When undertaking a research or enterprise project, Cardiff Met staff and students are obliged to complete this form in order that the ethics implications of that project may be considered.

**If the project requires ethics approval from an external agency such as the NHS or MoD**, you will not need to seek additional ethics approval from Cardiff Met. You should however complete Part One of this form and attach a copy of your NHS application in order that your School is aware of the project.

The document ***Guidelines for obtaining ethics approval*** will help you complete this form. It is available from the [Cardiff Met website](http://www3.uwic.ac.uk/English/uwicresearch/Students/Pages/UsefulDocuments.aspx).

Once you have completed the form, sign the declaration and forward to your School Research Ethics Committee.

**PLEASE NOTE:   
Participant recruitment or data collection must not commence until ethics approval has been obtained.**

**PART ONE**

|  |  |
| --- | --- |
| Name of applicant: | J.M. Navod Thishan Vishvajith Jayathilake |
| Supervisor (if student project): | Mr. Gihan Herath |
| School: | IT and Sciences |
| Student number (if applicable): | st20258180 |
| Programme enrolled on (if applicable): | BSc in Software Engineering |
| Project Title: | Addressing the Shortage of Teachers and Lack of Laboratory Facilities for Higher Education Students in Rural Sri Lanka. |
| Expected Start Date: | 22/11/2024 |
| Approximate Duration: | 3 Months |
| Funding Body (if applicable): | Click here to enter text. |
| Other researcher(s) working on the project: | If your collaborators are external to Cardiff Met, include details of the organisation they represent. |
| Will the study involve NHS patients or staff? | No |
| Will the study involve taking samples of human origin from participants? | No |

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| In no more than 150 words, give a non technical summary of the project |
| This project aims to improve science education in rural Sri Lanka by addressing key challenges such as teacher shortages and lack of laboratory facilities. It proposes a multi-step solution that includes teacher professional development, virtual lab simulations, and student project-based learning. Teachers will receive specialized training to enhance their subject knowledge and teaching skills. Virtual labs will be introduced in schools with limited resources, enabling students to conduct experiments online. A blended learning approach will combine physical and virtual labs to ensure students develop theoretical and practical skills. Additionally, students will engage in project-based learning activities, fostering creativity and critical thinking. The project will be continuously monitored and evaluated to ensure its effectiveness in improving student engagement and academic performance in science subjects. |

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| Does your project fall entirely within one of the following categories: | |
| Paper based, involving only documents in the public domain | No |
| Laboratory based, not involving human participants or human tissue samples | No |
| Practice based not involving human participants (eg curatorial, practice audit) | No |
| Compulsory projects in professional practice (eg Initial Teacher Education) | No |
| If you have answered YES to any of these questions, no further information regarding your project is required.  If you have answered NO to all of these questions, you must complete Part 2 of this form | |

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| **DECLARATION:**  **I confirm that this project conforms with the Cardiff Met Research Governance Framework** | |
| Signature of the applicant: | Date: |
| **FOR STUDENT PROJECTS ONLY** | |
| Name of supervisor:  Mr. Gihan Herath | Date: 22/11/2024 |
| Signature of supervisor: | |

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| --- | --- | --- | --- |
| **Research Ethics Committee use only** | | | |
| Decision reached: | Project approved | |  |
| Project approved in principle | |  |
| Decision deferred | |  |
| Project not approved | |  |
| Project rejected | |  |
| Project reference number: Click here to enter text. | | | |
| Name: Click here to enter text. | | Date: Click here to enter a date. | |
| Signature: | | | |
| Details of any conditions upon which approval is dependant:  Click here to enter text. | | | |

**PART TWO**

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| **A RESEARCH DESIGN** | |
| A1 Will you be using an approved protocol in your project? | Choose an item. |
| A2 If yes, please state the name and code of the approved protocol to be used[[1]](#footnote-1) | |
| Click here to enter text. | |
| A3 Describe the research design to be used in your project | |
| This project will use a mixed-methods approach, combining qualitative and quantitative research methods. The quantitative aspect will involve collecting academic performance data from students before and after the intervention to measure improvements in science knowledge. Qualitative data will be gathered through interviews and focus groups with teachers, students, and school administrators to assess their experiences with the training programs and virtual lab tools.  The study will target rural schools in Sri Lanka, focusing on schools currently facing significant challenges in science education. A stratified random sampling method will be used to select schools from different regions to ensure diversity in the sample. Within these schools, teachers will be selected based on their involvement in the project, and students will be selected based on their participation in science classes.  Pre- and post-assessment data will be collected from student performance in science subjects. This data will be analysed using statistical methods, such as paired t-tests or ANOVA, to measure improvements in academic performance.  Interviews and focus group discussions will be transcribed and analysed using thematic analysis to identify common themes and insights. This will help understand the impact of teacher training, virtual labs, and project-based learning on student engagement, teaching quality, and the overall learning environment. | |
| A4 Will the project involve deceptive or covert research? | Choose an item. |
| A5 If yes, give a rationale for the use of deceptive or covert research | |
| Click here to enter text. | |

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| **B PREVIOUS EXPERIENCE** |
| B1 What previous experience of research involving human participants relevant to this project do you have? |
| Click here to enter text. |
| B2 **Student project only** What previous experience of research involving human participants relevant to this project does your supervisor have? |
| Click here to enter text. |

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| **C POTENTIAL RISKS** |
| C1 What potential risks do you foresee? |
| Include details of risks to the participants, the researcher and the project as a whole. |
| C2 How will you deal with the potential risks? |
| Click here to enter text. |

When submitting your application you **MUST** attach a copy of the following:

* All information sheets
* Consent/assent form(s)

Refer to the document ***Guidelines for obtaining ethics approval*** for further details on what format these documents should take.

1. An Approved Protocol is one which has been approved by Cardiff Met to be used under supervision of designated members of staff; a list of approved protocols can be found on the Cardiff Met website here [↑](#footnote-ref-1)