1. Overview

Research involving students as participants is not uncommon but does have some sensitivities related to the potential vulnerability of students in these contexts. This guideline provides background for those considering conducting research where their students would be participants of the study.

When students of an instructor are involved as study participants, there is the potential for undue influence or manipulation because the instructor is "in a position of authority" (TCPS2, p. 28). It is important to remember that, "individuals being recruited may feel constrained to follow the wishes of those who have some form of control over them" (TCPS2, p. 28).

The following guidelines are intended to support and guide research involving students as participants with care and in an ethical manner.

2. Reflective Teaching

Reflective teaching and instructor development are part of usual teaching processes. Reflection helps instructors learn through and about their experiences, with the main goal being improved practice. If the activity of the instructor is a process of self-reflection on their own practice, there is no need to seek student consent and this may be done without REB approval.

If the research moves beyond what would be considered standard reflective practice, measures need to be introduced to minimize the impact of a conflict of interest.

Example of reflective teaching: A faculty member embarks on a self-study of their teaching. They have engaged in writing journal entries for two years about the changes in their teaching style, structures or approach. The self-study/narrative inquiry does not implicate or identify others and does not require ethics review.

3. Anonymous and Anonymized Data

The TCPS2 does "not require that researchers seek consent from individuals for the secondary use of non-identifiable information" (i.e., anonymous data). Anonymous means the information or data "never had identifiers associated with it and risk of identification of individuals is low or very low" (TCPS2, p. 57).

This is different than 'anonymized' which means that the information or materials have been "irrevocably stripped of direct identifiers, a code is not kept to allow future re-linkage" (TCPS2, p. 57). In cases of secondary use of identifiable information (i.e., <u>direct or indirect identifiers</u>) researchers must obtain consent from study participants (TCPS2, p. 63).

4. Program and Course Review for Internal Pedagogical Practices and Quality Review

At most universities including Trent, programs are reviewed on a cyclical basis and courses are reviewed by instructors even more frequently. This is within the mandate of the organization. Normally reviews of this nature do not require REB approval.

However, when these reviews involve students as participants, they may require ethics review if there is the intention of making student information from the review public, such as through conference presentations and publications – beyond use for improvement in a cyclical review.

Example of a review: A Department Chair initiates a student experience survey to determine how enrollment in block course learning and full-term course learning affects study strategies. This research is concerned with the impact of course structure on student learning strategies. This review may not require ethics review if it is strictly used for program improvement and not being published. If the review will be reported on at conferences or in other external publications, it requires ethics review. https://ethics.gc.ca/eng/documents/tcps2-2018-en-interactive-final.pdf

Note: Article 2.5 of the TCPS2 refers to Quality assurance and quality improvement studies. It outlines that program evaluation activities, and performance reviews, or testing within normal educational requirements when used exclusively for assessment, management, or improvement purposes, do not constitute research for the purposes of this Policy, and do not fall within the scope of REB review. According to the 2018 TCPS2, if data are collected for the purposes of such activities but later proposed for research purposes, it would be considered secondary use of information not originally intended for research, and at that time may require REB review.

5. Pedagogical Research

Some research involving students as participants is categorized as pedagogical research – that is, the study of teaching and learning.

At Trent, "pedagogical research" designates any study which contributes to the understanding of teaching and learning at the university level, undergraduate or graduate. This might include questions pertaining to active learning strategies, blended classrooms, storytelling as pedagogy, or the impacts of experiential education. Pedagogical research has no standard methodology; it can draw on the research standards of any discipline, with the intention of extending knowledge through a disciplined inquiry and/or systematic investigation. In most cases, pedagogical research is led by the instructor. In many cases, the research also involves students as participants. That situation presents some opportunities (e.g., the recruitment of participants) and challenges (e.g., the ethics of studying people whose future the instructor may affect).

Examples of Pedagogical Research

- A. An instructor has an in-person and online course running in parallel using different delivery methods. The instructor assesses the value of each and the challenges they present to students and themself. This research is focused on teaching strategies and the effects on student learning, and could employ qualitative, quantitative, or a blended methodology. Students are participants in this study when their behaviour, assignments and/or grades are being included in the data and published findings. This study should have ethics approval.
- B. As part of a longitudinal study, a Biologist gathers field data on butterflies in Peterborough. Those data are used in a classroom by students for analysis and a corresponding pairs assignment. After the assignment is submitted, students are asked to complete an assessment of the usefulness of the assignment. This research involves the Biologist using their disciplinary research as a means of the

- students reflecting on pedagogy. If student work or student feedback is used in the study, the students are participants in the study and ethics approval is needed.
- C. A professor includes the topic of the cultural impact of social media on youth. They ask students to write a reflection on their use (consumption and contributions) and how they think youth culture has changed. The responses are collected, analysed by theme and presented at a conference. This study should have ethics approval because the data is being shared publicly.

6. Research projects involving student participants which require REB approval

Projects which require REB have one or more of the following characteristics:

- The intention is to publish or present the findings;
- Student coursework is being used for a systematic investigation to establish facts or principles intended to answer a question or test a hypothesis with the goal of contributing to generalizable knowledge in the field;
- Involves deception of participants -Deception studies should only be used in conjunction with inclass experimentation when no other method is suitable. A clear and strong justification must be provided in the research ethics application form for why deception is necessary (as per Tri Council guidelines);
- Involves a subset of individuals and specific sample size of students as part of a comparison study.

7. The role of the Research Ethics Board (REB) in research with student participants:

The role of the REB is to review all *research* involving humans conducted at Trent University. The main goal of the REB is to protect potential participants in research by taking into account the potential risks and benefits they could be exposed to through participation. It does so by promoting respect for persons, concern for welfare, and justice.

For pedagogical research deemed to be minimal risk, applications will be reviewed by the REB in a delegated fashion. Minimal risk usually refers to research that does not expose a participant to risks any greater than they might encounter in their daily life. The REB meets monthly, with a deadline for submission set approximately three weeks prior to the <u>meeting date</u>.

Most projects require at least one revision prior to their approval, so researchers should be mindful to incorporate review time for their submission prior to their projected start date.

Special considerations for research involving students might include:

- Voluntariness;
- Undue influence;
- Conflict of interest;
- Informed consent; and
- Privacy.

For more information, see <u>Chapter 7, Article 7.4 TCPS2 2018</u>, on 'Dual Roles' of researchers and their associated obligations.

8. Planning Ahead

It is important to carefully consider the potential for negative impacts on a student, their marks, or their education.

A well-designed study will address the following considerations:

- 1. Should I be concerned with research fatigue if students are constantly being asked to participate in my research or that of my colleagues?
- 2. How generalizable will my results be if I only recruit students or the students that I teach? And is generalizability important for my study?
- 3. By what means will I ensure that participation is voluntary?
- 4. What are the advantages and disadvantages of using a population with whom I have a prior, and ongoing, relationship, especially when that relationship is one where I may have authority over the population? And are there advantages to involving students other than my own or is the study specifically related to my course and my students?
- 5. How will I ensure that students/study participants are truly free to participate or to decline to participate? And how will I ensure students/study participants who decline to participate will not be penalized or perceive they are being penalized?

9. Questions and Answers on research with students as participants

Q. Are there additional statements that I need to include in the information-consent letter when conducting in-class research with students as participants?

A. The information consent letter must clearly explain that:

- declining to participate is a definite option and students will not be penalized by doing so (e.g., not losing course credits);
- students can choose to not be involved in any aspect of the study, such as declining to complete a study task or leaving a survey question blank;
- anonymity of participation such that the questionnaire or study task will be distributed to everyone
 and those who wish to not participate can either spoil the materials or leave them blank before
 returning them;
- participants will not be unfairly advantaged in any way as a result of taking part in the research;
- an alternative option for course credit is available to those who do not wish to participate in the research study;
- the course instructor/professor will not be told who participated until after the final marks have been submitted; and
- participants' responses will be summarized and no individual results to the study task or questionnaire will be shared with the course instructor/professor.

Q. Do I need to declare a conflict of interest to conduct research with my own students?

A. Researchers must declare their role as both an instructor and a researcher in the information-consent letter to the students, even if the classroom activity or exercise to be examined is integrated into the regular class activities, is of value to study, and involves the entire class.

This dual role can create conflict, power imbalance, or perceptions of coercion among prospective participants, and voluntariness of consent. Researchers must be prepared to mitigate these tensions in the recruitment process and throughout the study. Researchers must be aware of and attempt to reduce "situations where undue influence, coercion, or the offer of incentives may undermine the voluntariness of a participant's consent to participate in research." (TCPS2, <u>Article 3.1</u>)

Q. Is it appropriate to ask the students I teach to participate in my research?

A. Yes, but a third party, who is not connected with the research, nor has any power or authority over the students, should be part of the consent process. Researchers should remove the undue influence that students can feel to be real or perceived to ensure that participation is truly voluntary. For example, the Chair of the Department or Dean of the Faculty should not be part of the recruitment or consent process as students may feel influenced to participate in the research. A department assistant or faculty administrator who has no influence or authority over student marks could send a recruitment email to students and indicate that he/she is sending the email on behalf of the researcher(s). In addition, the information-consent letter must explain and provide assurances to the students that no penalties will result by not agreeing to participate in the research (or experience no penalties by not allowing materials/course work or grades to be used for research purposes).

Note: Almost invariably, the instructor must wait until the end of the professor-student relationship before accessing the consent forms collected by the third party (i.e., after all marks have been submitted to the Registrar's Office). This will mitigate any real, or perceived, influence that the instructor may have toward the student's grades. Identifiable data must be analyzed only after grades have been submitted to the Registrar's Office so that any real, or perceived, influence on the student's grades no longer exists.

Students under the supervision of any member of the research team (e.g., for an internship, co-op job, etc.), even though they may not be connected the research, should not act as the third party as a power relationship also exists between the researcher and the student. It is conceivable that a student may pressure other students to participate, perhaps inadvertently, to ensure the success of their supervisor's research. A <u>sample information and consent letter</u> can be provided to give you guidance in creating your own.

Note: This does not suggest that grading of assignments should be left to the end of the course where there are student research participants. Students require feedback on their progress on an ongoing basis. If there is the option of having another marker-grader evaluating student participant assignments, this may help to reduce potential conflict or power imbalances of the instructor over the students.

Q. Can I give students course credit for participating in research?

A. Course credit is not recommended for participating in research. In cases where this is being proposed, students who do not wish to participate in the research must be offered a comparable alternative task to receive these same credits. Credits can be over and above the normal course credits (i.e., bonus marks) or included as part of the overall course mark. It is essential that students, as study participants,

or non-participants are not disadvantaged in any way as a result of their participation. There cannot be a penalty for non-involvement or poor performance.

Note: The course syllabus should be included with the research ethics application and describe the research and credits that can be obtained as well as outlining the alternative task to obtain the same credits. In the case of assigning participation credit, the course syllabus must also outline how the research relates to the course objectives along with the specific learning objectives for the students.

Q. Can I get retroactive ethics approval?

A. There are times when an instructor did not intend to conduct research with their students as participants, but after reviewing student assignments (exams, journal entries, essay question responses), the instructor sees that the assignments provide invaluable data to inform a research program. At this point, if materials gathered are being repurposed for research, the instructor must seek ethics approval.

Although unusual, it is possible to submit an ethics proposal in this retroactive manner. When considering this type of application, the researcher should be mindful that both retrospective review and prospective data collection strategies will require the express consent of the participants. Below are sections of the TCPS2 (2018) researchers may wish to reference prior to submission.

<u>Article 3.5</u> Research shall begin only after the participants, or their authorized third parties, have provided their consent.

Application: In keeping with the principle of Respect for Persons, participants shall provide their consent prior to engaging in research. This is the clearest demonstration that their participation is based on consideration of the risks and potential benefits of the research project, and other principles in this Policy. There are exceptions to this general ethical requirement, however, set out in Articles 3.7A and 3.8

<u>Article 3.7A</u> The REB may approve research that involves an alteration to the requirements for consent set out in <u>Articles 3.1 to 3.5</u> if the REB is satisfied, and documents, that all of the following apply:

- a. the research involves no more than minimal risk to the participants;
- b. the alteration to consent requirements is unlikely to adversely affect the welfare of participants;
- c. it is impossible or impracticable (see Glossary) to carry out the research and to address the research question properly, given the research design, if the prior consent of participants is required;
- d. in the case of a proposed alteration, the precise nature and extent of any proposed alteration is defined; and
- e. the plan to provide a debriefing (if any) that may also offer participants the possibility of refusing consent and/or withdrawing data and/or human biological materials, shall be in accordance with Article 3.7B.

Article 3.7B

a. Debriefing must be a part of all research involving an alteration to consent requirements (Article 3.7A) whenever it is possible, practicable and appropriate.

b. Participants in such research must have the opportunity to refuse consent and request the withdrawal of their data and/or human biological materials whenever possible, practicable and appropriate (Article 3.1).

Q. Can I quote from a student's paper on an anonymous basis to illustrate a particular issue I am addressing in a research paper?

A. While secondary use of data is permitted (<u>TCPS 2 (2018)</u>, <u>Section 5.5A / Section 5.5B</u>) in certain circumstances, the researcher would be required to receive <u>the consent of the student</u> before quoting from their submitted work. The use of a quotation from course work for a research paper would be to use those data for a reason other than they were originally created. As the student is known to the researcher, their consent is required prior to the use of this information.

Q. Can my study involving my students as study participants include deception?

A. For studies involving partial disclosure, deception, or an exemption to the requirement of seeking consent, researchers must satisfy the following requirements (<u>Article 3.7A</u>):

- the research involves no more than minimal risk to the participants;
- the alteration to consent requirements is unlikely to adversely affect the welfare of participants;
- it is impossible or impracticable (see <u>Glossary</u>) to carry out the research and to address the research question properly, given the research design, if the prior consent of participants is required;
- in the case of a proposed alteration, the precise nature and extent of any proposed alteration is defined; and
- the plan to provide a debriefing (if any) that may also offer participants the possibility of refusing consent and/or withdrawing data and/or human biological materials, shall be in accordance with Article 3.7B.

*Note: The requirements outlined in <u>Article 3.7A</u> does not address the exception to the requirement to seek consent for secondary use of identifiable information; this topic is addressed in <u>Article 5.5A</u>. Some social science research, particularly in psychology, seeks to learn about human responses to situations that have been created experimentally. Some types of research can be carried out only if the participants do not know the true purpose of the research in advance. For example, some social science research that critically probes the inner workings of publicly accountable institutions might never be conducted without the limited use of partial disclosure. In some research that uses partial disclosure or deception, participants may be asked to perform a task and informed about only one of several elements the researchers are observing. Research employing deception can involve a number of techniques, such as giving participants false information about themselves, events, social conditions and/or the purpose of the research. For such techniques to fall within the exception to the general requirement of full disclosure for consent, the research must also meet all the requirements of <u>Article 3.7A</u>.

For a complete reference, see TCPS2 (2018) Chapter 3, Section B.

Q. What do I need to do if I want to use student's course work or access their grades for my research?

Permission must be sought from students if any of their course materials (e.g., papers, assignments, tests, exams, marks, etc.) are to be used for research purposes, as use of a student's course materials would be secondary use of identifiable information for research purposes. Secondary use refers to the "use in research of information originally collected for a purpose other than the current research purpose" (TCPS2 (2018), Section 5.D). This includes school records originally created or collected for educational purposes.

As outlined in the TCPS2 2018 some "reasons to conduct secondary analyses of data include: avoidance of duplication in primary collection and the associated reduction of burdens on participants." However, "privacy concerns and questions about the need to seek consent arise" especially when "information provided for secondary use in research can be linked to individuals, and when the possibility exists that individuals can be identified in published reports or through data linkage." (TCPS2 (2018), Article 5.4)

Article 5.5A

Researchers who have not obtained consent from participants for secondary use of identifiable information shall only use such information for these purposes if they have satisfied the REB that:

- a. identifiable information is essential to the research;
- b. the use of identifiable information without the participants' consent is unlikely to adversely affect the welfare of individuals to whom the information relates;
- c. the researchers will take appropriate measures to protect the privacy of individuals and to safeguard the identifiable information;
- d. the researchers will comply with any known preferences previously expressed by individuals about any use of their information;
- e. it is impossible or impracticable to seek consent from individuals to whom the information relates; and
- f. the researchers have obtained any other necessary permission for secondary use of information for research purposes.

If a researcher satisfies all the conditions in <u>Article 5.5A(a) to (f)</u>, the REB may approve the research without requiring consent from the individuals to whom the information relates.

Article 5.5B

Researchers shall seek REB review, but are <u>not</u> required to seek participant consent, for research that relies exclusively on the secondary use of nonidentifiable information.

If the researcher, who is not the course instructor, wishes to access a student's grades for research purposes, permission must also be sought from the student to allow the Registrar's Office to release this information. Researchers must contact the Registrar's Office in the early stages of planning their study as it is not always possible or feasible for the Registrar's Office to provide access to student grades.

If you are looking for aggregate or average grades for a course the researcher can contact the course instructor directly for this information. A student's consent is not needed to report on the aggregate or average grade for an entire class.

Q. Can I use classroom time to conduct my research?

A. In considering research which would use classroom time for recruitment or data collection, the REB may consider if the research is:

- Directly related to the course objectives as outlined in the course syllabus;
- An activity or exercise whose examination is integral to regular classroom activities and involves the entire class;
- Able to guarantee the voluntary participation of students

A professor/instructor wishing to provide in-class time to research (either for their own research or that of other investigators) should make students aware of the details of the study and any expectations that they, as participants, will be required to fulfill.

Q. What would I need to do to conduct an observational study in a class?

A. Researchers conducting qualitative studies wishing to observe students in a class setting may do so in cases where:

- the study complies with the principles, articles, and applications outlined in the TCPS2 and has received prior research ethics approval by the REB;
- the observation is "non-participant" such that the researcher observes, but is not a participant in, the action (also known as naturalistic observation) as outlined in the TCPS2 (2018), Chapter 10;
- the professor whose students are to be observed, approves of the research and the dates and times for observation:
- the researcher sits in a location that is deemed acceptable and not intrusive to the professor or students;
- no identifying information is collected or recorded about the students or the professor; and
- students are provided with an opportunity to receive feedback about the study results upon completion of the research

Q. Can I video or audio-record the course instructor and the class for my observational study?

A. Yes, but researchers must keep in mind that the design of the study will affect the level of risk. Observational research will be considered minimal risk if it:

- Does not allow for the identification of the participants in the dissemination of results;
- Is not staged by the researcher; and
- Is non-intrusive should normally be regarded as being of minimal risk (TCPS2 (2018), Article 10.3).

Therefore, how any video or audio recordings are made and if anyone other than the research team will listen to or view them needs to be addressed in the application.

If <u>no personal information</u> is being collected and no one other than the researchers will listen to or view the recordings, consent may not be required by individual participants.

If <u>personal information</u> is being collected or the recordings will be shown to individuals beyond those directly involved in the research (including dissemination), the researchers must seek permission from individual study participants to be able to identify them in their dissemination of study results or to attribute the recordings to them by name.

Researchers need to be aware that, as outlined in the TCPS2 (2018), "in some jurisdictions, publication of identifying information – for example, a photograph taken in a public place, but focused on a private individual who was not expecting this action – may be interpreted in a civil suit as an invasion of privacy" (Article 10.3).

Researchers should also become familiar with Trent University's <u>Computer Code of Ethics</u> on information security and know what information is considered restricted information and may need to be protected through encryption.