Ethical Research



# ethics in the SCHOLARSHIP OF TEACHING AND LEARNING

Written by Lisa Fedoruk
With Contributions from Researchers Across Canada



# STRATEGIES FOR ETHICAL PRACTICE

#### **AUTHOR**

**Lisa Fedoruk, PhD** | Educational Development Consultant, Taylor Institute for Teaching and Learning, Conjoint Faculties Research Ethics Board Member, University of Calgary

### **CONTRIBUTORS (ALPHABETICAL)**

Barb Bloemhof, PhD | Instructor in the Department of Economics, McMaster University

 $\textbf{Pierre J. Boulos, PhD} \mid \text{Special Advisor, Research Ethics Education and Internationalization,} \\$ 

University of Windsor Research Ethics Board

**Rachel Braun, MA** | Scholarship of Teaching and Learning Program Specialist, Taylor Institute for Teaching and Learning, University of Calgary

**Nancy Chick, PhD** | Academic Director of the Taylor Institute for Teaching and Learning, and University Chair in Teaching and Learning, University of Calgary

Rhonda Dubec, PhD | Coordinator of Instructional Development (Teaching Commons), Lakehead University

Karen Manarin, PhD | Professor of English and General Education, Mount Royal University

Ken N. Meadows, PhD | Educational Researcher, Teaching Support Centre, Western University

**Kiara Mikita, PhD** | PostDoctoral Scholar in the Scholarship of Teaching and Learning, Taylor Institute for Teaching and Learning, University of Calgary

Jennifer Mather, PhD | Professor, Psychology Department, University of Lethbridge

**Karen McComas, PhD** | Executive Director of the Center for Teaching and Learning and Professor of Communication Disorders, Marshall University

**Jill Marie McSweeney, PhD** | Educational Developer, Centre for Learning and Teaching, Dalhousie University **Robin Mueller, PhD** | Educational Development Consultant, Taylor Institute for Teaching and Learning, University of Calgary

**Chris Ostrowski, MA** | Research Associate Program Coordinator, Taylor Institute for Teaching and Learning, University of Calgary

**Fiona Rawle, PhD** | Associate Professor of Biology and Associate Dean (Undergraduate), University of Toronto Mississauga

**Nicola Simmons, PhD** | Assistant Professor, Graduate and Undergraduate Studies in Education, Brock University

Brenda Spencer, PhD | Associate Professor, Werklund School of Education, University of Calgary John Thompson, PhD | Professor Emeritus, Sociology, St. Thomas More College, University of Saskatchewan Crystal Tse, PhD | Instructional Developer, Research and Consulting, Centre for Teaching Excellence, University of Waterloo

**Kimberly Wheelans, MEd., MLT, AHT** | Academic Chair, School of Health and Public Safety, SAIT Polytechnic **Cherie Woolmer, PhD** | Postdoctoral Research Fellow, MacPherson Institute for Leadership, Innovation, and Excellence in Teaching, McMaster University

August 2017 (Updated, October 2019)
Taylor Institute for Teaching and Learning
434 Collegiate Boulevard
University of Calgary, Calgary AB CANADA T2N1N4
http://www.ucalgary.ca/taylorinstitute

This guide is distributed under the terms of the Creative Commons — Attribution Non-Commercial License 4.0 International (creativecommons.org/licenses/by-nc/4.0/), which permits sharing and adapting of the material, provided the original work is properly attributed (see recommended citation below), any changes are clearly indicated, and the material is not used for commercial purposes.

#### **Recommended Citation**

Fedoruk, L. (2017). Ethics in the scholarship of teaching and learning: Key principles and strategies for ethical practice. *Taylor Institute for Teaching and Learning Guide Series*. Calgary, AB: Taylor Institute for Teaching and Learning at the University of Calgary. www.ucalgary.ca/taylorinstitute/guides

# **Foreword**

This new Taylor Institute Guide takes the researcher through the essentials of the Canadian standards for ethical practice in the scholarship of teaching and learning (SoTL). It began with Lisa Fedoruk's review of the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (TCPS2, 2014), which expanded and clarified the highest level best practices that are a necessary part of the scholarship done at Canadian post-secondary institutions across Canada. Because of the unique challenges of SoTL, where the human participants that are the subject of the research are also typically the researcher's students, this Guide translates the comprehensive TCPS2 (2014) for the researcher conducting SoTL research. Of note, a 2018 summary of revisions to the TCPS2 can be found here.

The team at the Taylor Institute wanted to provide a guide that laid bare the potential hegemony and power relationships that are part of instruction in higher education. In addition to a careful extrapolation of the relevant principles from the TCPS2, the author integrated several important findings from the scholarly literature on research ethics and SoTL. Next, input was sought from a Research Ethics Senior Advisor at the Secretariat on Responsible Conduct of Research with the Government of Canada. By including practical strategies for ethical practice in SoTL, the unique challenges that compliance with the TCPS2 poses for SoTL are brought to life. The work was then sent out to a community of Canadian academic researchers for their feedback and contributions. (See previous page for the list of contributors.) The result is a collaboration between a broad diversity of experts reflecting the insights of ethical researchers and ethics board members and chairs from across the country, to provide a resource to complement researchers' own ethical practices, training, and good judgement as they conduct their scholarship of teaching and learning.

Research with human participants is complex. Just as the TCPS2 supports researchers in managing that complexity, we hope that this Guide will be helpful to SoTL researchers in their design process, so that their research projects will be sound and robust, and the resulting insights can inform and extend our understanding of the processes of learning and of supporting that learning with effective, evidence-based instruction.

# **Contents**

Chapter	1 Ethical Considerations for SoTL Research in Canada	1
1.1	General Ethical Considerations When Designing SoTL Research	1
1.1.1	Purpose, Participation, and Consent	1
1.1.2		
1.1.3	Results and the Presentation of Results to Various Audiences	1
1.1.4	Reflection and Development	2
1.2	Doing SoTL Research in Canada	2
1.3	Ethical Dilemmas That May Arise When Doing SoTL Research	3
Chapter	2 Conflicts of Interest and Power Relationships	4
2.1	TCPS2   Article 7.4	4
2.1.1	Key Principle	4
2.1.2	Strategies for Ethical Practice	4
Chapter	3 Consent Processes	6
3.1	TCPS2   Article 3.1	6
3.1.1	Key Principle	6
3.1.2	Strategies for Ethical Practice	6
3.2	TCPS2   Article 3.2	7
3.2.1	Key Principle	7
3.2.2	Strategies for Ethical Practice	7
3.3	TCPS2   Article 3.3	7
3.3.1	Key Principle	7
3.3.2	2 Strategies for Ethical Practice	8
Chapter	4 Fairness and Equity in Research Participation	9
4.1	TCPS2   Article 4.1	9
4.1.1	Key Principle	9
4.1.2	Strategies for Ethical Practice	9
4.2	TCPS2   Article 4.7	9
4.2.1	Key Principle	10
4.2.2	2 Strategies for Ethical Practice	10
4.3	TCPS2   "Research Results"	10
4.3.1	, ,	
4.3.2	Strategies for Ethical Practice	10
Chapter		
5.1	TCPS2   Article 5.1	11
5.2	TCPS2   Article 5.2	11
5.2.1	, ,	
5.2.2	2 Strategies for Ethical Practice	11
5.3	TCPS2   Article 5.3	12
5.4	TCPS2   Article 5.4	12
5.4.1	Key Principle	12

5.4.	2 Strategies for Ethical Practice	12
5.5	TCPS2   "Reasons to Conduct Secondary Analyses of Data"	13
5.6	TCPS2   Article 5.5A	14
5.7	TCPS2   Article 5.5B	
5.7.	·	
5.7.		
Referen	ıces	17
Addition	nal Resources	17
	Tables and Figures	
Table 1: I	Potential Ethical Dilemmas and Key Principles of Ethical Practice	3
	Questions to Consider When Planning SoTL Research	
Figure 1:	The Three Core Principles of the TCPS2	2
-	: University of Alberta Risk Matrix (Babcock & Henry, 2014)	
	University of Toronto Data Risk Chart (Babcock & Henry, 2014)	

# Chapter 1 Ethical Considerations for SoTL Research in Canada

# 1.1 General Ethical Considerations When Designing SoTL Research

The scholarship of teaching and learning (SoTL) is research that typically involves human participants. Any research involving human participants comes with a responsibility to act ethically—and to demonstrate plans for these actions to the institutional ethics review board (e.g., Research Ethics Board/REB in Canada; Institutional Review Board/IRB in the US). As Hutchings (2003) explains, critical consideration of the ethical implications of SoTL inquiry not only mitigates potential harm to research participants; it also creates an opportunity for researchers to reflect upon their own identities as researchers and educators, as well as the values that guide their work.

Those interested in conducting SoTL research might wish to engage with the following questions to help guide their planning and reflect on the ethical implications of a SoTL inquiry (adapted from Faller & Norman, 2015, p. 3-4).

# 1.1.1 Purpose, Participation, and Consent

- What is the question or problem you want to investigate, and why is it important enough to spend your own and others' time and energy on it?
- Whose consent, permission, cooperation, involvement, or collaboration will be required for the conduct of your project? How can roles and permissions be negotiated and renegotiated over time?
- What concerns might students have about your work and their participation in it? What choices do students have if they are uncomfortable?
- Whose perspectives will be represented in the work? How can various perspectives be honored? What special concerns do you have about representing individuals or groups who have less power in the educational system?
- What power relationships need to be taken into account in negotiating roles, permissions, and involvements by various participants in your work? Are there issues of gender, race, culture, and status difference that need to be taken into account?

# 1.1.2 Methods

- What methods will you use in your investigation? What type of data will you gather?
   Will this include data that goes beyond normal classroom activities and assessments?
   How much class time will additional data collection activities take?
- How can your investigation be made educationally valuable for students? Might students be involved, for instance by gathering and analyzing data?
- Will your data collection choices (e.g., video recording, use of personal writing, use of data from whole-class discussion) affect your ability to protect students' privacy?

#### 1.1.3 Results and the Presentation of Results to Various Audiences

What negative or embarrassing data can you anticipate emerging from your scholarship
of teaching and learning, and who might be harmed as a consequence? How can you

create a context for understanding "bad news"? How in particular, can examples of work by students who are novices, or who are struggling with new material be treated with respect?

- Who will see the results and products of your work? What conclusions might be drawn by various audiences: About students? About teaching? About your department, discipline, or campus? About higher education? About you? How is your choice of medium (e.g., video recording) related to those concerns?
- How can contributions to your work by various participants (including both colleagues and students) be acknowledged and/or cited, while maintaining appropriate confidentiality?

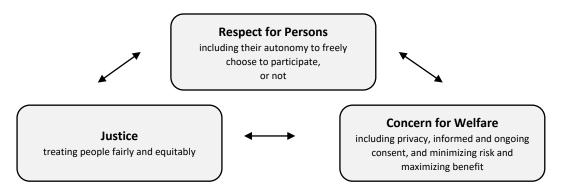
# 1.1.4 Reflection and Development

- Whom can you talk to about the above questions? How can you create occasions for discussion and reflection about them with colleagues?
- What are you learning from your project that can inform future practice related to ethical issues in the scholarship of teaching and learning?

# 1.2 Doing SoTL Research in Canada

In Canadian institutions of higher education, ethics boards are required to review research applications involving human participants to ensure that researchers intend to protect the rights and welfare of individuals. Ethical considerations used by Canada's research ethics boards (REBs) are governed by the <u>Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans</u> (TCPS2), and in particular, the guidelines in the TCPS2 are based on <u>three core principles</u> (see Figure 1 below).

Figure 1: The Three Core Principles of the TCPS2



Planning to conduct SoTL research in Canada therefore involves attending not just to one's ethical training and experience, but also to ethical considerations outlined in the TCPS2. With the goal of understanding and improving students' learning, SoTL is most often conducted by gathering evidence (or data) from one's own students. At times, SoTL researchers combine or use data gathered previously for a different purpose, such as assignments or student-produced work initially collected for evaluation or assessment purposes, school records, or statistical data for educational or administrative purposes. The TCPS2 (2014, p. 64) calls this "secondary use of data," or "the use in research of information

originally collected for a purpose other than the current research purpose." (Further clarification of the use of secondary data is included under the "Privacy and Confidentiality" section, and specifically under the heading, "Reasons to Conduct Secondary Analyses of Data.")

The following pages outline the relevant Articles from the TCPS2, and some strategies for ethical practice that readers might contemplate using. (University of Calgary applicants, please also review SoTL and the Ethics Review at the University of Calgary.)

#### 1.3 Ethical Dilemmas That May Arise When Doing SoTL Research

Because SoTL is typically conducted by instructors in their own classrooms (current or former), SoTL practitioners frequently find themselves in the dual role of both instructor and researcher. Ultimately, the instructor-researcher in SoTL is an instructor first. As MacLean and Poole (2010, pg. 3) explain, "The teacher's responsibility to hold students' educational interests paramount provides an important perspective when considering ethical issues for research in teaching and learning." This dual role can raise a set of specific ethical dilemmas that require instructor-researchers to carefully plan parts of the research and to ask themselves challenging questions. Potential ethical dilemmas can arise with respect to the following areas of ethical consideration. In the table below, we articulate several core principles for ethical practice that respond to these potentially dilemmatic areas of consideration, and elaborate on them in the remainder of the document.

Table 1: Potential Ethical Dilemmas and Key Principles of Ethical Practice

Areas of Potential Dilemmas	Key Principles of Ethical Practice		
Conflicts of Interest	Mitigate undue influence, coercion, or power imbalances by		
and Power	a. basing decisions first and foremost on an instructor's goals (which sometimes		
Relationships	may be at odds with research goals), and		
	<ul> <li>b. being sensitive to the inherent power differential between instructor and student.</li> </ul>		
Consent Processes	Ensure that students' decisions to participate in the research (or not) is informed and		
	voluntary by		
	a. telling them about the purpose, benefits, risks, and consequences of the		
	research before asking for their consent, and		
	b. making sure they have the autonomy to freely and privately choose to		
	participate, refuse to participate, or withdraw from participation at any time		
	during the research.		
Fairness and Equity	and Equity Within the goals of the research project, be inclusive, fair, and equitable when selecting		
in Research	participants by		
Participation	a. recognizing and respecting the vulnerability of individuals or groups and		
	b. making the results available, accessible, and understandable to all participants		
	upon completion of the study.		
Privacy and	Protect the participants' information and the integrity of the research project by		
Confidentiality	a. meeting confidentiality obligations in the research,		
	b. implementing appropriate institutional safeguards and security measures to		
	protect participant information and data, and		
	c. if the research involves identifiable secondary use of data (e.g., former students'		
	work or other identifiable materials collected before seeking REB approval),		
	seeking students' informed consent and applying the above principles of ethical		
	practice to this secondary use of data.		

# **Chapter 2 Conflicts of Interest and Power Relationships**

# 2.1 TCPS2 | Article 7.4

"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 other and affect decision-making procedures (e.g., consent of participants). Article 3.2(e) reminds researchers of relevant ethical duties that govern real, potential or perceived conflicts of interest as they relate to the consent of participants. To preserve and not abuse the trust on which many professional relationships rest, researchers should be fully cognizant of conflicts of interest that may arise from their dual or multiple roles, their rights and responsibilities, and how they can manage the conflict. When acting in dual or multiple roles, the researcher shall disclose the nature of the conflict to the participant in the consent process" (TCPS2, Chapter 7, D. Researchers and Conflicts of Interest).

# 2.1.1 Key Principle

When you are acting as both instructor and researcher, mitigate undue influence, coercion, or power imbalances by basing decisions first and foremost on your role as instructor (which sometimes may be at odds with your goals as researcher), and by being sensitive to the inherent power differential between instructor and student.

# 2.1.2 Strategies for Ethical Practice

- As you begin to design your study, describe your research plans to colleagues and former students, and invite them to help you identify blind spots you might have in terms of influence, coercion, or power imbalances, so that you can address them in your planning.<sup>1</sup>
- Provide student participants with information about how to contact the university's REB with ethical questions or concerns.

# If possible:

Use a third party to assist with participant recruitment, information provision, and data generation and analysis.<sup>2</sup> This approach protects the identity of participating and nonparticipating students by ensuring that students can become informed about the study, raise

<sup>&</sup>lt;sup>1</sup> For a list of discussion questions to facilitate identification of **blind spots**, see <u>Table 4 – Questions to Consider</u> When Planning SoTL Research on page 16 of this Guide.

<sup>&</sup>lt;sup>2</sup> A **third party** is someone who does not have grading authority or perceived power over potential participants who can act as an intermediary or buffer between you and the students. This person will be the only one who knows which students are participating in the research (you will not), and students will be informed of this person's role before deciding whether to participate. With your direction, the third party may do any or all the following: introduce/present the study to potential participants, collect and store consent forms, field participants' questions and/or de-identify then direct their questions your way and convey your response(s) to them, provide prospective participants with updates/ongoing information about the study, conduct interviews and/or lead focus groups with student participants, etc.

questions, participate in, and/or withdraw from the study without revealing their identities as research participants (or not) to you.

- Collect data (e.g., conduct interviews or focus groups, distribute surveys) after final grades have been submitted and released to the students, and after the appeal deadline has passed.
- Analyze student work after identifying information has been removed.<sup>3</sup>
- Conduct the research using students in a school or classroom other than your own.

<sup>&</sup>lt;sup>3</sup> **Identifying information** is that which can or may reveal which students are participating in the research. This information might include first and/or last names, student ID numbers, physical descriptions, or other references to or about people that might reasonably identify them as research participants.

# **Chapter 3 Consent Processes**

# 3.1 TCPS2 | Article 3.1

"The approach to recruitment is an important element in assuring voluntariness. In particular, how, when and where participants are approached, and who recruits them are important elements in assuring (or undermining) voluntariness. In considering the voluntariness of consent, REBs and researchers should be cognizant of situations where undue influence, coercion, or the offer or incentives may undermine the voluntariness of a participants' consent to participate in research" (TCPS2, Chapter 3, A. General Principles, "Consent Should Be Given Voluntarily").

# 3.1.1 Key Principle

Ensure that each student's decision to participate in your research (or not) is voluntary, and that their privacy is protected when offering or declining consent.

# 3.1.2 Strategies for Ethical Practice

- Use a third party to facilitate consent/withdrawal processes to protect students' privacy.
- Clearly communicate to students that there are no repercussions for their refusal to consent.
- When conducting surveys, use web-based survey tools (e.g., Qualtrics, etc.) that allow for students to participate anonymously. Anonymous online participation eliminates personal identifiers and peer pressure, and allows students who are not interested in participating to privately decline.
- When collecting consent forms from student participants in class, design the forms so that all students must sign and hand in the paper form in order to prevent knowledge of who is and is not participating (e.g., explain that everyone signs the consent form, but those who do NOT want to participate can then draw two lines through their signatures).
- When offering incentives, keep them to a minimum to avoid undue influence (e.g., \$25 bookstore gift card, a draw for a \$50 gift card), and provide students with clear timelines during which they may opt in or out of participation in the study. If the incentive includes a small percentage of their grade (1 to 5%), give students not participating in the study an opportunity to earn the same incentive through an alternate option, such as an additional assignment that is equivalent in time and effort.

# If you are collecting and analyzing your own data, where applicable, inform students:

- About where or to whom they might direct questions about the study, before, during, and after the study.
- That you will not know who has agreed to participate until students' grades are submitted and released and the appeal deadline has passed.
- That you will not analyze data until after grades are submitted and released to students and the appeal deadline has passed.

# 3.2 TCPS2 | Article 3.2

"Researchers shall provide to prospective participants, or authorized third parties, full disclosure of all information necessary for making an informed decision to participate in a research project" (TCPS2, Chapter 3, A. General Principles, "Consent Shall Be Informed").

# 3.2.1 Key Principle

Ensure that students' decisions to participate in your research (or not) are informed by telling them about the purpose, benefits, risks, and consequences of your research *before* asking for their consent.

# 3.2.2 Strategies for Ethical Practice

- Describe and discuss (or have a <u>third party</u> describe and discuss) the research with students before seeking their consent to participate.
- Include clear and transparent descriptions of the project on consent forms (even if the project has already been described in detail to participants).
- Commit to students at the onset that results will be shared with them upon completion.
- When conducting focus groups, ensure that the consent process asks that each member of the
  focus group to respect the confidentiality of other members, but that you cannot guarantee
  confidentiality. Because of this, in REB applications, it may be advisable attend to why group
  data (rather than individual interview data) is preferable in your research design.
- When video or audio recording, because this method of collecting data can inadvertently capture material produced by students who have not consented to participate in the research process, it is advisable that researchers clearly articulate to their institutional REBs why this data collection method (as opposed to others) is important to the research design. If using video, give consenting students the option to choose whether their presence on the video (a) will only be viewed by the research team, or (b) may be viewed by the research team and shared during dissemination of research findings, and to indicate their choice on the informed consent form.
- When possible, include a brief explanation of the research on your course outline or syllabus (if
  advisable within your campus context). For example: "Please be advised that within this course,
  you will have the opportunity to volunteer as a research participant in a study that examines the
  reading comprehension of second year, undergraduate students, as they progress through
  Language and Literature 201. Details will be provided at the start of the course."

## 3.3 TCPS2 | Article 3.3

"Consent shall be maintained throughout the research project. Researchers have an ongoing duty to provide participants with all information relevant to their ongoing consent to participate in the research" (TCPS2, Chapter 3, A. General Principles, "Consent Shall Be an Ongoing Process").

# 3.3.1 Key Principle

Make sure students have the autonomy to freely and privately choose to participate, refuse to participate, or withdraw from participation at any time during or after the research (provided that it has not already been disseminated).

# 3.3.2 Strategies for Ethical Practice

- Provide students the option to withdraw from the research simply (e.g., by sending an email) and at any time prior to dissemination. Indicate what will happen to their data after they have withdrawn from the research (e.g., that, wherever possible, it will be extracted and destroyed).
- In cases where the research timeline needs to be extended, whenever possible seek students' consent regarding these extensions.

# **Chapter 4** Fairness and Equity in Research Participation

# 4.1 TCPS2 | Article 4.1

"Taking into account the scope and objectives of their research, researchers should be inclusive in selecting participants. Researchers shall not exclude individuals from the opportunity to participate in research on the basis of attributes such as culture, language, religion, race, disability, sexual orientation, ethnicity, linguistic proficiency, gender or age, unless there is a valid reason for the exclusion.

Application ... The focus, objective, nature of research and context in which the research is conducted inform the inclusion and exclusion criteria for a specific research project... Other examples include research that is focused on specific cultural traditions or languages, or on one age group...Such research should not be precluded so long as the selection criteria for those to be included in the research are germane to answering the research question. Researchers who plan to actively exclude particular groups should clarify to their REBs the grounds for the exclusion" (TCPS2, Chapter 4, A. Appropriate Inclusion).

# 4.1.1 Key Principle

As much as possible, within the goals of the research project, be inclusive, fair, and equitable when selecting participants.

# 4.1.2 Strategies for Ethical Practice

- Have a clear rationale for participant inclusion and exclusion criteria, which are connected to your project's goals and specific research question. For instance, if you're not including seniors, or men, or non-majors, or non-native English speakers, explain how this exclusion is relevant to your specific project (e.g., "Because this research is specifically focused on the female experience of power relationships, and because we are linking to gender theory, only womenidentified people will be included for participation").
- Consider your assumptions about potential participants in your study. For example, don't assume that students with physical disabilities should be excluded from a study that uses physical activity games to assess comprehension of biomechanics principles. Invite colleagues and/or former students to help you identify assumptions that you might be making about participants, to ensure that your inclusion/exclusion criteria do not suffer from blind spots.
- If there's a language barrier between you (or your third party) and participant(s), involve an intermediary who is competent in both languages to assist with communication between you (or your third party) and participant(s).

# 4.2 TCPS2 | Article 4.7

"Researchers should anticipate, to the best of their ability, needs of participants, groups and their communities that might arise in any given research project. ... Researchers should consider ways to ensure the equitable distribution of any benefits of participation in research" (TCPS2, Chapter 4, B. Inappropriate Exclusion, "Participants' Vulnerability and Research").

# 4.2.1 Key Principle

Ensure that the benefits of participating in your study are equitably distributed among participants.

# 4.2.2 Strategies for Ethical Practice

- Discuss potential research benefits with students at the onset of the study.
- Ensure an "equitable distribution of research benefits" (TCPS2, 2014, p. 55) by avoiding circumstances in which the conditions of some participants are significantly more beneficial than the conditions for other participants or for non-participants. If you are using a comparison group or a differential experience for non-participants, you should closely monitor the impact of an intervention to guard against one group (e.g., research participants, or non-participants) experiencing significantly more benefits over the other group(s). You are responsible for gauging if the discrepancy between groups becomes unethical and could have negative implications for the other group(s), in which case contingencies and modifications to a study may be needed.
  - For instance, an instructor teaching two sections of the same course might use a "flipped classroom" model for one section and leave the other unchanged (as a control group). If students in the flipped classroom are showing significant gains, the students in the control group may be disadvantaged, and the instructor may decide to flip both sections to mitigate an unethical disparity between groups. This type of contingency should be included in the research design, and student success should be prioritized.

# 4.3 TCPS2 | "Research Results"

"Researchers should normally provide copies of publications, or other research reports or products, arising from the research to the institution or organization – normally the host institution – that is best suited to act as a repository and disseminator of the results within the participating communities. This may not be necessary in jurisdictions where the results are readily available in print or electronically. In general, researchers should ensure that participating individuals, groups and communities are informed of how to access the results of the research. Results of the research should be made available to them in a culturally appropriate and meaningful format, such as reports in plain language in addition to technical reports" (TCPS2, Chapter 4, B. Inappropriate Exclusion, "Equitable Distribution of Research Benefits").

# 4.3.1 Key Principle

Upon completion of the study, make the results available, accessible, and understandable to all participants.

## 4.3.2 Strategies for Ethical Practice

- Inform students that you will share the outcomes of your research, and in what format (e.g., a
  one-page brief, a paper, etc.) as soon as they become available. Invite students to provide
  contact information during the consent process to indicate how to reach them with research
  outcomes (e.g., an email address to which the outcomes can be sent).
- When the outcomes are available, provide participants with the citation of the journal in which it is published or copies of the publication, as well as a written summary of results that is written in clear, understandable language.

# **Chapter 5 Privacy and Confidentiality**

# 5.1 TCPS2 | Article 5.1

"Researchers shall safeguard information entrusted to them and not misuse or wrongfully disclose it. Institutions shall support their researchers in maintaining promises of confidentiality" (TCPS2, Chapter 5, B. Ethical Duty of Confidentiality).

# 5.2 TCPS2 | Article 5.2

"Researchers shall describe measures for meeting confidentiality obligations and explain any reasonably foreseeable disclosure requirements:

a. in application materials they submit to the REB; and

b. during the consent process with prospective participants" (TCPS2, Chapter 5, B. Ethical Duty of Confidentiality).

# 5.2.1 Key Principle

Protect the participants' information and the integrity of the research project.

# 5.2.2 Strategies for Ethical Practice

- Discuss the practical implications of confidentiality with all members of your research team, and where relevant, have all members sign a confidentiality agreement.
- Do not share any specific identifying information about the data collected with anyone other than your research team.
- If information sharing with government agencies, community research partners, research sponsors, or regulatory agencies may occur during the study, describe and include this possibility as part of the information provided to students before they decide whether to participate.
- If confidentiality is unexpectedly breached, let participants know immediately and advise them of the steps you have taken to address the situation and to prevent further breaches.

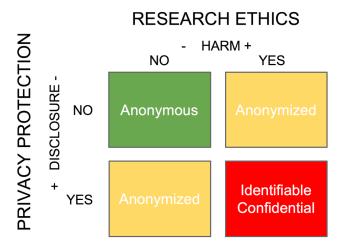
# If possible:

- **De-identify**<sup>4</sup> student data, or have a <u>third party</u> de-identify the data for you.
- When groups are small (e.g., fewer than 10 or 15 members of a particular type), aggregate or combine data and remove identifying information to diminish the possibility that the responses of specific identifiable groups will be deduced.

<sup>&</sup>lt;sup>4</sup> Data can be "de-identified" by having a third party strip from the data information that may identify which students are participating. This process might include actions such as assigning participants pseudonyms or codes, and removing information from the data such as physical descriptors or other references to or about a person that might reasonably identify her or him as a research participant.

In an online presentation about REBs,<sup>5</sup> Babcock and Henry (2014) reproduce the Risk Matrix below. The matrix demonstrates that there is a two-fold relationship between disclosure and harm reduction. Figure 2 demonstrates that privacy protection and ethics are both warranted in cases in which the data consists of identifiable, confidential information, where risk of disclosure and harm are most pronounced. The yellow cells in the table indicate that risk of disclosure and harm still exist in cases in which the data has been de-identified (here, referred to as anonymized), thus requiring protection of privacy and REB review.

Figure 2: University of Alberta Risk Matrix (Babcock & Henry, 2014)



# 5.3 TCPS2 | Article 5.3

'Researchers shall provide details to the REB regarding their proposed measures for safeguarding information, for the full life cycle of information: its collection, use, dissemination, retention and/or disposal" (TCPS2, Chapter 5, C. Safeguarding Information).

# 5.4 TCPS2 | Article 5.4

"Institutions or organizations where research data are held have a responsibility to establish appropriate institutional security safeguards" (TCPS2, Chapter 5, C. Safeguarding Information).

# 5.4.1 Key Principle

At all times during data collection and analysis, use appropriate safeguards and security measures to protect participant information and data.

# 5.4.2 Strategies for Ethical Practice

- Use encryption software and/or password protected digital documents, folders, and/or systems to limit access to data and protect participant confidentiality.
- Store all hardcopies of <u>participant-identifying</u> data, including signed consent forms, in a locked cabinet with a key and protect that key.

<sup>&</sup>lt;sup>5</sup> The online presentation can be found here: <a href="https://www.slideshare.net/CASRAI/rdc-humphrey-babcockresearch-ethics-boards-and-data-management-plansconflict-and-coexistence-42346535?from-action=save">https://www.slideshare.net/CASRAI/rdc-humphrey-babcockresearch-ethics-boards-and-data-management-plansconflict-and-coexistence-42346535?from-action=save</a>

- Keep an up-to-date list of all persons with access to participant information, ensuring they have signed a non-disclosure or confidentiality agreement (e.g., You can find an example of such an agreement at the University of Calgary CFREB website: <a href="https://ucalgary.ca/research/researchers/ethics-compliance/cfreb">https://ucalgary.ca/research/researchers/ethics-compliance/cfreb</a>).
- If appropriate, destroy all <u>identifying participant information and identifying data</u> upon completion of the research project (e.g., by shredding hardcopy materials and/or by reformatting/wiping digital storage devices). It may be inappropriate to destroy data when, for example, the data consists of course material (e.g., assignments, papers, exams) or evaluative material (e.g., course and/or teaching evaluations) that may be otherwise used and retained for other purposes (e.g., course redesign).

Babcock and Henry (2014) also outline a "data hierarchy" that helps researchers attend to the disclosure risks that can arise with respect to confidentiality and human participants. This four-tiered represents risk as least to most pronounced by information type. Specifically, anonymous information is represented as lowest in risk in terms of disclosing confidentiality, and identifiable information is positioned as the kind of information with the highest risk of disclosure.

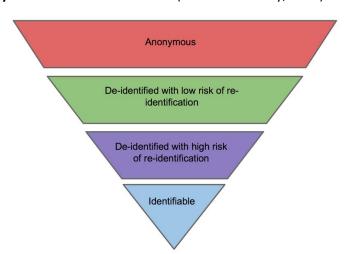


Figure 3: University of Toronto Data Risk Chart (Babcock & Henry, 2014)

# 5.5 TCPS2 | "Reasons to Conduct Secondary Analyses of Data" 6

"Reasons to conduct secondary analyses of data include: avoidance of duplication in primary collection and the associated reduction of burdens on participants; corroboration or criticism of the conclusions of the original project; comparison of change in a research sample over time; application of new tests of hypotheses that were not available at the time of original data collection; and confirmation that the data are authentic. Privacy concerns and questions about the need to seek consent arrive, however, 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, Chapter 5, D. Consent and

<sup>&</sup>lt;sup>6</sup> **Secondary analyses of data**, also referred to herein as **secondary use of data** consists of information originally collected for other purposes. Such information might consist of student work, information obtained for program evaluation, school records, or other <u>identifiable materials</u> collected for educational or administrative purposes.

Secondary Use of Identifiable Information for Research Purposes).

# 5.6 TCPS2 | Article 5.5A

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

- a. identifiable information is essential to the research;
- b. the use of <u>identifiable information</u> 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 <u>identifiable information</u>;
- 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" (<u>TCPS2</u>, <u>Chapter 5</u>, D. Consent and Secondary Use of Identifiable Information for Research Purposes).

# 5.7 TCPS2 | Article 5.5B

"Researchers shall seek REB review, but are not required to seek participant consent, for research that relies exclusively on the secondary use of non-identifiable information" (TCPS2, Chapter 5, D. Consent and Secondary Use of Identifiable Information for Research Purposes).

# 5.7.1 Key Principle

Apply the above principles of privacy, and seek REB review even if your research involves data initially collected for other reasons (e.g., "secondary use of data").

# 5.7.2 Strategies for Ethical Practice

- When possible, use anonymous data.
- If generating anonymous data conflicts with your research question and design, when possible, use data that has been <u>de-identified</u>.
- Although seeking participant consent is not required for non-identifiable data (Article 5.5B above), it is still good practice to seek students' consent to use their data again.
- If the data that you want to use is <u>identifiable</u> and the REB requires that you seek students' consent anyway, apply the principles and strategies in "<u>Consent Processes</u>," starting on page 6 of this Guide.

- If you are emailing former students to seek consent to use their previously generated information as data or for additional information that may serve as data, be sensitive to general overuse of email and full inboxes.<sup>7</sup>
  - Use a third party to collect consent for research participants who are not your current students. Although this is not required, use of a third party is a good practice in case these students want to enroll in a future course you teach or to ask you to serve on an advisory committee or write a reference letter for them, etc.
- If you are contacting former students to seek their consent to use their previously generated information as data or for additional information that may serve as data (e.g., "secondary use of data"), be prepared to explain to the REB:
  - o why you want to contact these former students,
  - how the potential benefits of this follow-up or additional data outweigh any drawbacks of contacting them,
  - who will be contacting the individuals and the nature of their relationship with those students (e.g., a <u>third party</u>), and
  - o how they will be contacted (Article 5.6).

<sup>&</sup>lt;sup>7</sup> Emailing students for research purposes is allowed by Canadian Anti-Spam Legislation, or CASL. See "7. Research" on https://www.ucalgary.ca/legalservices/files/legalservices/casl\_university-of-calgary\_checklist\_v4.pdf

Table 2: Questions to Consider When Planning SoTL Research

Areas of Potential Dilemmas	Key Principles for Ethical Practice	Questions to Consider	
Conflicts of Interest and Power Relationships	<ul> <li>Mitigate undue influence, coercion, or power imbalances by</li> <li>a. basing decisions first and foremost on an instructor's goals (which sometimes may be at odds with research goals), and</li> <li>b. being sensitive to the inherent power differential between instructor and student.</li> </ul>	<ul> <li>a. "Could any part of the research design interfere with the effectiveness and/or credibility an instructor and/or with students' interests and/or ability to learn?"</li> <li>b. "Are there ways in which participating in this research - or not - might be something that students feel like they had to do? If so, why?"</li> <li>c. "Could a third-party help with the consent and data collection process to mitigate power-differentials?"</li> </ul>	
Consent Process	Ensure that students' decisions to participate in the research (or not) is informed and voluntary by	"What else would you want to know before making a decision about participating in this research?"	
	<ul> <li>a. telling them about the purpose, benefits, risks, and consequences of the research before asking for their consent, and</li> <li>b. making sure they have the autonomy to freely and privately choose to participate, refuse to participate, or withdraw from participation at any time during the research.</li> </ul>	<ul> <li>b. "In what ways might students feel compelled to participate or compromised in their ability to withdraw from the study without consequence?"</li> </ul>	
Fairness and Equity	Within the goals of the research project, be inclusive, fair, and equitable when selecting participants by	a. "Are there any individuals or groups that this research might directly or indirectly exclude?"	
	<ul><li>a. recognizing and respecting the vulnerability of individuals or groups and</li><li>b. making the results available, accessible, and understandable to all participants upon completion of the study.</li></ul>	b. "How can I be sure that the results of this study can be accessible to all participants?"	
Privacy and Confidentiality	Protect the participants' information and the integrity of the research project by  a. meeting confidentiality obligations in the research,  b. implementing appropriate institutional safeguards and security measures to protect participant information and data, and	<ul> <li>a. "Are there ways in which this research design might, in any way, compromise participants' confidentiality?"</li> <li>b. "Are there adequate safeguards to protect</li> </ul>	
	c. if the research involves identifiable secondary use of data (e.g., former students' work or other identifiable materials collected before seeking REB approval), seeking students' informed consent and applying the above principles of ethical practice to this secondary use of data.	participants' information and data?"  c. "Have I obtained informed consent from all students' whose data I am using in this study, regardless of when said data was collected?"	

# References

- Allen, G., Israel, M., & Thomson, C. (2016). Scholarship of teaching and learning human research ethics resource manual. Australian Government Office for Learning and Teaching. Retrieved from: <a href="http://www.ahrecs.com/?post\_type=resource&p=1696">http://www.ahrecs.com/?post\_type=resource&p=1696</a>
- Babcock, S., & Humphrey, C. (2014). Research ethics boards and data management plans: Conflict and coexistence [Slideshare]. Retrieved from <a href="https://www.slideshare.net/CASRAI/rdc-humphrey-babcockresearch-ethics-boards-and-data-management-plansconflict-and-coexistence-42346535?from">https://www.slideshare.net/CASRAI/rdc-humphrey-babcockresearch-ethics-boards-and-data-management-plansconflict-and-coexistence-42346535?from</a> action=save
- Canada. Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council. (2018). Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans. (December). Retrieved from <a href="http://www.pre.ethics.gc.ca/eng/policy-politique\_tcps2-eptc2\_2018.html">http://www.pre.ethics.gc.ca/eng/policy-politique\_tcps2-eptc2\_2018.html</a>
- Chick, N. (2015, June). *The SoTL Guide*. University of Calgary. Retrieved from: http://sotl.ucalgaryblogs.ca/
- Faller, S.E., & Norman, C. (2015). Ethics & the IRB review process: A guide for SoTL researchers at UC. Retrieved from: <a href="https://www.uc.edu/content/dam/uc/cetl/docs/IRB%20for%20SoTL.pdf">https://www.uc.edu/content/dam/uc/cetl/docs/IRB%20for%20SoTL.pdf</a>
- Hutchings, P. (2002). *Ethics of inquiry: Issues in the scholarship of teaching and learning*. Menlo Park: CA. Carnegie Publications. The Carnegie Foundation for the Advancement of Teaching.
- Hutchings, P. (2003). Competing goods: Ethical issues in the scholarship of teaching and learning. *Change: The Magazine of Higher Learning*, *35*(5), 26-33. http://dx.doi.org/10.1080/00091380309604116
- Mount Royal University Research Ethics Board. (2012). Ethical considerations for dual-role research:

  Conducting research with students in your classroom. Retrieved from:

  http://www.mtroyal.ca/cs/groups/public/documents/pdf/dualroleresearchers.pdf

# **Additional Resources**

- Australasia Human Research Ethics Services (AHRECS), Australia
  <a href="https://www.ahrecs.com/resources/scholarship-teaching-learning-human-research-ethics-resource-manual-sotl-manual">https://www.ahrecs.com/resources/scholarship-teaching-learning-human-research-ethics-resource-manual-sotl-manual</a>
- Becker, W. E., & Andrews, M. L. (Eds.). (2004). *The scholarship of teaching and learning in higher education: Contributions of research universities.* Bloomington, IN: Indiana University Press.
- Blikstad-Balas, M. (2016). Key challenges of using video when investigating social practices in education: contextualization, magnification, and representation. *International Journal of Research & Method in Education*, 1-13. <a href="http://dx.doi.org/10.1080/1743727X.2016.11811">http://dx.doi.org/10.1080/1743727X.2016.11811</a>
- Burman, M., & Kleinsasser, A. (2004). Ethical guidelines for the use of student work: Moving from teaching's invisibility to inquiry's visibility in the scholarship of teaching and learning. *Journal of General Education*, *53*(1), 59-79. Retrieved from <a href="http://www.jstor.org/stable/27797976">http://www.jstor.org/stable/27797976</a>
- Chang, R. L., & Gray, K. (2013). Ethics of research into learning and teaching with Web 2.0: Reflections on eight case studies. *Journal of Computing in Higher Education*, 25(3), 147–165.
- Gurung, R. A. R., & Wilson, J. H. (Eds.). (2013). Doing the scholarship of teaching and learning: Measuring

- systematic changes to teaching and improvements in learning [Special issue]. *New Directions for Teaching and Learning*, 2013(136).
- Healey, R. L., Bass, T., Caulfield, J., Hoffman, A., McGinn, M. K., Miller-Young, J., & Haigh, M. (2013). Being ethically minded: Practising the scholarship of teaching and learning in an ethical manner. *Teaching & Learning Inquiry: The ISSOTL Journal*, 1(2), 23-33. doi: http://dx.doi.org/10.20343/teachlearningu.1.2.23
- Hubball, H., Clarke, A., & Poole, G. (2010). Ten-year reflections on mentoring SoTL research in a research-intensive university. *International Journal for Academic Development*, *15*(2), 117-129. http://dx.doi.org/10.1080/13601441003737758
- Hubball, H., & Clarke, A. (2010). Diverse methodological approaches and considerations for SoTL in higher education. *Canadian Journal for the Scholarship of Teaching and Learning*, 1(1), 2. http://dx.doi.org/10.5206/cjsotl-rcacea.2010.1.2
- Hutchings, P. (2002). *Ethics of inquiry: Issues in the scholarship of teaching and learning*. Carnegie Publications. The Carnegie Foundation for the Advancement of Teaching. Menlo Park: CA
- Hutchings, P. (2003). Competing goods: Ethical issues in the scholarship of teaching and learning. *Change: The Magazine of Higher Learning*, *35*(5), 26-33. doi: <a href="http://dx.doi.org/10.1080/00091380309604116">http://dx.doi.org/10.1080/00091380309604116</a>
- Linder, K. E., Elek, E. D., & Calderon, L. (2014). SoTL and the institutional review board: Considerations before navigating the application process for classroom research in higher education. *Journal of the Scholarship of Teaching & Learning*, 14(2), 1. Retrieved from http://josotl.indiana.edu/article/view/4217
- MacLean, M., & Poole, G. (2010). An introduction to ethical considerations for novices to research in teaching and in Canada. *Canadian Journal for the Scholarship of Teaching and Learning*, 1(2), 1-10. doi: <a href="http://dx.doi.org/10.5206/cjsotl-rcacea.2010.2.7">http://dx.doi.org/10.5206/cjsotl-rcacea.2010.2.7</a> Available at <a href="http://ir.lib.uwo.ca/cjsotl-rcacea/vol1/iss2/7">http://ir.lib.uwo.ca/cjsotl-rcacea/vol1/iss2/7</a>
- Manor, C., Bloch-Schulman, S., Flannery, K., & Felten, P. (2010). Foundations of student-faculty partnerships in SoTL: Theoretical and developmental considerations. In C. Werder & M. M. Otis (Eds.), Engaging student voices in the study of teaching and learning (pp. 3–15). Sterling, VA: Stylus.
- Martin, R. C. (2013). Navigating the IRB: The ethics of SoTL. *New Directions for Teaching and Learning*, 2013(136), 59-71. doi: 10.1002/tl.20076
- Martin, R. C., Gurung, R. A. R., & Wilson, J. H. (2014). *IRBs and research on teaching and learning*.

  Retrieved from http://teachpsych.org/Resources/Documents/otrp/resources/martin14.pdf
- Smythe, W.E. & Murray, M.J. (2000). Owning the story: ethical considerations in narrative research. *Ethics and Behaviour, 10*(4), 311-336. doi: 10.1207/S15327019EB1004 1
- Stockley, D., & Balkwill, L. (2013). Raising awareness of research ethics in SoTL: The role of educational developers. Canadian Journal for the Scholarship of Teaching and Learning, 4(1), 1–8.
- Swenson, E. V., & McCarthy, M. A. (2012). Ethically conducting the scholarship of teaching and learning research. In R. E. Landrum & M. A. McCarthy (Eds.), *Teaching ethically: challenges and opportunities* (pp. 21–30). Washington, DC: American Psychological Association.
- University of Alberta (Edmonton, AB, Canada). Students as Research Participants
  <a href="http://www.reo.ualberta.ca/Human-Research-Ethics/Students-and-Research/Students-as-Participants.aspx">http://www.reo.ualberta.ca/Human-Research-Ethics/Students-and-Research/Students-as-Participants.aspx</a>
- University of Cincinnati Ethics (Cincinnati, OH, USA). Ethics & the IRB Review Process https://www.uc.edu/content/dam/uc/cetl/docs/IRB%20for%20SoTL.pdf
- van den Hoonaard, W. C., & Hamilton, A. (Eds.). (2016). *The ethics rupture: Exploring alternatives to formal research-ethics review.* Toronto, ON: University of Toronto Press.
- Webb, A. (2015). Research interviews in the scholarship of teaching and learning. Transformative

Dialogues: Teaching & Learning Journal, 8(1), 1-8.

Wiles, R., Prosser, J., Bagnoli, A., Clark, A., Davies, K., Holland, S., & Renold, E. (2008). Visual ethics: Ethical issues in visual research. *National Centre for Research Ethics*. Available at: <a href="http://eprints.ncrm.ac.uk/421/">http://eprints.ncrm.ac.uk/421/</a>

Zeni, J. (Ed.). (2001). Ethical issues in practitioner research. New York: Teachers College Press.