaviour patterns in the classroom. The data collected will be in the form of observations that are made during two planned lessons. This will consist of timing the responses of the children and noting the attitude towards each approach. Further data will be collected through questioning the children individually. This research will be conducted in classes, with children of two different age groups. Ages 4-5 years and ages 8-9 years. I have already witnessed some of these approaches during the placements that I have worked at with varying responses. I will use this research together with research through peer reviewed journal sources and other theorists to inform my practise. Through this research I will be able to establish what method is more effective and whether there is a difference in effective approach dependable upon the age range. Gaining the attention of the class using a quick and effective method enables the smooth running of the class, which leads to a better learning environment for the children and a more effective teaching experience.			
Purpose of Research Activity Is to conduct a lesson study to learn and gain understanding regarding behaviour patterns within the classroom and therefore inform on future practice.			
Research Question Measuring the children's response to the teacher: "Using "Hands up", 'Clap, Clap' or Copycat approach to see which gains the quickest response.			
Aims of Research Activity The aim of the research to use the hands up and "clap clap" method to determine which response would gain the children's response quicker and the difference between the year groups researched (Year 1 and Year 5).			
Objectives of Research Activity My objectives are to use the qualitative and quantitative data collected in this investigation to assist my writing and inform my future practice. Through the learner's participation, I hope to ascertain an understanding of behaviour patterns in the classroom.			



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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: (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:		

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

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

Verbal feedback on the results will be given to the children.

(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.

Only the children with prior consent will be involved in the research and data collection.

(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.

Use pseudonyms not real names. Storage will password protected and encrypted. Participants will be able to withdraw their data at any point during or after the research.

(this box should expand as you type)

University/institutional risks

For example: adverse publicity, financial loss, data protection

Risk to University:

Uphold the good name of the university

Breach of confidentiality

Behaving according to the School Policy to ensure that the university is well represented

(this box should expand as you type)

How will you mitigate the Risk to University:

Always ensure that I act professional.

Password Protection, all information will be anonymous. Information will only be accessible by the persons required.

Ensure that the policies are adhered to.

(this box should expand as you type)

Disclosure and Barring Service

If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.

YES

NO

N/A

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

☒

☐

☐



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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: Children that are not chosen may be upset and could be at risk of low self-esteem. Children maybe under pressure to give the correct answer. Safeguarding Anonymity <i>(this box should expand as you type)</i>	How will you mitigate the Risk to Participant If the relevant consent has been given, then the children can be interviewed and then the data can be selected without the child even knowing that they were not chosen. The Child will be informed that there are no right or wrong answers and made to feel at ease. Children will be interviewed with two members of staff present. All children's identities will be anonymised, and data will be deleted after my course has been completed. <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	
N/A <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: Allegations from pupils in the classroom whilst completing research. Accusation of fabrication of data Possible bias in recording data due to possible teacher relationship with the pupils. Could be a conflict of interest as you are the class teacher and the researcher Absent participant	How will you mitigate the Risk to Investigator: All meetings with pupils will be conducted in pairs. The data will be all written down and submitted as evidence to support the information presented. Both researchers will submit reflections from the lesson together with the observation schedules, to compare the relevant information. I will be observing for the other teacher and do not know the children in that class and similarly the observation of my class the observer does not know my children. Consent will be obtained from more children than is required.



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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
<i>"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.</i>	☐	☒
If YES, provide a description of the data and explain why this data needs to be collected:		
<i>(this box should expand as you type)</i>		
Does it involve special category data (as defined by the GDPR)?	YES	NO
<i>"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).</i>	☐	☒
If YES, provide a description of the special category data and explain why this data needs to be collected:		
<i>(this box should expand as you type)</i>		
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:		
Password encrypted storage memory stick, in accordance with the UWTSD Data management policy, the information will be made anonymous, in line with the UWTSD Data Management Policy. Any manual files will be kept in a lock file. <i>(this box should expand as you type)</i>		



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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:
	Joanne Davies	17/12/19

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 Read and delete notes at the end.

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/>

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?	Consent could be collected for up to 30 pupils. Only 8 will be selected for the research.
Who will the participants be?	The participants will be selected 3 from Year 1 and 3 from Year 5 primary school.
How will you identify the participants?	Prior to the lesson, three children from each year group, with parent consent will be selected for the purpose of conducting the research. These children will be known to myself and partner. During the lesson the observer will be aware of where the children will be sitting and the aims and objectives of the lesson to ensure that the observer knows what each child should be doing during the lesson.

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>			

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:		
The only people who will have access to the data generated by the research activity is myself and 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:		
The only people who will have control over the data generated by the activity is 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.		
The research data information in accordance with the information in section C, I will store this information under password protected and encrypted files. This information will be destroyed after the course is completed.		
<i>(this box should expand as you type)</i>		
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, it will not be stored in the UWTSD Research Data Repository.		
<i>(this box should expand as you type)</i>		
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	☐

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.

Recruitment

Children will be asked to participate in the research these children will be selected from key stage 1 and key stage 2. Letters to parents will be sent out to gain permission prior to the children being selected for research.

Consent

Consent forms will be sent prior to the commencement of any research taking place. Children will be selected when the parents consent forms have been received.

Observation

For the process of the research, firstly I will observe my partners lesson as a non-participant observer and then I will be observed by my partner and my partner will be the non-participant observer. An observation schedule from both lessons will be complete and reviewed as evidence in the writing of my assignment.

Interview – with the Focus Group

Following the lesson and completion of the observation schedule an interview of the children will occur. Children will be asked a set of pre-prepared questions.

Analysation of Data

The data will be analysed and recorded in the form of quantitative and qualitative data and used to inform the writing of my assignment regarding improvement of my practice as a student teacher.

Location of research activity

Identify all locations where research activity will take place.

In year 1 and year 5 classroom in a school in South Wales.

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, cultural and/or legal sensitivities or vulnerabilities of participants.

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.



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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 2 – Proforma: Gibbs’ Reflective Cycle (1988)

Description	
• When and where did this happen?	
• Why were you there?	
• Who else was there?	
• What happened?	
• What did you do?	
• What did other people do?	
• What was the result of this situation?	

Feelings	
• What did you feel before this situation took place?	
• What did you feel while this situation took place?	
• What do you think other people felt during this situation?	
• What did you feel after the situation?	
• What do you think about the situation now?	
• What do you think other people feel about the situation now?	

Evaluation	
• What was positive about this situation?	
• What was negative?	
• What went well?	
• What didn't go so well?	
• What did you and other people do to contribute to the situation (either positively or negatively)?	

Conclusions	
• How could this have been a more positive experience for everyone involved?	
• If you were faced with the same situation again, what would you do differently?	
• What skills do you need to develop, so that you can handle this type of situation better?	

Appendix 3 – Observation Schedule

Teacher	Observer	Time
Silent Approach The approach at the start of the lesson should be the silent approach.	To measure the silence with a stopwatch	
Singing Approach The approach at the start of the lesson should be the teacher singing and the children singing back approach.	To measure how long it takes to obtain attention from the class.	
Raise Hand The children need to be given an activity to do - Think, Pair, Share.	To measure how long it takes to obtain silence from the class.	
Clap, Clap Pattern The children need to be given an activity to do - Think, Pair, Share.	To measure how long it takes to obtain silence from the class.	
Raise Hand The children need to be given a writing activity to do from the screen.	To measure how long it takes to obtain silence from the class.	
Clap, Clap Pattern The children need to be given a writing activity to do from the screen.	To measure how long it takes to obtain silence from the class.	

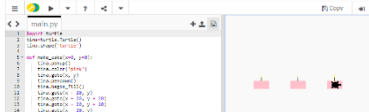
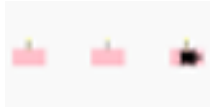
Appendix 4 – Research Interview Questionnaire proforma

Questions Focus Group	Answers		
	Child 1	Child 2	Child 3
When you see a teacher raise their hand – What do you think?			
Do you notice immediately?			
How long do you think it takes for the class to be quiet when the teacher raises a hand?			
What do you do?			
How do you think other children think?			
When a teacher claps a pattern, what do you think?			
Do you react immediately?			
What do you do?			
How do you think other children think?			
When a teacher stands at the front of the class and says nothing. What do you think?			
What do you do?			
How do you think other children think?			
Do you prefer a quiet classroom environment to learn in?			
Do you think others prefer to work in a quiet classroom?			

Appendix 5 – Lesson 1

Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role –including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening phase (with links to prior learning)	Sing days of the week/months of the year -recap. Recapping of counting in 2, 5 and 10 (clap in 2s, high five for 5s and jump for 10s). Recap how we add 10 more or 10 less. Recap how we add 1 more or 1 less. Research – use methods of gaining attention – clapping, hands up, singing.	Engagement in carpet activities.	Display board Pointer
Teaching & Core Learning	Bottoms – Physical activity – use a number square and a counter to move around the numbersquare due to teacher's command – ensure the evidence is seesaw'd (video?) Middle groups – Give a number square with some blank columns – fill in the caps. Then use a counter to move around number square – adding and subtracting 10 (like bottoms activity) Top Groups – Blank number square given. Tell children to fill in a column starting from a random number (7-97). When they get the grasp of it, ask them to fill in a column from bottom up (91-1). When complete, use counters to move around the number square - consolidate learning.	Complete tasks ← Engage in discussions.	Number square Counters Number square with blank columns Blank number square iPad – Seesaw.
Plenary	Lollypop sticks questions regarding the use of a number square.	Answer questions and engage in discussion.	Display board.

Appendix 6 - Lesson 2

Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role –including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening phase (with links to prior learning)	Whole class Recap the PowerPoint from last lesson. Teacher: using lollypop sticks to assess for prior knowledge. Children will watch the coding clip to reinforce their prior knowledge 	Assessment for Learning Ask the children what they remember from last week. Observe who can log on to the system from last week.	15 x Chromebooks  Lollypop sticks
Teaching & Core Learning	Following the instructions from the coding package trinket.  Teaching: I will support the children during the activity. For the purpose of the research project during the lesson I will gain responses of the children at various stages of the lesson to ensure that all the children are on track and that all the children are understanding how to do the task and are able to follow the coding instructions. Extention:  Make a cake	The children will work in pairs to create a birthday cards following the trinket instructions. Peer support from the digital leaders will also support children with the lesson. Assessment of Learning By questioning throughout the lesson assessment for learning is being monitored. The children's work will be saved on their hwb account for future marking and assessment.	15 x chromebooks Trinket: Make a Birthday card.  Extension Trinket: Make a cake 
Plenary	This will be a show and tell session for the last 5 minutes of the lesson.	Children will show the work they have completed and share their top tips.	Whiteboard to show children's work

Appendix 7 - Evaluation of Lesson Study 1

Lesson Evaluation not submitted as this full evaluation not used.

Gibbs Reflection Model (1988) was used to reflect

Appendix 8 - Evaluation of Lesson Study 2

Lesson Plan – Phase 1
Evaluation of the Learning Experience
 (include references to QTS)

Evaluation of Pupil Learning	
Evidence of Learning (including attitude to learning over time))	To start the lesson, I ensured that I told the children the aims and objectives of the lesson and asked the children what they remember from the coding lesson last week. I identified the children who would need support in the computer suite. The children responded well. <i>Good teaching and learning means employing assessment for learning principles.</i> The task itself was a very difficult one. For some children they did not understand the coding language. With support from myself, and digital leaders (peers) in the class the children were able to complete the task. Even if they did not fully understand the language of the coding.
Next Steps for Progress	I would break down the coding language into a more simpler form. To enable the children to complete their own programme. However, the package the children had used was not an easy one. I discussed with the class teacher other coding package possibilities.

Reflective Analysis of Teaching and Strategies For Development – including justification/rationale for pedagogical choices	
Evidence of my Effective Practice	I believe that although the package was a tricky one to use. With my knowledge of computers, I could see the pattern that had to be followed. This enabled me to support the children in completing the task that was required. <i>The student-teacher demonstrates an understanding of how learning develops incrementally and tangentially, building on prior experience and learning, and plans for progress in learning based on this.</i> This lesson was also to gain information for my research project. The project was to gain response using various methods of expecting silence from the class in order to give them instructions. <i>The student-teacher engages in small scale action research, alone or in collaboration with peers, to examine learning in depth and tease out implications for practice.</i> It was a very busy class as a lot of the children required support in the beginning. I started by ensuring that I had the attention of all the children to ask them in pairs to share what they remembered. I then clapped to gain the attention from the children to share with the class what they knew. Throughout the lesson I would gain the class's attention to ensure that they were all on track and also to share information for those that might have been struggling. As this was recapped as a class discussion, rather than having children waiting for help.
Areas for my Development Personal Targets for Progress	I had researched and tried to develop my knowledge of the coding package before the lesson. However I believe that more knowledge could have allowed for a more productive lesson.

Appendix 9 - Evaluation of Lesson Study 1 – Researchers thoughts using the

Model Proforma

Gibbs
(1988)

Maths - Nynce + children
3/2/20 at 9:00 - 10:15
Reflection Pro-forma: Gibbs' Reflective Cycle (1988)

Description	
• When and where did this happen?	Year 1/2 9:00am Maths
• Why were you there?	Maths Research lesson
• Who else was there?	Nynce, class teacher children
• What happened?	children were creating their own 100 Square.
• What did you do?	observe
• What did other people do?	Nynce taught - teacher sang
• What was the result of this situation?	The children completed task

Feelings	
• What did you feel before this situation took place?	Interested to see how the children would react
• What did you feel while this situation took place?	Intrigued at how well the children coped with 100 square
• What do you think other people felt during this situation?	That the lesson was going well
• What did you feel after the situation?	That the singing to the children gave the quickest response
• What do you think about the situation now?	The teacher did not need to use the methods that much as children were engaged
• What do you think other people feel about the situation now?	I would think they felt the same.

Evaluation	
• What was positive about this situation?	If the children are engaged + challenged they are learning.
• What was negative?	Not enough disengagement to measure research options.
• What went well?	The singing was good.
• What didn't go so well?	
• What did you and other people do to contribute to the situation (either positively or negatively)?	

Appendix 8 - Evaluation of Lesson Study 2 – Researchers thoughts using the

Model
Proforma
(1988)

Gibbs

Response to L1

Reflection Pro-forma: Gibbs' Reflective Cycle (1988)

Description	
• When and where did this happen?	Dorset High
• Why were you there?	Observe - Data collection
• Who else was there?	Learners, Pict Student, Teacher
• What happened?	Leading lesson - using Chinese books
• What did you do?	Observe
• What did other people do?	Teach / learn
• What was the result of this situation?	

Feelings	
• What did you feel before this situation took place?	Curious
• What did you feel while this situation took place?	Comfortable
• What do you think other people felt during this situation?	Excited, busy, stressed? Confused?
• What did you feel after the situation?	
• What do you think about the situation now?	Clap gets most response
• What do you think other people feel about the situation now?	

Evaluation	
• What was positive about this situation?	Responses to approaches were generally good
• What was negative?	Not all approaches were used
• What went well?	
• What didn't go so well?	
• What did you and other people do to contribute to the situation (either positively or negatively)?	Good for gaining data → Clap used multiple times

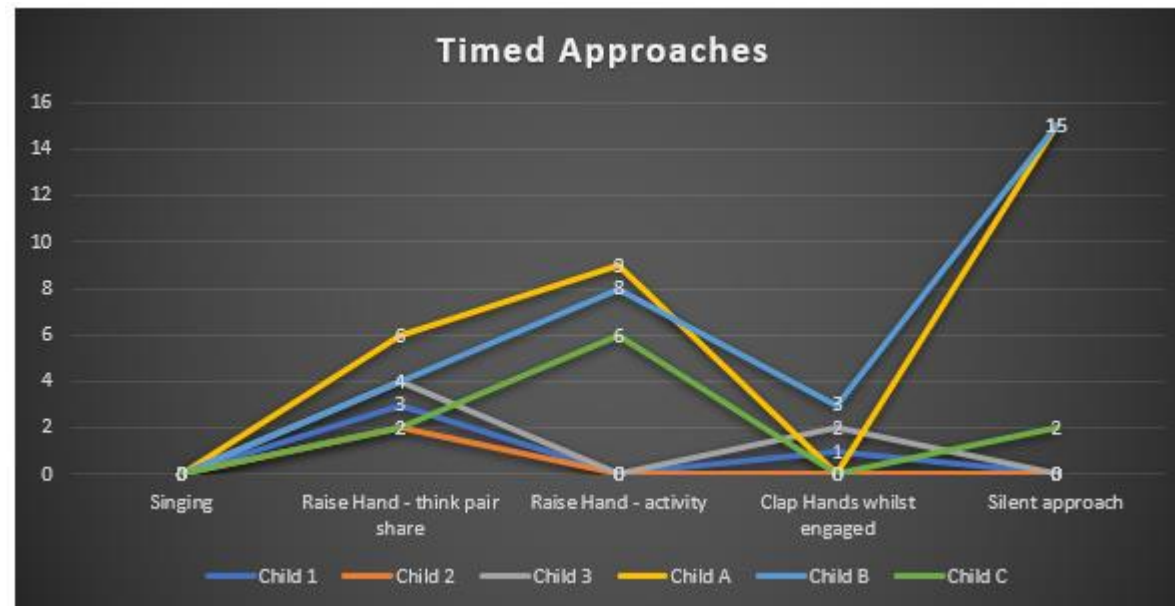
Appendix 9 – Findings of lesson 1 and 2

Teacher	Year 1 - Child 1	Year 1 - Child 2	Year 1 - Child 3	Year 5 – Pupil A	Year 5 – Pupil B	Year 5 – Pupil C
Singing Approach The approach at the start of the lesson should be the silent approach.	This was instant 0 secs	This was instant 0 secs	This was instant 0 secs	Not Used	Not Used	Not Used
Silent Approach The approach at the start of the lesson should be the silent approach.	Not Used	Not Used	Not Used	No response 15 secs	No Response 15 secs	No response 15 secs
Raise Hand The children need to be given an activity to do - Think, Pair, Share.	3 seconds	2 seconds	4 seconds	6 seconds	4 seconds	2 seconds
Clap, Clap Pattern The children need to be given an activity to do - Think, Pair, Share.	Instant Children engaged and clapped back instantly 1 sec	Instant Children engaged and clapped back instantly 0 secs	Instant Children engaged and clapped back instantly 2 secs	Did not stop – 15 secs 11 seconds 2 seconds - Average 9	8 seconds 6 seconds 11 seconds -Average 8	4 seconds 11 seconds 2 seconds -Average 6
Raise Hand The children need to be given a writing activity to do from the screen.	No screens were used.	No screens were used.	No screens were used.	Almost instant 0 seconds	3 seconds	Almost instant 0 seconds
Clap, Clap Pattern The children need to be given a writing activity to do from the screen.	No screens were used.	No screens were used.	No screens were used.	Child did not stop at all – 15 seconds	Child did not stop until name called – 15 secs	2 seconds

NB: 0 seconds represents an instant response and 15 seconds was given to the children with no response (for the purpose of drawing a graph of results, for comparison).

Appendix 10

Graph to show: The Timed Approaches



Timed Approaches in Seconds

Approach Methods

	Child 1	Child 2	Child 3	Child A	Child B	Child C
Singing	0	0	0	N/A	N/A	N/A
Raise Hand - think pair share	3	2	4	6	4	2
Raise Hand - activity	N/A	N/A	N/A	9	8	6
Clap Hands whilst engaged	1	0	2	0	3	0
Silent approach	N/A	N/A	N/A	15	15	2

Appendix 11

Questions Focus Group	Answers		
	Child 1	Child 2	Child 3
When you see a teacher raise their hand – What do you think?	I need to be quiet	I need to listen to the teacher	I need to listen
Do you notice immediately?	Sometimes I don't see if I am busy, but I hear the teacher.	I stop and start singing	It's time to sing
How long do you think it takes for the class to be quiet when the teacher raises a hand?	I don't know	Straight away	Not long
What do you do?	I be quiet	I stop and listen to the teacher.	I listen to the teacher
How do you think other children think?	Some don't see	It's time to stop what they are doing	It's time to stop playing
When a teacher claps a pattern, what do you think?	Copy straight away	I stop and start clapping	I need to copy
Do you react immediately?	Yes	Yes, straight away	yes
What do you do?	I stop talking	I start clapping and listen to the teacher	I start clapping, then listen
How do you think other children think?	Sometimes children don't want to listen, they want to finish their game	Some children don't have good ears	Some children are distracted by others and don't hear the teacher
When a teacher stands at the front of the class and says nothing. What do you think?	I copy the other children and stand still	It is time to stop and listen	It is time to stop and listen
What do you do?	It's time to stop playing	Stop and listen	Stop and listen
How do you think other children think?	It's time to stop and listen	It is time to stop and listen	It is time to stop and listen
Do you prefer a quiet classroom environment to learn in?	Yes	I prefer a calm and quiet room	Yes
Do you think others prefer to work in a quiet classroom?	Yes	Sometimes they do but they are noisy sometimes	Yes

Appendix 12

Interview Answers	
1.	Stop and listen
2.	no
3.	7sec
4.	be quite
5.	?
6.	Go back
7.	no
8.	do it back
9.	?
10.	do nothing
11.	look at them
12.	?
13.	yes
14.	?

1.	de quite
2.	no.
3.	40sec
4.	be quite.
5.	" "
6.	clap same pattern
7.	yes
8.	clap same pattern
9.	clap same pattern
10.	say nothing
11.	say nothing
12.	carry on ^w with work
13.	yes
14.	yes

1.	You need to be quite and also raise yours
2.	Sometimes
3.	around a 1 minute
4.	Stop talking
5.	? I think they have to quiete
6.	You have to clap the pattern back
7.	Yes, ~~one~~
8.	I clap it back
9.	They know they have to clap it back
10.	They are waiting for us to notice to stop chatting
11.	at first they don't know but then they realise
12.	Sometimes
13.	Some do ~~to~~ some don't
14.	