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University of Edinburgh

MORAY HOUSE SCHOOL OF EDUCATION ETHICS COMMITTEE

Student Application Form
(This form is for completion electronically)

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PROCEDURE FOR ETHICAL APPROVAL

This form should be used for all research carried out by postgraduate students under the auspices of Moray House School of Education. A four-tier system of ethical approval has been developed, as explained in Section 2 on page 2.

This form should be completed by all Postgraduate students (taught or research degree) prior to research commencing. It should be completed in consultation with your main dissertation/thesis supervisor. The final version should be signed by the student and the supervisor and both should retain a copy. A revised form should be submitted if the nature of the research changes significantly during the period of study.

If the research is assessed at Level 0 or Level 1 the form need not be processed by the Moray House Ethics Committee. However a copy of the completed form should be sent to Shona Cunningham, Research Secretary at RKE Office (shona.cunningham@education.ed.ac.uk) for auditing purposes. If the research is considered to be at Level 2 or Level 3 (see Section 2) the application must be sent to Shona Cunningham who will arrange for it to be reviewed by the Moray House Ethics Committee.

(Please note that those students undertaking the Strength & Conditioning MSc and the MSc Performance Psychology should submit applications to the Programme Director of their course rather than the Ethics Committee).
Postgraduate research students should also submit a completed application form to their first year board.

Research should not commence until the supervisor(s) and, where necessary, the Ethics Committee have approved the ethics application.

SECTION 1: STUDENT & PROJECT DETAILS

1.1 Student name: ………Austin Tate…………...………

1.2 Programme:…………MSc in e-Learning……………………………….............…………

1.3 Supervisor(s): ………Hamish Macleod………..………………………..…………….

………………………………………………………..……………..

1.5 Title of Research Project:…… Support for Mixed-Initiative Scenario-Based Training in Virtual Collaboration Environments …………………………………........………………

1.6 Proposed research start date: ……1ˢᵗ May 2012……………….....................………

1.7 Project duration: ……4 Months……………………………...………

SECTION 2: ETHICS CATEGORY & GUIDANCE

2.1 Please tick the box which best describes your proposed research study:

Level 0: your research project is completely desk-based, i.e. does not involve participants. |X|

Level 1: covers research with participants that is 'non-problematic', i.e. the likelihood of physical or emotional risk to the participants is minimal. This may include, for example, analysis of archived data, classroom observation, or questionnaires on topics that are not generally considered 'sensitive'. This research can involve children or young people, if the likelihood of risk to them is minimal. | |

Level 2: covers novel procedures, topics of a more sensitive nature, or the use of atypical participant groups – usually projects in which ethical issues might require more detailed consideration but are unlikely to prove problematic. | |

Level 3: applies to research which is potentially problematic in that it may incorporate an inherent physical or emotional risk to participants. | |

2.2 Ethical guidelines followed (tick all that apply):

British Educational Research Association (BERA)   ☐

British Sociological Association (BSA)   ☐

British Psychological Society (BPS)   ☐

The British Association of Sport and Exercise Sciences (BASES) ☐

Other *(please write in)*   **X**

    School of Education and School of Informatics ethical guidelines

2.3 Does the project require the approval of any other institution and/or ethics committee?

YES ☐   NO X

If YES, give details and indicate the status of the application at each other institution or ethics committee (i.e. submitted, approved, deferred, rejected).

SECTION 3: DESCRIPTION OF THE RESEARCH

Please provide a brief description (no more than 500 words) of your research. This should include, as appropriate, the aims and objectives of the study, the research question and/or hypothesis to be investigated, details of the sample, and data collection methods.

Aims and objectives, research questions and hypotheses:

To study the cognitive psychological foundations for situated social learning.

To identify effective learning methods relevant to mixed-initiative interaction between agents.

To describe the relationship between cognitive psychological activity models and the AI research informed <I-N-C-A> conceptual model of activity.

To explain how the concepts identified could be utilised in a situated training orientated "I-Zone" – a virtual space for intelligent interaction

To create, document and demonstrate a resource base for experimentation and potential re-use on projects in this area.

Background and purpose:

I hope to establish a number of "elements" or "influences" involved in supporting mixed-initiative scenario-based training, relate these to learning principles and experience, and then seek to identify which are found to be the most effective or influential.

I will seek to relate these to my conceptual model of activity <I-N-C-A> – Issues, Nodes (Activities), Constraints and Annotations – to provide a mechanism whereby some level of automation can be offered to support learning activities in a simulated operations centre style of decision making environment.

I will assemble a set of key readings and a technological resource base which can be used to demonstrate the concepts, and which will be designed to allow for future use on student and collaborative research projects.

Plan of work:

A major element the MSc dissertation study and the new area of work for me is to absorb and understand the relevance of a large body of literature on cognitive educational psychology potentially relevant to the area of study. I have deliberately gone into this in depth already during this custom module work in order to accelerate this element and to come close to having read and commented upon much of the necessary readings. I expect to continue to refine and add material to this part of the dissertation, but the literature survey is largely complete.

I expect to develop a technology demonstrator based on a Non-Player Character (NPC) avatar in an "I-Zone" virtual world simulated operations centre and which could access domain knowledge and learning related objects and process knowledge to assist a learner in a mixed-initiative fashion. The aim will be to go

far enough to show the various elements and software in a form that will be sufficient for someone else to replicate and reuse.

I will focus on seeking and demonstrating features of the mixed-initiative tutor which are supported by good teaching and learning practice as found in the literature.

Ethical considerations:

No specific ethical issues arise in the work proposed under the ethics guidelines of the School of Education and the School of Informatics. No data collection from any participant is anticipated in the research study proposed. Hence, the School of Education Student Projects Ethics Form is completed as "Level 0". The results are intended to be openly accessible to all, and potentially to be of positive value to society through influencing training processes, especially in collaborative situations.

If your project is 'Level 0' please go now to Section 8.

SECTION 4: PARTICIPANTS

4.1   How many participants do you intend to include in the research?

4.2   What criteria will be used in deciding on the inclusion and exclusion of participants in the study?

4.3   Are any of the participants likely to be:

under 16 years of age?	YES ☐	NO ☐
children in the care of a Local Authority?	YES ☐	NO ☐
known to have additional support needs?	YES ☐	NO ☐
physically or mentally ill?	YES ☐	NO ☐
vulnerable in other ways?	YES ☐	NO ☐
members of a racial or ethnic minority?	YES ☐	NO ☐
unlikely to be proficient in English?	YES ☐	NO ☐
in a client or professional relationship with the researchers?	YES ☐	NO ☐
in a student-teacher relationship with the researchers?	YES ☐	NO ☐
in any other dependent relationship with the researchers?	YES ☐	NO ☐
have difficulty in reading and/or comprehending any printed material distributed as part of the study?	YES ☐	NO ☐

If YES to any of the above, explain and describe the measures that will be used to protect and/or inform participants (also see section 7 on children & vulnerable adults)

4.4   How will the sample be recruited?

4.5   Will participants receive any financial or other material benefits because of participation?

                                                                YES ☐   NO ☐

If YES, what benefits will be offered to participants and why?

SECTION 5: POTENTIAL RISKS TO PARTICIPANTS/RESEARCHER

5.1　Could the research induce any psychological stress or discomfort in the participants?　　　　　　　　　　　　　　　　　　YES ☐　　NO ☐

If YES, state the nature of the risk and what measures will be taken to deal with such problems.

5.2　Does the research require any physically invasive or potentially physically harmful procedures?　　　　　　　　　　　　　　　YES ☐　　NO ☐

If YES, give details and outline procedures to be put in place to deal with potential problems.

5.3　Does the research involve the investigation of any illegal behaviours?
　　　　　　　　　　　　　　　　　　　　　　　　　　YES ☐　　NO ☐

If YES, give details.

5.4　Is it possible that this research will lead to the disclosure of information about child abuse or neglect?
　　　　　　　　　　　　　　　　　　　　　　　　　　YES ☐　　NO ☐

If YES, indicate the likelihood of such disclosure and your proposed response to this. If there is a real risk of such disclosure triggering an obligation to make a report to Police, Social Work or other authorities, a warning to this effect must be included in the Information and Consent documents.

5.5　Is there any purpose to which the research findings could be put that could adversely affect participants?
　　　　　　　　　　　　　　　　　　　　　　　　　　YES ☐　　NO ☐

If YES, describe the potential risk for participants of this use of the data. Outline any steps that will be taken to protect participants.

5.6　Could this research adversely affect participants in any other way?　YES ☐
　　　　　　　　　　　　　　　　　　　　　　　　　　　　　NO ☐

If YES, give details and outline procedures to be put in place to deal with such problems.

5.7　Could this research adversely affect members of particular groups of people?

　　　　　　　　　　　　　　　　　　　　　　　　　　YES ☐　　NO ☐

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If YES, describe these possible adverse effects and the protection to be put in place against them.

5.8   Is this research expected to benefit the participants, directly or indirectly?

YES ☐   NO ☐

If YES, give details.

5.9   Will the true purpose of the research be concealed from the participants?

YES ☐   NO ☐

If YES, explain what information will be concealed and why. Will participants be debriefed at the conclusion of the study? If not, why not?

5.10   At any stage in this research could researchers' safety be compromised or could the research induce emotional distress in the researchers?

YES ☐

NO ☐

If YES, to either or both, give details and outline procedures to be out in place to deal with potential problems.

Before completing Sections 6 - 8 please refer to the University Data Protection Policy to ensure that the relevant requirements relating to the processing and retention of personal data have been met. It is also advised that applicants familiarise themselves with the: "Researcher checklist for compliance with the Data Protection Act" See:
http://www.recordsmanagement.ed.ac.uk/InfoStaff/DPstaff/DP Research/ResearchAndDPA.htm

SECTION 6: PARTICIPANT INFORMATION AND CONSENT

6.1   Will written consent be obtained from participants?

YES ☐   NO ☐

If YES, attach a copy of the information sheet(s) and consent forms (covering project details, confidentiality, freedom to withdraw at any stage of the project).

If NO, explain why not.

Administrative consent may be deemed sufficient:

a)   for studies where the data collection involves aggregated (not individual) statistical information and where the collection of data presents:

(i)   no invasion of privacy;
(ii)   no potential social or emotional risks:

b)   for studies which focus on the development and evaluation of curriculum materials, resources, guidelines, test items, or programme evaluations rather than the study, observation, and evaluation of individuals.

6.2   Will administrative consent (e.g. from a headteacher) be obtained in lieu of participants' consent?   YES ☐   NO ☐

If YES, explain why individual consent is not considered necessary.

6.3   In the case of participants whose first language is not English, will arrangements be made to ensure informed consent?

                                                              YES ☐   NO ☐
If YES, what arrangements will be made?

If NO, give reasons.

SECTION 7: RESEARCH INVOLVING CHILDREN/VULNERABLE ADULTS
Complete this section only if your research involves minors, (i.e. individuals who are less than 18 years) or vulnerable adults.

7.1   All researchers who plan to work directly with children and vulnerable adults should obtain application forms from the Protecting Vulnerable Groups Scheme (PVG Scheme) See http://www.disclosurescotland.co.uk/apply/

        Have you obtained the necessary, up to date Disclosure Scotland Clearance?

                    YES ☐   NO ☐ AWAITING CLEARANCE ☐

7.2   In the case of minors participating in the research on an individual basis, will the consent or assent of parents be obtained?   YES ☐   NO ☐

If YES, explain how this consent or assent will be obtained.

If NO, give reasons.

7.3   Will the consent or assent (at least verbal) of minors participating in the research on an individual basis be obtained?

YES ☐   NO ☐

If YES, explain how this consent or assent will be obtained.

If NO, give reasons.

7.4   In the case of participants with additional support needs (special educational needs) will arrangements be made to ensure informed consent?

YES ☐   NO ☐

If YES, what arrangements will be made?

If NO, give reasons.

SECTION 8: CONFIDENTIALITY AND HANDLING OF DATA

8.1   Will the research require the collection of personal information from e.g. universities, schools, employers, or other agencies about individuals without their direct consent?

YES ☐   NO X

If YES, state what information will be sought and why written consent for access to this information will not be obtained from the participants themselves.

8.2   Will any part of the research involving participants be audio/film/video taped or recorded using any other electronic medium?

YES ☐   NO ☐

If YES, what medium is to be used and how will the recordings be used?

8.3   Who will have access to the raw data from the research (record forms, documents, electronic media etc.)?

8.4   How will the confidentiality of data, including the identity of participants, be ensured?

8.5   Specify where/by whom the datafiles/audio/video tapes, etc. will be retained after the completion of the period of study, how long they will be retained and how they will eventually be disposed of.

8.6   How do you intend for the results of the research to be used? Publications and feed into projects.   Open publication, blog entries and feed into I-X projects.

8.7   Will feedback of findings be given to participants? YES ☐ NO ☐ N/A X

If YES, how and when will this feedback be provided?

SECTION 9: CONFLICT OF INTEREST

The University has a 'Policy on the Conflict of Interest' (see:
http://www.docs.csg.ed.ac.uk/HumanResources/Policy/Conflict_of_Interest.pdf
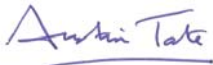
An example of a conflict of interest is given as follows:

"compromising research objectivity or independence in return for financial or non-financial benefit for him/herself or for a relative or friend." (Policy on Conflict of Interest, University of Edinburgh, p. 3)

The policy also states that the responsibility for avoiding a conflict of interest, in the first instance, lies with the individual, but that potential conflicts of interest should always be disclosed, normally to the student supervisor, line manager or Head of Institute. Failure to disclose a conflict of interest or to cease involvement until the conflict has been resolved may result in disciplinary action.

9.1   Does your research involve a conflict of interest as outlined above YES ☐ NO X

If YES, give details.

SECTION 10: SIGNATURES

Student signature:……………………………….................   **Date:** 30th April 2012

Supervisor signature:………………………......................   **Date:** ……………..…

N.B. Have you attached copies of participant information sheet(s) and consent sheet(s) if appropriate? Have you checked through your application to ensure that you have answered all relevant questions?

Please note all completed forms should be sent to Shona Cunningham, Research Secretary, RKE Office, Moray House School of Education (s.cunningham@ed.ac.uk)