

Appendices

Table of Contents

Appendix A	Application for ethical approval
Appendix B	Letter to parents
Appendix C	Observation schedule
Appendix D	Interview questions
Appendix E	Emotions questionnaire
Appendix F	Pupil engagement questionnaire

Appendix A

Application for ethical approval

RESEARCH STUDENTS

This form is to be completed by the student within **SIX** months for full-time students and **TWELVE** months for part time students, after the commencement of the research degree or following progression to Part Two of your course.

Once complete, submit this form via the ***MyTSD Doctoral College Portal*** at (<https://mytsd.uwtsd.ac.uk>).

This document is also available in Welsh.

RESEARCH 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.

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.

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)

1	Full Name:	Rachel Ann Darby			
2	Tick all boxes that apply:	Member of staff:	☐	Honorary research fellow:	☐
	Undergraduate Student	☐	Taught Postgraduate Student	☒	Postgraduate Research Student

3	Institute/Academic Discipline/Centre:	Yr Athrofa
4	Campus:	Swansea
5	E-mail address:	2307703@student.uwtsd.ac.uk
6	Contact Telephone Number:	07585971637
For students:		
7	Student Number:	2307703
8	Programme of Study:	TAR Cynradd/ PGCE Primary
9	Director of Studies/Supervisor:	Rachel Bendall

SECTION B: Approval for Research Activity

1	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
2	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	☐		
		Institute Research Committee	☐		
		Other (write in) Rachel Bendall	☒	14/03/24	

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, location-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. You may add rows to this table if needed.	
1	UWTSD Research Ethics & Integrity Code of Practice	☒
2	UWTSD Research Data Management Policy	☒
3	<i>BERA Ethical Guidelines for Educational Research, fourth edition (2018)</i>	☒
4	<i>EWC Code of Professional Conduct and Practice (2023)</i>	☒

SECTION D: External Collaborative Research Activity

If there are external collaborators then you should gain consent from the contact persons to share their personal data with the university. If there are no external collaborators then leave this section blank and continue to section E.

1	Institution	
2	Contact person name	
3	Contact person e-mail address	
4	Is your research externally funded?	YES ☐ NO ☐
5	Are you in receipt of a KESS scholarship?	YES ☐ NO ☐
6	Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary YES ☐ NO ☐
7		Employed YES ☐ NO ☐
8	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 ☐
9	Has permission to undertake the research has been provided by the partner organisation?	(If YES attach copy) If NO the application cannot continue YES ☐ NO ☐

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

10	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 (this may be a copy of an email if appropriate).	

SECTION E: Details of Research Activity

1	Indicative title:	Investigating the impact of Sensory Circuits in year 2.		
2	Proposed start date:	08/04/24	Proposed end date:	31/06/24
	Introduction to the Research (maximum 300 words per section) Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the 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>			
3	Purpose of Research Activity The purpose of this research activity is to investigate the effects of sensory circuits on the engagement of year 2 students. I wish to investigate this as it was observed that the children in the year 2 class found it challenging to remain focused and engaged during class and this resulted in some challenging behaviour for the class teacher. The class teacher informed me that movement breaks and physical activities showed improvements in this. I wish to investigate how sensory circuits could be incorporated into the daily routine and to measure effects of participation in this.			
4	Research Question What are the effects of sensory circuits on engagement of year 2 pupils? (this box should expand as you type)			
5	Aims of Research Activity The aim of this project is to investigate the effects of sensory circuits on the engagement of year 2 students. I aim to answer the following: -What are the effects of sensory circuits on engagement of year 2 pupils? -What are the teachers' perceptions regarding the effectiveness and feasibility of integrating sensory circuits into the classroom routine?			
6	Objectives of Research Activity			

	1) To measure a baseline for student behaviour and engagement among year 2 pupils (aged 6-7). 2) To investigate the association between student participation in sensory circuits and changes in student engagement levels. 3) Examine any correlation which may occur between sensory circuit participation and observed improvements in student behaviour. 4) Explore if sensory circuits benefits students with sensory processing issues and their neurotypical counterparts, and its potential to be utilised as a form of universal provision for all pupils in managing student engagement and behaviour. 5) Evaluate teacher perceptions and feedback regarding the effectiveness and the feasibility of integrating sensory circuits into the classroom routine. 6) Provide recommendations for future research and the optimization of sensory circuit implementation.
	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. You do not need to justify the methods here, but should instead describe how you intend to collect the data necessary for you to complete your project.
7	I intend to conduct an exploratory case study using a combination of Quantitative and Qualitative research methods to obtain data to create a richer in-depth picture of the effects of sensory circuits on pupil engagement. For one week the participants of the study will continue with their usual routine without sensory circuits and data will be gathered to formulate a base line for the research. The pupils will then participate in a sensory circuits programme which will include sensory circuit sessions lasting 10-15 minutes 1-2 times a day. The children's engagement and behaviour will be monitored using the same methods as the baseline week for more comparable results. The following research methods will be used to gather data: Observation:

	The learners' engagement and behaviour will be monitored, and noticeable disruptions and disengagement will be documented. The Leuven Scale will be used to support observations with quantitative data so that the effects of sensory circuits can be measured. Questionnaires: A questionnaire will be sent to parents on two occasions, one before the start of the sensory circuits intervention and one following them. This questionnaire will ask parents about the students' attitudes towards school and learning in order to identify if there is a measurable difference from the parents' perspective. Another questionnaire will be given to the class teacher, one before and one after the sensory circuits programme. This aims to gain an understanding of the teacher's perspective of sensory circuits on the children's engagement and its feasibility to be used as universal provision in the future. The participants (pupils) will also be asked to complete a simple brief questionnaire about their own experience and their thoughts on sensory circuits. The children already routinely participate in a "feelings" check in daily. This will be recorded to gain an understanding of if the sensory circuits had an effect on their wellbeing. Focus groups: Focus groups will be used to gain an understanding of how the sensory circuits are impacting the children's education from their point of view. This research method will allow me to obtain qualitative data on the effects that the sensory circuits are having on the learners in their own words and gives the participants a voice in the research. This will also be an opportunity to remind pupils that the research is taking place, keeping them informed and providing them with the opportunity to opt out if they wanted to. The questions used in these focus groups will be open ended as to not be leading and discussion among pupils will be encouraged with as minimal input from the researcher as possible. These focus groups will be audio recorded for the purposes of data collection. Interviews: Interviews may be used as a means of gathering further information if needed. For example, if an answer on a questionnaire by a teacher is unclear, a brief interview may be conducted to expand on the information already provided. These will be audio recorded to maintain accurate qualitative data, and to record that no leading questions are asked during the interview.
	Location of research activity Identify all locations where research activity will take place.
8	A primary school in the south Wales area. (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. If you live in the country where you will do the research then please state this.
9	N/A <i>(this box should expand as you type)</i>

10	Use of documentation not in the public domain: Are any documents <u>NOT</u> publicly available?	NO	☒
		YES	☐
11	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 the current data protection law of the country in question and that of England and Wales. <i>(this box should expand as you type)</i>		

	Does your research relate to one or more of the seven aims of the Well-being of Future Generations (Wales) Act 2015?	YES	NO
12	A prosperous Wales	☐	☒
13	A resilient Wales	☐	☒
14	A healthier Wales	☒	☐
15	A more equal Wales	☒	☐
16	A Wales of cohesive communities	☐	☒
17	A Wales of vibrant culture and thriving Welsh language	☐	☒
18	A globally responsible Wales	☐	☒
19	If YES to any of the above, please give details:		
	A healthier Wales: This research relates to the aim of a healthier Wales as sensory circuits involves movement and activity which is a form of exercise and is encouraged by this aim along with promoting structured and unstructured play (Wellbeing of Future Generations (Wales) Act, 2015). In addition, this aim of the Wellbeing of Future Generations (Wales) Act (2015) encourages outdoor activities and it is my intention to conduct as many of the sensory circuit interventions as possible outside (weather permitting). A more Equal Wales:		

	This research relates to this aim as the research will provide equal opportunities for all pupils. All students in year 2 will be allowed the opportunity to participate and experience any potential benefits of sensory circuit intervention.
~1	

SECTION F: Scope of Research Activity

	Will the research activity include:	YES	NO
1	Use of a questionnaire or similar research instrument?	☒	☐
2	Use of interviews?	☒	☐
3	Use of focus groups?	☒	☐
4	Use of participant diaries?	☐	☒
5	Use of video or audio recording?	☒	☐
6	Use of computer-generated log files?	☐	☒
7	Participant observation with their knowledge?	☒	☐
8	Participant observation without their knowledge?	☐	☒
9	Access to personal or confidential information without the participants' specific consent?	☐	☒
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒
11	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.	☐	☐
	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

If there are no participants then do not complete this section, but go directly to section H.

Who are the intended participants:		YES	NO
1	Students or staff at the University?	☐	☒
2	Adults (over the age of 18 and competent to give consent)?	☒	☐
3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☒	☐
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒
7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.		
	Details of any other participant groups: (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?	
10	How many participants are expected? 30 (this box should expand as you type)
11	Who will the participants be? Year 2 pupils (this box should expand as you type)
12	How will you identify the participants? A class of year 2 pupils which I will be working with on placement has been identified as the sample of participants. All pupils who have provided consent will be included in the study unless they chose to withdraw at some point during the study. Participants for the data collection methods which require a smaller group sample such as the focus groups will be selected through stratified random sampling, a set number of children will be selected from each ability group for the sample ensuring a mixed ability, unbiased sample. Though teachers and parents will not be part of the sample of participants which will participate in sensory circuits they will be asked to complete questionnaires and/ or interviews, the data from which will be used for the study. (this box should expand as you type)

	Information for participants:	YES	NO	N/A
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐
15	Will you obtain written consent for participation?	☒	☐	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
17	If the research is observational, will you ask participants for their consent to being observed?	☒	☐	☐
18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
22	If NO to any of above questions, please give an explanation			
	(this box should expand as you type)			

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

SECTION H: Anticipated Risks

	Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them.		
	If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.		
1	Full risk assessment completed and appended?	Yes	☐
		No	☒
2	Risks to participants For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information		
	Risk to participants: Emotional distress due to change in routine when introducing sensory circuits and when the study ends. Minor injury from physical activity of sensory circuits. However, this is the same level of risk the children would face on a normal day from P.E. lessons or outdoor play. <i>(this box should expand as you type)</i>	How you will mitigate the risk to participants: The emotional distress due to change in routine will be mitigated by providing the pupils with forewarning before the changes are made, preparing them. The children will also be well informed due to the information provided whilst gaining their informed consent for the study. To reduce the risk of injury whilst participating in sensory circuits the pupils will be instructed in how to complete movements and activities safely prior to the intervention and participants will be supervised by the researcher and other members of school staff.	
3	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>		
4	Risks to the investigator For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest		
	Risk to the investigator: I may be at risk of distress if I am unable to get consent from enough participants to conduct my study. <i>(this box should expand as you type)</i>	How you will mitigate the risk to the investigator: I will try to reduce this risk by attempting to recruit as many participants as possible so that I have a higher chance of obtaining a good sample size which will provide some allowances for drop-out rate without adversely affecting the validity of the results of the research. <i>(this box should expand as you type)</i>	
5	University/institutional risks For example: adverse publicity, financial loss, data protection		
	Risk to the University: Risk to the university's reputation if ethical guidance is not followed correctly. <i>(this box should expand as you type)</i>	How you will mitigate the risk to the University: This is mitigated by adhering to the universities research guides and policies and following BERA (2018) guidelines. <i>(this box should expand as you type)</i>	
6	Environmental risks For example: accidental spillage of pollutants, damage to local ecosystems		
	Risk to the environment: None identified <i>(this box should expand as you type)</i>	How you will mitigate the risk to environment: <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
7	Does your research require you to hold a current DBS Certificate?	☒	☐	☐

8	If YES, please give the certificate number. If the certificate number is not available please write "Pending"; in this case any ethical approval will be subject to providing the appropriate certificate number.	001836790006
---	---	--------------

SECTION I: Feedback, Consent and Confidentiality

1	Feedback What de-briefing and feedback will be provided to participants, how will this be done and when?
	Focus groups will be used as a de-briefing and feedback method for the pupil participant. This will be done during the research and following the end of the sensory circuits programme. This will be an opportunity for me to thank the pupils for their participation and give them an opportunity to ask any questions. At the end of questionnaires and interviews to parents and teachers there will be a note thanking them for their participation and an email address will be provided for them to contact me should they want to know more about the research or to ask any questions. <i>(this box should expand as you type)</i>
2	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.
	I have already obtained consent for the research from the school. To obtain consent from parents, consent forms will be sent to parents of all students in the year 2 class along with a letter explaining the research and outlining how confidentiality and data protection will be maintained. These must be completed and returned for the pupil to participate in the research. To gain informed consent from the pupils, sensory circuits will be described and explained along with the research methods that will be used to collect data in terms appropriate for their age. The pupils will then be asked to complete a simple opt in or opt out tick box with visuals to obtain their consent to be involved in the study. For pupils to be included in the research the parents and the pupil must have provided their written consent in the formats listed above. Pupils will also be informed that they can opt out of the research at any time and given opportunities to do this throughout the course of the research at different times including during the focus group sessions. Any paper documentation which contains personal information such as consent forms will be kept on the school premises under lock and key. Any data taken off school premises will be anonymous with no information that can identify the participants. All digital documentation and data will be stored on the university one drive under 2 step authentication and verification protection and all data gathered to be included in the report will be anonymous not containing the names of the participants to adhere to data protection guidance and BERA (2018). <i>(this box should expand as you type)</i>
3	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.
	The anonymity of participants and the school will be maintained throughout this research project in line with BERA (2018) guidelines. And all data obtained will be destroyed once the research period is over. All digital data will be double password protected using two step authentication and verification processes. Any paper documentation with personal information (such as consent forms) will remain at the school under lock and key. <i>(this box should expand as you type)</i>

SECTION J: Data Protection and Storage

	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
1	“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. Any video or audio recordings of participants is considered to be personal data.	x	☐
	If YES, provide a description of the data and explain why this data needs to be collected:		
2	Names will need to be provided on completed consent forms to identify the participants who have given informed consent to be part of the study. During all other aspects of the research the anonymity of participants will be maintained and no names or other personal information will be used. <i>(this box should expand as you type)</i>		
	Does it involve special category data (as defined by the GDPR)?	YES	NO
3	“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),	☐	x
	If YES, provide a description of the special category data and explain why this data needs to be collected:		
4			

	(this box should expand as you type)
--	--------------------------------------

	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	YES	NO
5	Manual files (i.e. in paper form)?	☒	☐
6	University computers?	☐	☒
7	Private company computers?	☐	☒
8	Home or other personal computers?	☒	☐
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☐	☒
10	"Cloud" storage or websites?	☐	☒
11	Other – specify: University One Drive – with 2 step authentication protection.	☒	☐
12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation:		
	Any physical paper consent forms will be stored on the school premises under lock and key. All digital data will be stored on the university one drive protected by two step authentication and verification. If any data is stored on my personal computer the data will be anonymous and contain no personal information and will be password protected. (this box should expand as you type)		

Data Protection			
	Will the research activity involve any of the following activities:	YES	NO
13	Electronic transfer of data in any form?	☐	☒
14	Sharing of data with others at the University outside of the immediate research team?	☐	☒
15	Sharing of data with other organisations?	☐	☒
16	Export of data outside the UK or importing of data from outside the UK?	☐	☒
17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☐	☒
18	Publication of data that might allow identification of individuals?	☐	☒
19	Use of data management system?	☐	☒
20	Data archiving?	☐	☒
21	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and any international equivalents, where appropriate):		
	(this box should expand as you type)		
22	List all who will have access to the data generated by the research activity:		

	<i>(this box should expand as you type)</i>		
23	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	<i>(this box should expand as you type)</i>		
24	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.		
	<i>(this box should expand as you type)</i>		
25	Please indicate if your data will be stored in the UWTSD Research Data Repository (see https://researchdata.uwtsd.ac.uk/). If so please explain. <i>(Most relevant to academic staff)</i>		
	<i>(this box should expand as you type)</i>		
26	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	YES	☒
27	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	☒

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 which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
1	Signature of applicant:	R. Darby	Date: 14.03.24

For STUDENT Submissions:

2	Director of Studies/Supervisor:	Rachel Bendall	Date:
3	Signature:		

For STAFF Submissions:

4	Academic Director/ Assistant Dean:		Date:
5	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 (where appropriate) <i>ONLY TICK IF YOU HAVE ATTACHED A FULL RISK ASSESSMENT</i>
☒	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 Academic Director.

RESEARCH STUDENTS ONLY

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

RESEARCH 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.

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

Appendix B

Letter to Parents

Annwyl Rhiant / Warcheidwad:

Fy enw i yw Rachel Darby ac rwy'n astudio am gymhwyster TAR yn Yr Athrofa, Prifysgol Cymru y Drindod Dewi Sant. Ar hyn o bryd, rydw i'n ddarpar athro/athrawes yn Ysgol Gymraeg Dewi Sant ac yn addysgu yn nosbarth eich plentyn.

Hoffwn wahodd eich plentyn i gymryd rhan yn fy mhrosiect ymchwil. Teitl y prosiect yw "Archwilio effaith Cylchedau synhwyrdd ar ymgysylltiad disgyblion", ac rwy'n anelu at ddarganfod effaith cylchedau synhwyrdd ar ymgysylltiad disgyblion (gan gynnwys cyfranogiad ac ymddygiad). Trwy gyfranogiad eich plentyn, rwy'n gobeithio canfod os ydy sesiynau cylchedau synhwyrdd yn cael effaith gadarnhaol ar ymgysylltiad disgyblion.

Mae cylchedau synhwyrdd yn fath o ymyrraeth integreiddio synhwyrdd. Mae'n cynnwys cyfres o weithgareddau corfforol sydd wedi'u cynllunio i rybuddio, trefnu a thawelu'r plentyn. Rwy'n bwriadu casglu data ar effaith y cylchedau synhwyrdd trwy arsylwi, cyfweiliadau a holiaduron. Mi fydd cyfweiliadau yn cael ei recordio er mwyn sicrhau fod y gwybodaeth wedi ei trawsgrifio yn gywir cyn cael ei ddinistrio.

Bydd pob enw yn cael ei gadw'n hollol gyfrinachol a dim ond minnau a'r staff yn y dosbarth fydd yn ei adnabod. Mae cyfranogiad eich plentyn yn yr astudiaeth hon yn gwbl wirfoddol felly gallwch chi neu'ch plentyn dynnu'n ôl o'r astudiaeth ar unrhyw adeg. Bydd gofyn i'ch plentyn roi ei gydsyniad cyn dechrau'r astudiaeth yn ogystal.

Ar ôl dadansoddi'r data a gafwyd o'r arsylwadau, cyfweiliadau a'r holiaduron byddwn yn falch o roi copi o'r canfyddiadau i chi ar eich cais. Bydd canlyniadau'r ymchwil yn cael eu trafod mewn aseiniad Prifysgol a fydd yn cyfrannu at fy nghwrs TAR. Caiff canlyniadau'r astudiaeth hon eu storio ar gwmwl data sydd â dilysu 2 gam a diogelwch biometreg, a chaiff yr holl ddata crai eu dinistrio unwaith y bydd yr asesiad wedi'i farcio.

Diolch i chi ymlaen llaw am eich amser. Os oes unrhyw gwestiynau'n codi, mae croeso i chi gysylltu â mi ar unrhyw bryd.

Yn gywir,

Rachel Darby

TEITL Y PROSIECT: “Archwilio effaith Cylchedau synhwyrdd ar ymgysylltiad disgyblion”

1. Cadarnhaf fy mod wedi darllen a deall y ffurflen wybodaeth sydd wedi ei dyddio _____ ar gyfer yr astudiaeth uchod.
2. Deallaf fod cyfranogiad fy mhlentyn yn wirfoddol ac rwy'n rhydd i dynnu'r caniatâd yn ôl unrhyw adeg, heb roi rheswm.
3. Rwy'n deall y gall fy mhlentyn ddewis tynnu'n ôl ar unrhyw adeg, heb roi rheswm.
4. Rwy'n deall y bydd y wybodaeth a roddir gan fy mhlentyn yn cael ei defnyddio mewn aseiniad Prifysgol.
5. Deallaf na fydd enw fy mhlentyn yn cael ei ddatgelu ar unrhyw adeg.
6. Cytunaf i fy mhlentyn gymryd rhan yn yr astudiaeth uchod.

Enw'r Ymchwilydd: Rachel Darby

Enw'r plentyn

Llofnod y rhiant

Dyddiad

Ar ôl ei llenwi, dychwelwch erbyn y 9fed o Ebrill.

Diolch.

Dear Parent / Guardian,

My name is Rachel Darby and I am studying for a PGCE qualification at Yr Athrofa, University of Wales Trinity Saint David. I am currently a student teacher within Ysgol Gymraeg Dewi Sant 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 "Exploring the impact of Sensory Circuits on pupil engagement" and I aim to identify the impact of sensory circuits of pupil engagement (including participation and behaviour). Through your child's participation, I hope to ascertain if sensory circuit sessions have a positive impact on pupil engagement.

Sensory circuits are a form of sensory integration intervention. It involves a series of physical activities designed to alert, organise and calm the child. I intend to collect data on the impact of the sensory circuits through observation, interviews, and questionnaires. Interviews will be recorded to ensure that the information has been transcribed correctly before being destroyed.

All names will be kept strictly confidential and will only be known by myself and classroom staff. 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 assent 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 an university assignment that will contribute to my PGCE course. The results of this study will be stored on the University's data cloud with 2-step validation and biometrics security, and all raw data will be destroyed once the assessment has been marked.

Thank you in advance for your time. If any questions do arise, feel free to contact me at your convenience.

Yours sincerely,

Rachel Darby

PROJECT TITLE: "Exploring the impact of Sensory Circuits on pupil engagement"

Please initial box

1. I confirm that I have read and understand the information sheet dated _____ 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 an university assignment. ☐

5. I understand that my child's name will not be disclosed at any time. ☐

6. I agree for my child to take part in the above study. ☐

Name of Researcher: Rachel Darby

Child's name

Parent signature

Date

When completed, please return by the 9th of April.

Thank you.

Appendix C

Observation Schedule

Disruptions include behaviours such as talking over the teacher, shouting out answers, leaving the seat without need, and making non-verbal noises (e.g., whooping). Fidgeting includes swinging on a chair and playing with blue tac/paper/ruler. Teacher intervention includes any occasion where the teacher is required to stop the lesson to speak to a pupil about behaviour. Teacher “shushing” refers to any occasion where the teacher “shushes” a pupil or asks them to be quiet.

Week 1 (Without Sensory circuits)

Tuesday Date:	Lesson: Teacher: Pupils in class:	Disruptions: Fidgeting: Teacher intervention: Teacher “shushing”:	Other observation notes or comments:
Wednesday Date:	Lesson: Teacher: Pupils in class:	Disruptions: Fidgeting: Teacher intervention: Teacher “shushing”:	Other observation notes or comments:
Thursday Date:	Lesson: Teacher: Pupils in class:	Disruptions: Fidgeting: Teacher intervention: Teacher “shushing”:	Other observation notes or comments:

Week 2 (With sensory circuits)

Tuesday Date:	Lesson: Teacher: Pupils in class:	Disruptions: Fidgeting: Teacher intervention: Teacher “shushing”:	Other observation notes or comments:
Wednesday Date:	Lesson: Teacher: Pupils in class:	Disruptions: Fidgeting: Teacher intervention:	Other observation notes or comments:

		Teacher “shushing”:	
Thursday Date:	Lesson: Teacher: Pupils in class:	Disruptions: Figeting: Teacher intervention: Teacher “shushing”:	Other observation notes or comments:

Appendix D

Teacher Interview Questions

English

1. Have you seen any change in the student’s behaviour or engagement during the sensory circuits programme?
2. How feasible do you think it would be to integrate sensory circuits into the classroom routine permanently?

Welsh

1. A ydych chi wedi gweld unrhyw newid yn ymddygiad neu ymgysylltiad y dysgwyr yn ystod rhaglen cylchedau synhwyrdd?
2. Pa mor ymarferol ydych chi'n credu y byddai ymgorffori cylchedau synhwyrdd yn barhaol o fewn i amserlen dysgu y dosbarth?

Appendix E

Emotions Questionnaire

Sut wyt ti'n teimlo heddiw?



trist



pryderus



hapus



crac



blinedig



cyffrous

Dyddiad: _____

Nodiadau: _____

Appendix F

Teacher Interview Questions

Holiadur Ymgysylltiad Disgyblion

Cwestiynau i ddarganfod sut mae'r ysgol yn teimlo i chi! Ticiwch y wynebâu sy'n dangos sut ydych yn teimlo.

1. Sut wyt ti'n teimlo am fynd i'r ysgol?

 Hapus  Mae'n iawn  Ddim yn hapus

2. Wyt ti'n mwynhau dysgu pethau newydd yn y dosbarth?

 Ydw  Weithiau  Na

3. Wyt ti'n gwranddo i cyfarwyddiadau'r athrawes?

 Ydw  Weithiau  Na

4. Wyt ti'n gallu cadw sylw ar yr athrawes pan mae'n siarad?

 Ydw  Weithiau  Na

5. Wyt ti'n mwynhau gwranddo ar stori?

 Ydw  Weithiau  Na

6. Sut wyt ti'n teimlo am aros yn dawel yn y dosbarth?

 Dw i'n hoffi tawelwch  Mae'n iawn  Dw i ddim yn mwynhau'n fod yn dawel

7. Wyt ti'n mwynhau chwarae ar y maes chwarae?

 Ydw  Weithiau  Na

8. Wyt ti'n gallu eistedd yn llonydd yn ystod amser carped?

 Ydw  Weithiau  Na

9. Wyt ti'n gallu canolbwyntio yn ystod amser carped?

 Ydw  Weithiau  Na

10. Wyt ti'n teimlo fod amser ar y carped yn hir?

 Mae ddim yn teimlo'n hir  Mae'n iawn  Mae'n teimlo'n hir iawne