Research Ethics in the Scholarship of Teaching and Learning

Scholarship of Teaching and Learning (SoTL) may be defined as methodologically sound inquiries into student learning that explore disciplinary knowledge, skills and the development of learning-related attitudes or habits, grounded in the specific disciplinary, institutional, environmental or cultural context in which the learning occurs.[1] A core tenet of SoTL is that findings are made appropriately public to contribute to and extend broader conversations about teaching and learning. This public dissemination element distinguishes SoTL from regular teaching assessment or course evaluation.

SoTL research involves special considerations that are not present in many other types of research. While students can make excellent research participants, and SoTL research can lead to improved teaching and learning, researchers should pay special attention to the unique ethical considerations involved in this type of research. Our hope is that the following list of FAQs along with our answers, will help you in preparing your study and research ethics protocol and ensuring that it follows the guidance in the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2).

Throughout this document, we distinguish between data collection for teaching evaluation/ assessment (which does not require REB review) and data collection for SoTL (which may require REB review). Evaluations of teaching are typically conducted by the instructor teaching the course (and/or other colleagues, e.g. those who teach other sections of the same course). In SoTL research, the researcher may be the course instructor, or it can be another scholar who is given permission to conduct the study in the relevant setting. While assessments for teaching improvement are conducted for internal purposes (e.g., improving pedagogy or course design), SoTL aims to extend the knowledge and disseminate generalized findings that other scholars and educators can learn from. SoTL meets the definition of "research" in the TCPS and it is therefore subject to REB review.[2]

Another important distinction is the difference between "course-based research" and SoTL. SoTL refers to research that is conducted by researchers where the research participants are students in the course or other learning environment. "Course-based research" in the context of the TCPS refers to course assignments designed to help students to develop their academic

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[1] Adapted from Felten, P. (2013). Principles of Good Practice in SoTL. Teaching & Learning Inquiry: The ISSOTL Journal, 1(1), 121–125. https://doi.org/10.2979/teachlearninqu.1.1.121.

[2] TCPS Ch. 2: "For the purposes of this Policy, 'research' is defined as an undertaking intended to extend knowledge through a disciplined inquiry and/or systematic investigation. The term 'disciplined inquiry' refers to an inquiry that is conducted with the expectation that the method, results, and conclusions will be able to withstand the scrutiny of the relevant research community."

research skills through data collection practices.[3] In these types of activities, students are the researchers and the participants may be each other, or individuals in the community. Course-based research requires ethics review through the REB's delegated Course-Based Research Ethics Board Committees (CBREC) whereas SoTL research is reviewed by the REB.

Before starting your SoTL research, it is always advisable to contact the REB for guidance, particularly when the planned activities have a dual purpose (evaluation of teaching + SoTL).

The purpose of this guideline is to provide researchers with information related to research ethics in SoTL studies. The overarching aims are to:

- Provide guidance to help researchers determine whether and what type of REB application is required.
- Guide researchers' navigation of the ethical considerations relevant to SoTL research.
- Help researchers anticipate review comments from the REB and facilitate an efficient ethics review.

This document will be updated periodically. If there are questions that are not reflected in these FAQs, please send an email via rebchair@torontomu.ca.

Frequently Asked Questions

1) What distinguishes SoTL research from teaching evaluation?

The key distinction between SoTL research and teaching evaluation is the intent and use of the collected data.

Teaching evaluation:

- Primarily used to improve one's own teaching practice.
- Findings remain internal to the instructor or program.
- Typically does not require REB review as per TCPS 2, Chapter 2, Article 2.5.
- Examples include course surveys, student feedback collection and teaching reflections.

SoTL research:

- Extends knowledge in the field through systematic investigation.
- Typically requires REB review when data collection is designed with the intention to disseminate findings to the research community.

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[3] See the application of TCPS Art. 2.1: "[Research] includes course-based research activities, the primary purpose of which is pedagogical, because of the possible risks to those recruited to participate in such activities, and the fact that, from their perspective, such activities may appear indistinguishable from those that meet this Policy's definition of research."

- Note: If teaching evaluation data is later repurposed for research analysis, it becomes a secondary use of data, which requires REB review under TCPS 2, Chapter 5.

This distinction is important for determining what type of REB approval (if any) is required for your project.

2) Does my study require REB approval?

The REB routinely exempts assessments and evaluations in courses (as per Chapter 2, Article 2.5 of the TCPS 2), and these exemptions are based on the understanding that the information is being collected (usually from students) for internal purposes to inform program development or improve the pedagogy in a course. When the same data are used for research dissemination (publications, presentations) in a manner that "extends knowledge in the field through systemic investigation or disciplined inquiry," it then becomes a secondary use of data that requires REB approval (see Chapter 5 of the TCPS 2). This is also noted in the formal exemption letters issued by the REB.

If a study is initially exempt from review but a research question emerges from the evaluation data, using the data to answer the newly emergent research question would require an application to the REB for the secondary use of data for research purposes. If the study is dual-purpose from the onset (e.g., evaluation and research), then it may be best to submit a full application before the evaluation is conducted.

The scenarios provided below can help you determine whether your planned activities require REB review. Please note that these scenarios are provided for illustration purposes and it is strongly recommended that you consult with the REB before proceeding with a study. In all cases, researchers should submit an application to determine whether a project is exempt from review.

Scenario 1: Requires REB review

A researcher is conducting a survey in their course to determine whether the use of online discussions helps improve student learning. Throughout the course, they will ask students to complete surveys at the beginning of the term, at the mid-term point and at the end of the term. They are also asking students for their consent to use their midterm and final exam grades for the purposes of research. The instructor plans to use the data to both improve their own teaching practice as well as publish papers to share the impact of online discussion boards in university classrooms.

Rationale: This scenario requires REB review because the researcher plans to use results to extend knowledge and intends to publish findings in academic journals, indicating that the research extends beyond teaching assessment. The collection of grades connected to survey

responses also increases the sensitivity of the data and requires careful ethical consideration of student privacy and voluntary consent.

Scenario 2: May require REB review

A researcher is planning to survey the students in their course at the end of every semester to determine whether students who chose a group presentation rated their experience more favourably than those who chose to present independently. The researcher does not currently intend to use the data for research analysis, but they may consider doing so in the future, as an individual data set, combined with other data sets, or with prospective data collection to extend knowledge on how group versus individual learning benefits educational outcomes.

Rationale: This scenario falls into a gray area because while the researcher doesn't currently intend to use the data collected for research analysis, they acknowledge they might in the future. In these scenarios, if the research questions (that may or may not be explored in the future) can be articulated, the REB often recommends obtaining REB approval at the outset. In some situations, this can help avoid the challenges of obtaining approval for secondary use of the data later (see question 3 below). When in doubt, the REB team can help you decide whether ethics review at the outset is advisable based on the research design and the anticipated ethical considerations.

Scenario 3: Does not require REB review

A researcher is distributing a course survey during Reading Week to assess students' perspectives on their experiences in class for the first half of the semester. The results will only be used to inform their teaching for the remainder of the semester and to assess its effectiveness. They do not intend to use the data for research analysis, and they will not be publishing the findings.

Rationale: This scenario describes a teaching assessment activity, not research. Since the instructor states that data will only be used to improve their teaching and will not be published or used for secondary analysis, this activity falls outside the scope of REB review under TCPS 2, Chapter 2, Article 2.5.

3) What are the ethics requirements if my research involves previously collected student data?

Many instructors who engage in assessments of teaching and learning in their courses later decide that they wish to repurpose the data for research. Under the TCPS, "secondary use of data" refers to the use of information collected for one purpose (such as teaching evaluation) for a research analysis. According to TCPS 2, Chapter 5, when data originally collected for evaluative purposes is later used for research analysis and dissemination, REB approval is required. If this dual purpose is known from the outset, it is best to consult the REB to determine

whether a prospective application should be submitted or if it would be best to submit a secondary use application after the data is collected and before it is used for research.

Generally, there are four pathways to approval for secondary use of data in SoTL:

a. Demonstrating that the students from whom the data was collected provided "broad consent" for the future use of their information for the purpose of research (TCPS 2, Chapter 13, Article 13.3).

   This pathway requires advance planning. If obtaining consent from students for the evaluative activities (surveys, collection of grades, content of assignments), you can incorporate language that separately seeks consent from students for the future use of their information for research. This option is useful when the data collected may be challenging to de-identify (e.g., qualitative data) or when the sample is small enough that even after removing identifiers, the instructor/researcher could re-identify students based on their information. When obtaining consent for future use, it is best practice to mitigate the risk of undue influence relating to the power imbalance and how it can be mitigated (see question 5).

b. Demonstrating that the datasets being repurposed are non-identifiable or that the risk of re-identification is very low (TCPS 2, Chapter 5, Article 5.5B).

   This is the most commonly used pathway for secondary use and does not require explicit consent. It applies when the data collected can be made non-identifiable before it is used for research analysis (quantitative survey responses, assignment marks in large classes). Making the data non-identifiable can be challenging when it is qualitative in nature and re-identification is still possible through indirect identifiers or unique responses. Note that coding the data in a way that may allow for linking codes to student identities would not satisfy the requirement of non-identifiability.

c. Applying for a waiver of consent under the terms stipulated in TCPS 2, Chapter 5, Article 5.5A.

   This pathway applies when identifiable information is essential for the research and obtaining consent is not possible or practical. The application for secondary use must demonstrate that all the requirements under this Article are met, and it rarely applies to SoTL research.

d. When all else fails and if feasible, another option is re-contacting students to obtain consent for the new purpose.

This pathway often applies to data collected from a small number of individuals who can be easily reached and asked to provide consent for re-repurposing their information as proposed.

4) What are the ethical considerations when connecting assessment data (grades) to other research data?

Connecting student grades or other assessment data to research data raises several important ethical considerations.

    a. **Privacy and confidentiality:** Student grades are protected educational records and connecting grades to other data requires careful anonymization protocols. Consider using participant codes to separate identifiers from data.

    b. **Consent requirements:** Explicit consent is required to access and use student grades for research, and consent forms should clearly state that grades will be connected to other data. In particular, students should understand how their grades will be used and reported.

    c. **Mitigation strategies:** Consider relying on a third party (an RA or colleague) to link grades to research data before anonymization. Communicating this to students in the consent form will help ensure voluntary participation, as the course instructor will not know which students chose to participate. Alternatively, wait until after grades are finalized and the appeals deadline has passed before accessing the data for research purposes.

Remember that the more sensitive the data (such as grades), the more robust your protocols should be for protecting student privacy.

5) I'm concerned that my students may feel compelled to participate in the research because they want to do well in the course and/or benefit from additional support from their instructor in the future (e.g., providing references). How can I address this dual-role risk?

TCPS 2, Chapter 7, Article 7.4 states, "Dual roles of researchers and their associated obligations (e.g., acting as both a researcher and a therapist, health care provider, caregiver, teacher, advisor, consultant, supervisor, student or employer) may create conflicts, undue influences, power imbalances or coercion that could affect relationships with others and affect decision-making procedures (e.g., consent of participants)."

Mitigation strategies can be used to address this ethical challenge by ensuring that non-participating students are not disadvantaged, that the student learning experience is not negatively impacted by the research objectives, and that student consent is well-informed and voluntary. In some cases, it might be necessary to have someone other than the researcher recruit

students to facilitate the voluntary nature of participation. This is a very common risk in SoTL research. Some common mitigation strategies include:

- Collect data in a section of the course that you do not teach.
- Defer data collection until after grades are submitted and the appeal deadline has passed.
- Collect data anonymously (e.g., surveying students while not collecting identifiers or linking it to their student IDs).
- Use a third party to assist with recruitment, consent and/or data collection (e.g., RA or colleague) to minimize any undue pressure to participate.
- If recruiting in class, step outside the classroom while the study is introduced by a third party who is not involved in teaching and grading.
- Ask a third party to handle requests from students to withdraw from the study.
- When offering incentives, mitigate the risk of undue influence by:
  - Keeping the incentives low (e.g., $30 gift card or draw, no more than 5% of the final grade).
  - If using course credit, offer an alternative to students who choose not to participate through an alternative assignment or activity that requires a similar time commitment and effort.
- Identifiers should be removed from the data before it is shared with you for analysis (consider the limits of de-identifying qualitative data, class/sample size).

6) How can I ensure fairness and equity when engaging in SoTL?

When choosing/justifying the inclusion criteria for the study, consider the requirement to be fair and inclusive in designing the research. For example, excluding participants who are under 18 years old might lead to the exclusion of some first-year students who are 17 years old. Mature students are often inadvertently and inappropriately excluded when the eligibility criteria indicate that participants must be 18 to 25 years old, for example.

When offering incentives, make sure to avoid undue influence. If incentives are small course credits, offer students who do not participate in the study an alternative opportunity to earn the same incentive, such as an additional assignment that is comparable to the tasks that participants are completing in terms of time and effort.

Accommodation and academic considerations required by university policies apply to research activities as well. For example, if students are asked to complete surveys or other tasks, you should incorporate any accommodations and/or academic considerations into the design of the study, where possible. Students who wish to participate in the study should receive appropriate accommodations to fully and meaningfully participate. Types of accommodations include but are not limited to setting (e.g., adaptive furniture or equipment), timing, presentation and response modality (e.g., AAC devices, hearing aid), and technological support. Along with individual

accommodations, implementing Universal Design for Learning (UDL) principles into the study could help researchers to minimize barriers to participation.

Consider the proposed benefits of the research (e.g. when proposing to test a novel teaching design) and how such research design may affect the learning experience. For example, if students are being randomized into two groups, consider whether one group may be placed at a disadvantage (e.g., if you are testing a new technology or process of evaluation that one group would not have access to). If this is a concern, consider a cross-over method, by which students will have equal access to both teaching strategies.

7) How can I best protect the confidentiality and privacy of students being recruited in SoTL studies?

Confidentiality and privacy protocols that apply to research generally are relevant here, while tending to the data management protocols required given the dual role (e.g., the instructor/researcher should not have access to participant identifiable information during the semester).

Privacy concerns are often raised in reviews when the research involves an observational component (e.g., filming or recording lectures or discussions while capturing students who did not provide consent).

Remember that students' privacy rights under university teaching policies must be followed. A common challenge in the ethics review is that the third party assisting with recruitment and consent may not have teaching privileges, which means that they cannot be granted access to the information of non-participating students (e.g., extracting grades from D2L). A potential mitigation strategy in this situation could be to wait until after the appeal deadline to extract the information yourself or ask your TA to extract this information if it is critical before the end of the term.

8) What are some recommended practices in SoTL research and what practices should we avoid?

Research design:

- Use waitlist control group designs when testing new teaching methods to ensure that all students eventually receive beneficial interventions.
- Plan for secondary data analysis possibilities at the outset of teaching assessments.
- Design data collection that minimizes disruption to the learning environment.

Consent and recruitment:

- Have a third party handle consent forms and keep them secure until after grades are released.
- Schedule recruitment at times that minimize pressure (not immediately before assignments are due).
- Create clear differentiation between course activities and research activities.
- Obtain consent that specifically addresses potential future uses of data.

Data management:

- Establish clear data anonymization protocols before data collection begins.
- Create separate storage systems for identifiable and de-identified data.
- Plan for secure long-term data storage that complies with institutional policies.
- Document chain of custody for data, especially when third parties are involved.

Practices to avoid:

- Conducting lengthy research-focused surveys with no relevance to the course objectives.
- Waiting until after data collection to consider ethical implications or REB requirements.
- Using course credit incentives without equivalent alternative assignments.
- Having students participate in time-consuming research activities during high stress periods.
- Designing studies where one group receives significantly advantageous learning opportunities that the other group cannot benefit from.
- Creating circumstances where students might feel evaluated in the course based on their decision to participate in the research.

9) What are some additional resources that address common issues in SoTL?

Panel on research ethics:

- TCPS 2 (Tri-Council Policy Statement)
- Interpretations of the TCPS 2

Resources:

- Taylor Institute for Teaching and Learning
- TMU's Centre for Excellence in Learning and Teaching (CELT)
- SoTL Canada
- International Society of Teaching and Learning

- [Staying Current with the Scholarship of Teaching and Learning as a Busy Educator (A Comprehensive List of Resources/Literature)](#)
- [A Guide to Doing SoTL (Nancy Chick)](#)

Additional reading:

- [Scholarship of Teaching and Learning Annotated Literature Database](#)
- [Researching Teaching and Student Outcomes in Postsecondary Education: An Introduction](#)
- [Bridging the Gap between the Research Ethics Board and the Scholarship of Teaching and Learning](#)
- [The Pedagogical and Ethical Relationship Between Student Researchers and Supervisors: Essential Elements and Best Practices](#)

10) I have a question that was not covered in these FAQs. Who should I contact?

Please email rebchair@torontomu.ca. We also hold virtual drop-in office hours every Thursday from 10 a.m. to 12 p.m.