University of Victoria

Human Research Ethics Board
Application for Research Ethics Approval for Human Participant Research

The following application form is an institutional protocol based on the
Tri-Council Policy Statement on the Ethical Conduct for Research Involving Humans

Instructions:

1. Download this application and complete it on your computer. Hand written applications will not be accepted. You will receive a response from the HREB within 4-6 weeks.
2. Use the *Human Research Ethics Board Annotated Guidelines* to complete this application: http://www.uvic.ca/research/conduct/home/regapproval/humanethics/index.php.
   Note: This form is linked to the guidelines. Access links in blue text by hitting CTRL and clicking on the blue text.
3. Submit one (1) original and two (2) copies of this completed, signed application with all attachments to: Human Research Ethics, Administrative Services Building (ASB), Room B202, University of Victoria, PO Box 1700 STN CSC, Victoria BC V8W 2Y2 Canada
4. Do not staple the original copy (clips O.K.).
5. If you need assistance, contact the Human Research Ethics Assistant at (250) 472-4545 or ethics@uvic.ca
6. Please note that applications are screened and will not be entered into the review system if incomplete (e.g., missing required attachments, signatures, documents). You will be notified in this case.
7. Once approved, a Request for Annual Renewal must be completed annually for on-going projects for continuing Research Ethics approval.

A. Principal Investigator

If there is more than one Principal Investigator, provide their name(s) and contact information below in Section B, Other Investigator(s) & Research Team.

Last Name: Perry First Name: Bernadette

Department/Faculty: Computer Science **UVic** Email: bernadet@uvic.ca

Phone: 250-858-9393 Fax:

Mailing Address including postal code:
Department of Computer Science
University of Victoria
Engineering/ Computer Science Building (ECS), Room 504
PO Box 1700, STN CSC
Victoria, BC
Canada V8W 2Y2

Title/Position: (Must have a UVic appointment or be a registered UVic student)

☐ Faculty ☐ Undergraduate **x** Ph.D. Student

FOR HUMAN RESEARCH ETHICS' USE ONLY		Protocol No.
HREB Chair Approval Signature:		Date:
Start Date:	Annual Renewal Due:	Approval Expiry:

☐ Staff ☐ Master's Student ☐ Post-Doctoral

☐ Adjunct or Sessional Faculty (Appointment start and end dates):_____

Students: Provide your Supervisor's information:

Name: Margaret-Anne Storey Email: mstorey@uvic.ca

Department/Faculty: Department of Computer Science Phone: 250-472-5713

Graduate Students: Provide your Graduate Secretary's email address:

All PIs: Provide any additional contacts for email correspondence:

Name: Email:

Name: Email:

B. Project Information

Project Title: Extending ARIS for Greater Collaborative Potential

Anticipated Start Date for Recruitment / Data Collection: Oct 23 2015 Anticipated End Date: Nov. 30 2015

Geographic location(s) of study: University of Victoria BC CLE C239 and on campus

Keywords: 1. Collaboration 2. Augmented Reality 3. Social Media /Twitter 4. Game-based learning

Is this application connected/associated/linked to one that has been recently submitted? ☐ Yes **X** No

If yes, provide further information:

All Current Investigator(s) and Research Team:
(*Include all current co-investigators, students, employees, volunteers, community organizations.)*

Contact Name	Role in Research Project	Institutional Affiliation	Email or Phone
Steven Bjornson	co-investigator		stevefromabove@gmail.com
Khoipham Ca	co-investigator		khoipham.ca@gmail.com
Peter Lebo	co-investigator		plebo@uvic.ca
Kaileen Mcculloch	co-investigator		kaileenm@uvic.ca

For Faculty Only: Any Graduate Student Research Assistants who will use the data to fulfill UVic thesis/ dissertation/ academic requirements: Include all current Graduate Student Research Assistants

Student/Research Assistant	Email or Phone

C. Multi-Jurisdictional Research

Does the proposed project require Research Ethics Board (REB) approval from another research ethics board(s)? ☐ Yes ☒ No

If yes, list the other research ethics board from which you or research team members have sought approval or will seek approval:

(Attach proof of having applied to other research ethics board(s). Please forward approvals upon receiving them. Be assured that UVic ethics approval may be granted prior to receipt of other research ethics board approvals.)

If you have answered "yes" above, please indicate your role in the multi-jurisdictional research project (Check all that apply):

☐ Recruiting participants

☐ Collecting data

☐ Analyzing data (with or without identifiers) collected by you and/or UVic research team members

☐ Analyzing data that *contains* identifiers: Data to be collected by non-UVic research team members as outlined in this application.

☐ Analyzing data that *does not* contain identifiers: Data to be collected by non-UVic research team members as outlined in this application.

☐ Dissemination of results via publications, reports, conferences, internet, etc.

☐ Other *(explain):*

D. Agreement and Signatures

For further information, on signature requirements, please see the Guidelines for Signatures.

Principal Investigator and Student Supervisor affirm that:

- *I have read this application and it is complete and accurate.*
- *The research will be conducted in accordance with the University of Victoria regulations, policies and procedures governing the ethical conduct of research involving human participants and all relevant sections of the TCPS 2.*
- *The conduct of the research will not commence until ethics approval has been granted.*
- *The researcher(s) will seek further HREB review if the research protocol is modified.*
- *Adequate supervision will be provided for students and/or staff.*

Principal Investigator	**Student's Supervisor or co-Supervisor (for student applicants only)**
_____	_____
Signature	*Signature*

Bernadette Perry
Print Name Bernadette Perry

Print Name

Date October 26, 2015

Date

Chair, Director or Dean
(*To be signed by the person to whom the PI, or student's supervisor reports, and must not be the same person as the PI or student's supervisor. The Research Ethics Office cannot accept applications with duplicate signatures*)

I affirm that adequate research infrastructure is available for the conduct and completion of this research.

Signature

Print Name

Date

E. Project Funding

Have you applied for funding for this project? ☐ Yes **X** No If yes, please complete the following:

Source of Project Funding	Funding Applied	Funding Approved	Project Title Used in Funding Application (or additional information)
	☐ Yes ☐ No	☐ Yes ☐ No	
	☐ Yes ☐ No	☐ Yes ☐ No	
	☐ Yes ☐ No	☐ Yes ☐ No	
	☐ Yes ☐ No	☐ Yes ☐ No	

Will this project receive funding from the US *National Institutes of Health (NIH)*?

☐ Yes ☒ No

If yes, provide further information:

If you have applied for funding, have you submitted a funding application or contract notification to the UVic Office of Research Services?

☐ Yes ☒ No

Have you previously submitted an In-Principle Research Ethics Application for release of preparatory research funds associated with this project?

☐ Yes ☒ No

F. Scholarly Review

What type of scholarly review has this research project undergone?

☐ External Peer Review (*e.g., granting agency*)

☐ Supervisory Committee or Supervisor—required for all student research projects

☐ None

☒ Other, please explain: **this research project will be approved by Dr. Storey, our professor for CSCW 586A before research commences**

G. Other Approvals and Consultations

Do you require additional approvals or consultations from other agencies, community groups, local governments, etc.?

☐ Yes, attached ☐ Yes, will forward as received ☒ No

(Attach proof of having made request(s) for permission, or attach approval letter(s). Please forward approvals upon receiving them. Be assured that ethics approval may be granted prior to receipt of external approvals.)

If **Yes**, please check all that apply:

☐ **School District, Superintendent, Principal, Teacher.** Please list the school districts or schools:

☐ **Vancouver Island Health Authority (VIHA)** *if you are UVic faculty, student or staff and will be conducting minimal-risk research under the auspices of the Vancouver Island Health Authority (VIHA), involving VIHA staff, patients, health records, sites and/or recruitment through VIHA sites (including recruitment via poster placement), you must use the* **Joint UVic/VIHA application form**. *For above minimal risk research, please contact the UVic Research Ethics Office.*

☐ **Other regional government authority**, please explain:

☐ **Community Group (e.g., formal organization, informal collective),** please explain:

☐ **Other Research Ethics Board (REB) Approval**, please explain:

☐ **UVic Biosafety Committee Approval.** *Attach your Biosafety Approval, or your correspondence with the Biosafety Committee, to this application. Note that Research Ethics Approval is contingent on Biosafety Approval.*

☐ **Other Approval**, please explain:

H. Researcher(s) Qualifications

In light of your research methods, the nature of the research, and the characteristics of the participants, what training, qualifications, or personal experiences do you and/or your research team have (*e.g., research methods course, language proficiency, committee expertise, training on the equipment to be used)*?

FRAN 500: Introduction to Bibliography and Research Methods

FRAN 502: Studies in Applied Linguistics -Computer Assisted Language Learning (CALL): theories & practices

Extensive research on game-based learning and augmented realities during MA:

Explorez: Gamifying French as a second language (FL2) through quest-based learning and augmented realities

I. Research Involving Aboriginal Peoples of Canada (Including First Nations, Inuit and Métis)

The TCPS 2 (Chapter 9) highlights the importance of community engagement and respect for community customs, protocols, codes of research practice and knowledge when conducting research with Aboriginal peoples or communities. "Aboriginal peoples" includes First Nations, Inuit and Métis regardless of where they reside or whether or not their names appear on an official register. The nature and extent of community engagement should be determined jointly by the researcher and the relevant community or collective, taking into account the characteristics and protocols of the community and the nature of the research.

1. Conditions of the Research

1a. Will the research be conducted on (an) Aboriginal – First Nations, Inuit and Métis – lands, including reserves, Métis settlement, and lands governed under a self-government agreement or an Inuit or First Nations land claims agreement?

☒ No

☐ Yes, provide details:

1b. Do any of the criteria for participation include membership in an Aboriginal community, group of communities, or organization, including urban Aboriginal populations?

☒ No

☐ Yes, provide details:

1c. Does the research seek input from participants regarding a community's cultural heritage, artifacts, traditional knowledge or unique characteristics?

☐ Yes ☒ No

1d. Will Aboriginal identity or membership in an Aboriginal community be used as a variable for the purposes of analysis?

☐ Yes ☒ No

1e. Will the results of the research refer to Aboriginal communities, peoples, language, history or culture?

☐ Yes ☒ No

2. Community Engagement

2a. If you answered "yes" to questions a), b), c), d) or e), have you initiated or do you intend to initiate an engagement process with the Aboriginal collective, community or communities for this study?

☐ Yes ☐ No

2b. If you answered "yes" to question 2a, describe the process that you have followed or will follow with respect to community engagement. Include any documentation of consultations (*i.e. formal research agreement, letter of approval, email communications, etc.*) and the role or position of those consulted, including their names if appropriate:

3. No community consultation or engagement

If you answered "no" to question 2a, briefly describe why community engagement will not be sought and how you can conduct a study that respects Aboriginal communities and participants in the absence of community engagement.

J. International Research

4. Will this study be conducted in a country other than Canada?

☐ Yes ☒ No

If yes, describe how the laws, customs and regulations of the host country will be addressed (*consider research Visas, local Institutional Research Ethics Board requirements, etc.*):

K. Description of Research Project

5. Purpose and Rationale of Research

Briefly describe in non-technical language:
Please use 150 words or fewer.

5a. The research objective(s) and question(s)

This research consists of the development and implementation of collaborative game elements for the ARIS platform. Our research question asks: can the integration of Twitter into the ARIS platform add dynamic communication and benefit the user experience through extended interactivity?

5b. The importance and contributions of the research

Our planned implementation is the integration of a Twitter function for the game. We firmly believe that by having this service, user experience of ARIS will improve. The idea behind Augmented Reality is the integration of digital information into the user's environment in real-time, in order to simulate aspects of the real world, which inevitably includes human-to-human interaction. However, the state of ARIS right now does not have a platform for such interaction. By implementing the proposed solution(s), we aim to enhance user experience by allowing user-to-user communication directly in the application.

5c. If applicable, provide background information or details that will enable the HREB to understand the context of the study when reviewing the application.

ARIS is an open-source augmented reality engine for creating and playing augmented reality games and interactive stories. The community includes a range of users (artists, educators, game designers) many of which are using it for educational purposes because it is user-friendly, and includes an online community to address questions and feedback. The community itself is also collaborative; the platform is open source, and members connect via Google Groups, Google hangouts, and Global Game Jams. However, the ARIS platform itself lacks collaborative game elements, and the community has expressed interest in the addition of such elements.

L. Recruitment

6. Recruitment and Selection of Participants

6a. Briefly describe the target population(s) for recruitment. Ensure that all participant groups are identified (*e.g., group 1 - teachers, group 2 - administrators, group 3 - parents*).

Group 1- Users of a game constructed in the ARIS platform, likely UVic students since the game developed incorporates the UVic campus, but could include any individual interested in the playing the game.

6b. Why is each population or group of interest?

Group 1- Since we aim to enhance user experience, the users feedback and perspectives are of great importance to this research.

6c. What are the *salient* characteristics of the participants for your study? (*e.g., age, gender, race, ethnicity, class, position, etc.*)? List all inclusion and exclusion criteria you are using.

The only salient characteristic is that participants have interest in playtesting an augmented reality ARIS game with the integrated Twitter component.

6d. What is the desired number of participants for each group?

Group 1: 10-15

6e. Provide a detailed description of your recruitment process. Explain:

i) List all source(s) for information used to contact potential participants (*e.g., personal contacts, listserves, publicly available contact information, etc.). Clarify which sources will be used for which participant groups:*

Group 1 will be contacted via email (listserves)

ii) List all methods of recruitment (*e.g., in-person, by telephone, letter, snowball sampling, word-of-mouth, advertisement, etc.) If you will be using "snowball" sampling, clarify how this will proceed (i.e., will participants be asked to pass on your study information to other potential participants?). Clarify which methods will be used for which participant groups.*

Group 1: email

iii) If you will be using personal and/or private contact information to contact potential participants (as stated above), have the potential participants given permission for this, or will you use a neutral third party to assist you with recruitment? *Note that this is not a concern when public and/or business contact information is used.*

We will not be using personal and/or private contact information to contact potential participants.

iv) Who will recruit/contact participants (*e.g., researcher, assistant, third party, etc.) Clarify this for each participant group.*

Group 1- researchers

v) List and explain any relationship between the members of the research team (including third party recruiters or sponsors/clients of the research) and the participant(s) (*e.g., acquaintances, colleagues*). Complete item 7 if there is potential for a power relationship or a *perceived* power relationship (*e.g., instructor-student, manager-employee, etc.*). If you have a close relationship with potential participants (*e.g., family member, friend, close colleague, etc.)* clarify here the safeguards that you will put in place to mitigate any potential pressure to participate.

Group 1- these participants will likely be students from the University of Victoria, therefore possibly colleagues.

In chronological order (if possible) describe the steps in the recruitment process. *(Include how you will screen potential participants where applicable).* Consider where in the process permission of other bodies may be required.

Email a call to participate to potential participants through UVic listsserves.

7. Power Relationships (Dual-Role and Power-Over)

If you are completing this section, please refer to the:
Guidelines For Ethics in Dual-Role Research for Teachers and Other Practitioners and the TCPS 2, Article 3.1 and Article 7.4.

Are you or any of your co-researchers in any way in a power relationship, including dual-roles, that could influence the voluntariness of a participant's consent? Could you or any of your co-researchers potentially be *perceived* to be in a power relationship by potential participants? *Examples of "power relationships" include teachers-students, therapists-clients, supervisors-employees and possibly researcher-relative or researcher-close friend where elements of trust or dependency could result in undue influence.*

☐ Yes ☒ No ☐ Varies

If *yes* or *varies*, describe below:

i) The nature of the relationship:

ii) Why it is necessary to conduct research with participants over whom you have a power relationship:

iii) What safeguards (steps) will be taken to ensure voluntariness and minimize undue influence, coercion or potential harm:

iv) How will the power or dual-role relationship and associated safeguards be explained to potential participants:

Recruitment Materials Checklist:

Attach all documents referenced in this section *(check those that are appended):*

x Script(s) – in-person, telephone, 3rd party, e-mail, etc.

☐ Invitation to participate *(e.g., Psychology Research Participation System Posting)*

☐ Advertisement, poster, flyer

☐ None; please explain why *(e.g., consent form used as invitation/recruitment guide)*

M. Data Collection Methods

8. Data Collection

Use the following sections in ways best suited to explain your project. If you have more than one participant group, be sure to explain which participant group(s) will be involved in which activity/activities or method(s).

8a. Which of the following methods will be used to collect data? *Check all that apply.*

x **Interviewing participants:** ☐ in-person ☐ by telephone ☐ using web-based technology (explain): Google Hangout x Conducting group interviews or discussions (including focus groups)	☐ **Attach draft interview questions**
☐ **Administering a questionnaire or survey:** ☐ In person ☐ by telephone ☐ mail back ☐ email x web-based* (see below) ☐ Other, describe: *If using a web program with a server located in the United States (e.g., SurveyMonkey), or if there are other reasons that the data will be stored in the US (e.g., use of US-based cloud technology, sharing data with US colleagues, etc.), you must inform participants that their responses may be accessed via the U.S. Patriot Act. Please add the following to the consent form(s):	☐ **Attach questionnaire or survey:** ☐ standardized (one with established reliability and validity) ☐ non-standardized (one that is un-tested, adapted or open-ended)

"Please be advised that this research study includes data storage in the U.S.A. As such, there is a possibility that information about you that is gathered for this research study may be accessed without your knowledge or consent by the U.S. government in compliance with the U.S. Patriot Act."	
☐ **Administering a computerized task** (*describe in 8b or attach details*)	
☐ **Observing participants** *In 8b, describe who and what will be observed. Include where observations will take place. If applicable, forward an observational data collection sheet for review.*	
☐ **Recording of participants and data using**: x audio ☐ video x photos or slides ☐ note taking ☐ flipcharts ☐ data collection sheet *(attach)* ☐ other:	☐ Images used for analysis x Images used in disseminating results *(include release to use participant images in consent materials)*
☐ **Using human samples** (*e.g., saliva, urine, blood, hair*) *Attach your Biosafety Approval, or your correspondence with the Biosafety Committee, to this application. Note that Research Ethics Approval is contingent on Biosafety Approval.*	
☐ **Using specialized equipment/machines** *(e.g., ultrasound, EEG, prototypes etc.)* or other. *(e.g., testing instruments that are not surveys or questionnaires).* Please specify:	
☐ **Using other testing equipment not captured under other categories.** Please specify:	
☐ **Collecting materials supplied by, or produced by, the participants** *(e.g., artifacts, paintings, drawings, photos, slides, art, journals, writings, etc.)* Please specify:	
☐ **Analyzing secondary data** or secondary use of data (Refers to information/data that was originally gathered for a purpose other than the proposed research and is now being considered for use in research (*e.g., patient or school records, personal writings, lesson plans, etc.).* ☐ Secondary data involving anonymized information (Information/data is stripped of identifiers by another researcher or institution **before** being shared with the applicant*).* ☐ Secondary data with identifying information (Data contains names and other information that can be linked to individuals*,(e.g., student report cards, employment records, meeting minutes, personal writings).* *In item 8b describe the source of the data, who the appropriate data steward is, and explain whether (and how) consent was or will be obtained from the individuals for use of their data.*	
☐ **Other:** Please specify:	

8b. Provide a sequential description of the procedures/methods to be used in your research study. Be sure to provide details for all methods checked in section 8a. Clarify which procedures/methods will be used for each participant group. Indicate which methods, if any, will be conducted in a group setting. *List all of the research instruments and interview/focus group questions, and append copies (if possible) or detailed descriptions of all instruments. If not yet finalized, provide drafts or sample items/questions.*

Email request to participate and provide link for pre-use questionnaire via Fuidsurveys

Accompany users during playtesting to record audio of their interactions with eachother and the system

Email post-use questionnaire to participants

Follow-up email asking participants to participate in a focus group session for more in depth questions regarding the user experience with the tool/ game.

8c. Where will participation take place for each data collection method/procedure? *Provide specific location*, (*e.g., UVic classroom, private residence, participant's workplace). Clarify the locations for each participant group and/or each data collection method.*

Participants will fill in the pre and post questionnaires online at a time and place of their convenience.

Playtesting will take place on the University Campus (for example the SUB, Bookstore, UVic Centre, Finnerty Gardens, Library, etc.)

The focus group will take place in the UVic Digital Language Learning Lab Clearihue C239

8d. For each method, and in total, how much time will be required of participants? *Clarify this for each participant group, each data collection method, and any other research related activities.*

pre-questionnaire: 10-15 minutes

playtest the game: 1 hour

post-questionnaire: 10-15 minutes

focus group : 30 minutes

maximum total 2 hours

8e. Will participation take place during participants' office/work hours or instructional time?

x No ☐ Yes. Indicate whether permission is required *(e.g., from workplace supervisor, school principal, etc.)* and how this will be obtained:

Data Collection Methods Checklist:

Attach all documents referenced in this section *(check those that are appended. Where draft versions are appended please ensure that final versions are submitted when available. If final versions differ significantly after you have obtained Research Ethics approval, you will need to submit a Request for Modification:*

☐ Standardized Instrument(s)

x Survey(s), Questionnaire(s)

x Interview and/or Focus Group Questions

☐ Observation Protocols

☐ Other:

N. Possible Benefits, Inconveniences, and Risks of Harm to Participants

9. Benefits

Identify any potential or known benefits associated with participation and explain below.
Keep in mind that the anticipated benefits should outweigh any potential risks.

x To the participant **x** To society **x** To the state of knowledge

10. Inconveniences

Identify and describe any known or potential inconveniences to participants:
Consider all potential inconveniences, including total time devoted to the research.

An inconvenience is a loss of time (2 hours) to participants.

11. Level of Risk

The TCPS 2 definition of "minimal risk research" is as follows:

> *"Research in which the probability and magnitude of possible harms implied by participation in the research is no greater than those encountered by the participant in those aspects of their everyday life that relate to the research."*

Based on this definition, do you believe your research qualifies as "minimal risk research"?

x Yes it is minimal risk. ☐ No, it is not minimal risk.

Explain your answer with reference to the risks of the study and the vulnerability of the participants:

12. Estimate of Risks of Harm

Consider the inherent foreseeable risks associated with your research protocol and complete the table below by putting an X in the appropriate boxes. Be sure to take into account the vulnerability of your target population(s) if applicable:

Potential Risks of Harm	Very unlikely	Possibly	Likely
i) Emotional or psychological discomfort, such as feeling demeaned or embarrassed due to the research	x	☐	☐
ii) Fatigue or stress	x	☐	☐
iii) Social risks, such as stigmatization, loss of status, privacy and/or reputation	x	☐	☐

iv) Physical risks such as falls	x	☐	☐
v) Economic risk (e.g., job security, salary loss, etc.)	x	☐	☐
vi) Risk of incidental findings (*See Article 3.4 of the TCPS 2 for more information*)	x	☐	☐
vii) Other risks:	x	☐	☐

13. Possible Risks of Harm

If you indicated in Item 12 (i) to (vii) that any risks of harm are *possible* or *likely*, please explain below:

13a. What are the risks? *(i.e., elaborate on risks you have identified above)*

13b. What will you do to try to minimize, mitigate, or prevent the risks?

13c. How will you respond if the harm occurs? *(i.e., what is your plan?)*

13d. If you have indicated that there is a risk of Incidental Findings (vi) please outline your proposed protocol for information and/or action.

13e. If one or more of your participant groups could be considered vulnerable please describe any specific considerations you have built into the protocol to address this.

14. Risk to Researcher(s)

14a. Does this research study pose any risks to the researchers, assistants and data collectors?

No

14b. If there are any risks, explain the nature of the risks, how they will be minimized, and how you will respond if they occur.

15. Deception

Will participants be fully informed of everything that will be required of them prior to the start of the research session?

x Yes ☐ No *(If no, complete the Request to Use Deception form on the ORS website)*

O. Incentives, Reimbursement and Compensation

16a. Is there any incentive, monetary or otherwise, being offered for participation in the research *(e.g., gifts, honorarium, course credits, etc.)*

☐ Yes ☒ No

If yes, explain the nature of the incentive(s) and why you consider it necessary. *Also consider whether the amount or nature of the incentive could be considered a form of undue inducement or affect the voluntariness of consent. Clarify which participant groups will be provided with which incentives*.

16b. Is there any reimbursement or compensation for participating in the research *(e.g., for transportation, parking, childcare, etc.)*

☐ Yes ☒ No

If yes, explain the nature of reimbursement or compensation and why you consider it necessary. *Also consider whether the amount of reimbursement or compensation could be considered a form of undue inducement or affect the voluntariness of consent. Clarify which participant groups will be provided with which kind of reimbursement or compensation.*

16c. Explain what will happen to the incentives, reimbursement or compensation if participants withdraw during data collection or any time thereafter *(e.g., compensation will be pro-rated, full compensation will be given, etc.)*

P. Free and Informed Consent

Consent encompasses a process that begins with initial contact and continues through to the end of the research process. Consult Article 3.2 of the TCPS 2 and Appendix V of the Guidelines for further information.

17. Participant's Capacity (Competence) to Provide Free and Informed Consent

Capacity refers to the ability of prospective or actual participants to understand relevant information presented about a research project, and to appreciate the potential consequences of their decision to participate or not participate. See the TCPS 2, Chapter 3, section C, for further information.

Identify your potential participants: *(Check all that apply.)*

Competent	**Non-Competent**
☒ Competent adults ☐ A protected or vulnerable population (*e.g., inmates, patients*)	☐ Non-competent adults: ☐ Consent of family/authorized representative will be obtained ☐ Assent of the participant will be obtained (note that assent of the participant is always required)
☐ Competent youth aged 13 to 18: ☐ Consent of youth will be obtained and parental/guardian consent is required, *due to institutional requirements (such as school districts) or due to the nature of the research*	☐ Non-competent youth: ☐ Consent of parent/guardian ☐ Assent of the youth will be obtained (note that assent of the participant is always

(e.g., risks, etc.) ☐ Consent of youth will be obtained, parents/guardians will be informed ☐ Consent of youth will be obtained, parents/guardians will *NOT* be informed ☐ Other, explain:	required)
☐ Competent children under 13 (*who are able to provide fully informed consent)*: ☐ Consent of child will be obtained and consent of parent/guardian will be obtained ☐ Other, explain:	☐ Non-competent children *(young children and/or children with limited abilities to provide fully informed consent)*: ☐ Consent of parent/guardian ☐ Assent of the child will be obtained (note that assent of the participant is always required)

18. Means of Obtaining and Documenting Consent and/or Assent:
Check all that apply, consider all of your participant groups, attach copies of relevant materials, complete item 19:

x Signed consent (*Attach consent form(s) - see template available)*
☐ **Verbal** consent (*Attach verbal consent script(s) - see template available*.)

Explain in 19 why written consent is not appropriate and how verbal consent will be documented.

x Letter of Information for **Implied** consent (*e.g., anonymous, mail back or web-based survey. Attach information letter, see template)*
☐ **Signed** or **Verbal assent** for non-competent participants *(Attach assent form(s), or verbal assent script(s)).*

Explain how verbal assent will be documented in 19.
☐ **Other** means. **Explain** in 19 and provide justification.
☐ Consent **will not be obtained**. See TCPS 2 Articles 3.5 and 3.7. **Explain** in 19**.**
☐ **Signed** consent from the parents/guardians for youth/child participants *(Attach consent form(s)).*

Explain how parents/guardians will provide informed consent for child/youth participants in 19.

☐ **Information letters** for the parents/guardians of youth/child participants *(Attach information letter(s)). If consent will not be obtained from parents/guardians and the parents/guardians will not be informed, explain why not in 19.*

19. Informed Consent

Describe the exact steps (chronological order) that you will follow in the process of explaining, obtaining, and documenting informed consent. Ensure that consent procedures for all participant groups are identified (e.g., group 1 - teachers, group 2 – parents, group 3 – students). Be sure to indicate when participants will first be provided with the consent materials *(e.g., prior to first meeting with the researcher?).* If consent will not be obtained, explain why not with reference to the TCPS 2 Articles 3.5 and 3.7.

Participants will be provided with the letter of Information for Implied consent when directed to both the pre and post questionnaires

Participants choosing to participate in playtesting will meet the researcher in the UVic Digital Language Lab (CLE C239) the written consent form will be supplied, the researcher will explain the proposed research, and ask participants to read and sign the document and return to the researcher if they wish to participate.

Any participant agreeing to participate in the foolw-up focus group will be supplied the written consent form, the researcher will explain the focus group process and then ask participants to read and sign the document and return to the researcher if they wish to participate.

20. Ongoing Consent

Article 3.3 of the TCPS 2 states that consent shall be maintained throughout the research project. Complete this section if the research involves interacting with participants over multiple occasions (including review of transcripts, etc.), has multiple data collection activities, and/ or occurs over an extended period of time.

20a. Will your research occur over multiple occasions or an extended period of time *(including review of transcripts)*?

☐ Yes **x** No

20b. If yes, describe how you will obtain and document ongoing consent. If consent procedures differ for each group or activity, please clarify each group or activity that you are referring to.

21. Participant's Right to Withdraw

Article 3.1 of the TCPS2 states that participants have the right to withdraw at any time and can withdraw their data and human biological materials.

Describe what participants will be told about their right to withdraw from the research at any time (*i.e., who to contact and how*). If compensation is involved, explain what participants will be told about compensation if they withdraw. *If you have different participant groups and/or different data collection methods, clarify the different procedures for withdrawing as necessary.*

Withdrawal of Participation:

- You may withdraw at any time without explanation or consequence.
- Should you withdraw, we will send you a form that you may sign if you agree to let the researcher use partial data.

22. What will happen to a person's data if s/he withdraws part way through the study or after the data have been collected/submitted? If applicable, include information about visual data such as photos or videos. *If you have different participant groups and/or different data collection methods, clarify the different procedures for withdrawing as necessary. Ensure this information is included in the consent documents.*

x Participant will be asked if he/she agrees to the use of his/her data. Describe how this agreement will be documented:

We will include the following in the participant consent form: "You may withdraw at any time without explanation or consequence. Should you withdraw, we will send you a form that you may sign if you agree to let the researcher use partial data".

☐ It will not be used in the analysis and will be destroyed.

☐ It is logistically impossible to remove individual participant data (*e.g., anonymously submitted data*).

☐ When linked to group data (*e.g., focus group discussions*), it will be used in summarized form with no identifying information.

Free and Informed Consent Checklist:

Attach all documents referenced in this section *(check those that are appended):*

x Consent and Assent Form(s) – Include forms for all participant groups and data gathering methods

x Letter(s) of Information for Implied Consent

☐ Verbal Consent and Assent Scripts

Q. Anonymity and Confidentiality

23. Anonymity

Anonymity means that no one, including the principal investigator, is able to associate responses or other data with individual participants.

23a. Will the participants be anonymous in the data gathering phase of research?

☐ Yes **x** No

23b. Will the participants be anonymous in the dissemination of results *(be sure to consider use of video, photos)*?

☐ Yes

x Maybe. Explain below.

☐ No. If anonymity will not be protected and you plan to identify all participants with their data, provide the rationale below.

24. Confidentiality

Confidentiality means the protection of the person's identity (anonymity) and the protection, access, control and security of his or her data and personal information during the recruitment, data collection, reporting of findings, dissemination of data (if relevant) and after the study is completed (e.g., storage). The ethical duty of confidentiality refers to the obligation of an individual or organization to safeguard entrusted information. The

ethical duty of confidentiality includes obligations to protect information from unauthorized access, use, disclosure, modification, loss or theft.

24a. Are there any limits to protecting the confidentiality of participants?

☐ No, confidentiality of participants and their data will be completely protected

☐ Yes, there are some limits to the researcher's ability to protect the confidentiality of participants (*Check relevant boxes below.)*

- **x** Limits due to the nature of group activities *(e.g., focus groups):* The researcher cannot guarantee confidentiality
- ☐ Limits due to context: The nature or size of the sample from which participants are drawn makes it possible to identify individual participants *(e.g., school principals in a small town, position within an organization)*
- ☐ Limits due to selection: The procedures for recruiting or selecting participants may compromise the confidentiality of participants *(e.g., participants are identified or referred to the study by a person outside the research team)*
- ☐ Limits due to legal requirements for reporting *(e.g., legal or professional)*
- ☐ Limits due to local legislation such as the U.S.A. Patriot Act *(e.g., when there will be data storage in the United States).* When using USA based data instruments and data storage systems researchers are responsible for determining if this applies.
- ☐ Other:

24b. If confidentiality will be protected, describe the procedures to be used to ensure the anonymity of participants and for preserving the confidentiality of their data *(e.g., pseudonyms, changing identifying information and features, coding sheet, etc.) If you will use different procedures for different participant groups and/or different data methods be sure to clarify each procedure*.

The questionnaires are anonymous and pseudonyms will be used for participants who choose to participate in the follow-up focus gorup.

24c. If there are limits to confidentiality indicated in section 24a. above, explain what the limits are and how you will address them with the participants. *If there are different procedures for different participant groups and/or different data collection methods, be sure to clarify each procedure.*

If participants agree photos taken during playtesting may be used when presenting the research.

R. Use and Disposal of Data

25. Use(s) of Data

25a. What use(s) will be made of all types of data collected *(field notes, photos, videos, audiotapes, transcripts, etc.)*?

The data gathered by means of the questionnaires and audio recordings will be analyzed in order to establish the users' experience with the tool, game and each other during playtesting.

The focus group will be allow for more in-depth answers to the users' experience and will also be analyzed to ascertain the experience with the tool, game, and other participants during playtesting.

25b. Will your research data be analyzed, now or in future, by yourself for purposes other than this research project?

☐ Yes **x** No ☐ Possibly

25c. If yes or possibly, indicate what purposes you plan for this data and how will you obtain consent for future data analysis from the participants *(e.g., request future use in current consent form)*?

25d. Will your research data be analyzed, now or in future, by other persons for purposes other than explained in this application?

☐ Yes **x** No ☐ Possibly

25e. If yes or possibly:

i) Indicate whether the data will contain identifiers when it is provided to the other researchers or whether it will be fully anonymous *(note that "fully anonymous" means that there is no identifying information, links, keys, or codes that allow the data to be re-identified).*

ii) How will you obtain consent from the participants for future data analysis by other researchers? *(If the data will be transferred in fully anonymous form, this request for future use can be made in the current consent form. If the data will contain identifiers or links/keys/codes for re-identification, consider requesting permission to contact the participants in the future, to obtain consent for the use of the data at that time)*.

26. Commercial Purposes

26a. Do you anticipate that this research will be used for a commercial purpose?

☐ Yes **x** No

26b. If yes, explain how the data will be used for a commercial purpose:

26c. If yes, indicate if and how participants will benefit from commercialization.

27. Maintenance and Disposal of Data

Describe your plans for protecting data during the project, and for preserving, archiving, or destroying all the types of data associated with the research (*e.g., paper records, audio or visual recordings, electronic recordings, coded data*) after the research is completed:

27a. means of storing and securing data (*e.g., encryption, password protected computer files, locked cabinet, separation of key codes from raw data etc.*):

Data will be stored on a password-protected computers, and in password protected files.

27b. location of storing data *(include location of data-storage servers if using web-based technology)*:

Data will be stored on a password protected computers, and in password protected files.

27c. duration of data storage *(if data will be kept indefinitely, explain why this is necessary and state whether the data will contain identifiers or links to identifiers)*:

Duration of data storage until the end of the research: December 30, 2015.

27d. methods of destroying or archiving data. If archiving data, please describe measures to secure or protect the data. If the archiving will involve a third party *(e.g., library, community agency, Aboriginal band, etc.)* please provide details:

Data will be destroyed at the end of the research December 30, 2015, all files and documentation will be deleted.

28. Dissemination

How do you anticipate disseminating the research results? (*Check all that apply)*

x Thesis/Dissertation/Class presentation

x Presentations at scholarly meetings **x** Published article, chapter or book

☐ Internet (*Students: Most UVic Theses are posted on "UVicSpace" and can be accessed by the public*)

☐ Media (*e.g., newspaper, radio, TV*)

☐ Directly to participants and/or groups involved. Indicate how: *(e.g., report, executive summary, newsletter, information session):*

☐ Other, explain:

S. Conflict of Interest

29a. Apart from a declared dual-role relationship (Section K, item 7), are you or any of the research team members in a perceived, actual or potential conflict of interest regarding this research project (*e.g., partners in research, private interests in companies or other entities*)?

☐ Yes **x** No

29b. If yes, please provide details of the conflict and how you propose to manage it:

Attachments*

*Ensure that all applicable attachments are included with all copies of your application. Incomplete applications will not be entered into the review system. You will be notified in this case

Information for Submission

- Applications may be printed and submitted double-sided
- Do **not** staple the original application with original signatures (clips O.K.)
- The two photocopies may be individually stapled or clipped
- Do **not** staple or clip the individual appendices

Title and label attachments as Appendix 1, 2, 3 etc. and attach the following documents (check those that are appended):

Section I - Recruitment Materials:

x Script(s) – in-person, telephone, 3rd party, e-mail, etc.

☐ Invitation to participate

☐ Advertisement, Poster, Flyer

Section J - Data Collection Methods:

☐ Standardized Instrument(s)

x Survey(s), Questionnaire(s)

x Interview and/or Focus Group Questions

☐ Observation Protocols

☐ Other:

Section M - Free and Informed Consent:

x Consent Form(s) – Include forms for all participant groups and data gathering methods

☐ Assent Form(s)

x Letter(s) of Information for Implied Consent

☐ Verbal Consent Script

☐ Approval from external organizations (or proof of having made a request for permission)

☐ Permission to gain access to confidential documents or materials

☐ Request to Use Deception form

☐ Biosafety Committee Approval

☐ Other, please describe: