The Canadian Journal for the Scholarship of Teaching and Learning

Volume 10 | Issue 1 Article 12

Spring 5-31-2019

Bridging the Gap between the Research Ethics Board and the Scholarship of Teaching and Learning

Matthew A. Schnurr

Dalhousie University, matthew.schnurr@dal.ca

Alanna Taylor

Dalhousie University, alannataylor@dal.ca

Follow this and additional works at: https://www.cjsotl-rcacea.ca https://doi.org/10.5206/cjsotl-rcacea.2019.1.8003

Bridging the Gap between the Research Ethics Board and the Scholarship of Teaching and Learning

Abstract

In 2016, Dalhousie University's Research Ethics Board created an interdisciplinary working group to identify the key ethical challenges of SoTL research, with the overarching aim of recommending best practices and communicating these to researchers in order to support and expand the conduct of ethically sound SoTL research. This essay reflects on the lessons learned through this process and shines a light on the three most contentious arenas that emerged: using class time to conduct SoTL research, integrating Students Ratings of Instruction (SRI) into SoTL, and incorporating student work as a data source.

This essay contributes to the emerging conversation around ethical SoTL research in two important ways. First, we argue for more lenient REB protocols that encourage SoTL research by exposing how restrictive interpretations of key issues serve as obstacles for student-centered research. Second, we introduce new tools designed to address these impediments, including the first-ever interactive user guide. The overarching aims of this essay are (a) to help SoTL researchers navigate this complex terrain, and (b) to encourage other Canadian REBs to consider implementing more permissive regimes.

En 2016, le comité d'éthique de la recherche de l'Université Dalhousie a mis sur pied un groupe de travail interdisciplinaire pour identifier les défis éthiques principaux de la recherche en ACEA, avec pour but suprême de recommander les meilleures pratiques et de communiquer celles-ci aux chercheurs afin de soutenir et d'élargir la conduite de recherches éthiques en ACEA. Cet article se penche sur les leçons apprises tout au long de ce processus et met en lumière les trois questions les plus controversées qui ont été dévoilées : employer les heures de classe pour mener des recherches en ACEA, intégrer les évaluations de l'enseignement des étudiants dans l'ACEA et incorporer les travaux des étudiants en tant que source de données.

Cet article contribue à la nouvelle conversation concernant l'éthique de la recherche en ACEA de deux manières importantes. Tout d'abord, nous proposons des protocoles de CÉR plus indulgents qui encouragent la recherche en ACEA en exposant comment les interprétations restrictives des questions principales constituent des obstacles à la recherche centrée sur les étudiants. Ensuite, nous introduisons de nouveaux outils conçus pour répondre à ces obstacles, y compris le tout premier guide de l'utilisateur interactif. Les objectifs suprêmes de cet article sont a) d'aider les chercheurs en ACEA à naviguer dans ce terrain complexe et b) d'encourager d'autres CÉR canadiens à envisager d'adopter des régimes plus permissifs.

Keywords

research ethics, SoTL, TCPS 2, REB review, consent, class time

Cover Page Footnote

Funding for this project was provided by Dalhousie University's Centre for Learning and Teaching. Special thanks to the Director of Research Ethics, Catherine Connors, as well as the Social Sciences and Humanities Research Ethics Board Working Group on the Scholarship of Teaching and Learning at Dalhousie University for offering valuable feedback and guidance.

Much of the Scholarship of Teaching and Learning (SoTL) depends upon the participation of students within the research process, as the perspectives of learners figure prominently in the evaluation of teaching effectiveness. But while the profile of SoTL research continues to expand, the research ethics protocols that govern university research have struggled to address the array of moral and ethical challenges that frame this unique branch of scholarship.

In this essay, we argue for more permissive REB protocols that encourage SoTL research. We draw on our own institutional experience marshalling in new tools designed to bridge this gap, alongside a scan of comparative protocols embraced by other institutions within the U15 group of research-intensive universities. Ultimately, we zero in on what we consider to be the three most pressing ethical considerations facing SoTL research—using class time to conduct SoTL research, integrating Students Ratings of Instruction (SRI) into SoTL, and incorporating student work as a data source—and expose how restrictive interpretations of key issues serve as obstacles for student-centered research. We then introduce an innovative, interactive user guide to help SoTL researchers and REBs navigate this murky terrain.

Research Ethics and SoTL

Research ethics is the arms-length, systematic analysis of ethical issues to ensure that research is conducted in a way that "serves the needs of... participants and of society as a whole" (Weijer, Dickens, & Meslin, 1997, p. 1154). It is a process that is concerned with the application of ethical guiding principles, especially respect for persons and concern for welfare and justice, in the context of specific research projects.

In Canada, the regulatory process is governed by an institutional REB, which assesses the ethical acceptability of all projects involving human participants. The REB provides guidance and oversight to ensure research adheres to accepted standards in order to protect both participants and researchers. Canadian REBs are governed by the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2), which mandates the establishment of REBs across all participating institutions giving them the authority to review, modify and approve all research involving human subjects.

The TCPS 2 does not mention SoTL explicitly, but it does make use of the student-instructor relationship to illustrate the diverse challenges of ethical research. SoTL is subsumed alongside a range of research that present potential risks related to dual-roles and undue influence. For example, the TCPS 2 acknowledges that dual-roles can create a conflict of interest and requires all researchers to state any conflicts of interest in their research. Article 3.2 (e) states that "researchers should separate, to the greatest extent possible, their role as researcher from their other roles as therapists, caregivers, teachers, advisors, consultants, supervisors, employers or the like" (CIHR, NSERC, & SSHRC, 2014, p. 30). This absence of any acknowledgment or concrete measures to guide pedagogical research in the TCPS 2 has left many SoTL practitioners feeling ambivalent about REB requirements (Stockley & Balkwill, 2013).

¹ Dalhousie University is a research-intensive university within the U15 Group of Canadian Research Universities, making these institutions the most logical choice as comparators. While we recognize that institutions outside this narrow range have made significant contributions to this debate, limitations in terms of time and space prevented a more comprehensive and robust comparison. Our national scan of U15 comparators, which involved a targeted search of each institution's research ethics online resource portal, was undertaken between January and April 2017, with a secondary verification conducted in January 2018.

A small body of research has begun to identify the ethical issues that underpin the SoTL. These matters stem predominantly from the unequal power dynamic that underlies the student-instructor relationship. The instructor is an authority figure and a gatekeeper to academic success, while the student is dependent upon the instructor for their educational outcomes (Loftin, Campanella, & Gilbert, 2011). When an instructor conducts SoTL research that involves students as research participants, their position of authority may create an environment where students feel vulnerable, coerced or pressured during the recruitment process (Ferguson, Yonge, & Myrick, 2006). For the instructor, conducting SoTL research positions them in a dual-role as teacher and researcher. Instructors are forced to balance their teaching and research objectives, which may diverge. The complicated relations between instructor and student necessitate an approach to SoTL research that is sensitive to these ethical considerations (Martin, 2013; Swensen & McCarthy, 2012).

While unequal power dynamics are not exclusive to SoTL research, we believe that the student-instructor relationship is unique and generates distinct ethical considerations. This view represents a challenge to the status quo. Currently, the Canadian Association of Research Ethics Board groups SoTL under community-engaged research, alongside action research and practitioner research. But community-engaged research is a collaborative process that includes participants in the research process, creating a very different set of ethical considerations (Anderson et al., 2012). When SoTL research is conducted with students, students become part of a captive population that is essentially locked-in as they are dependent on their instructor for their grades and educational success. This power differential is unique to SoTL.

A suite of ethical SoTL practices has emerged to address these challenges. At the scholarly level, a series of protocols aimed at mitigating the risks associated with SoTL research have been proposed (see for example, the international code of ethics for SoTL proposed by Gurung, Martin, Jarvis, & Creasey, 2007 or guidelines for using student work for the SoTL proposed by Burman & Kleinsasser, 2004). At the intuitional level, progress has been more uneven. Empirical and anecdotal evidence suggest that there exists a great deal of confusion for researchers around whether and how a SoTL application should be submitted to the REB (Stockley & Balkwill, 2013). This has led to denouncements of the REB process as a "bureaucratic hurdle" that impedes the research project (Chang & Gray, 2013). The danger here is that researchers might decide to pitch their investigations as program evaluation or quality improvement in order to evade the REB approval process as these interventions do not require REB approval.

For the REB, SoTL represents an ethically fuzzy arena of scholarship. At Dalhousie, SoTL is one of three areas of scholarship that are immediately flagged as high-risk—the other two being research involving children and research involving Indigenous populations—which triggers a full board review, as opposed to the delegated review reserved for low risk applications. This runs contrary to scholarly assessments, which maintain that most SoTL research presents only minimal risk and are deserving of expedited review (Linder, Elek, & Calderon, 2014; Pool & Reitsma, 2017). An additional challenge is that of capacity and expertise. The increasing popularity of SoTL leads to more REB submissions. REBs can lack reviewers with SoTL experience, which leads to cases of exaggerated risk and unnecessary delays. For all these reasons, the relationship between SoTL and the REB requires careful consideration.

Dalhousie University's REB User Guide on SoTL

Several universities across Canada have begun to bridge this gap by creating supplemental guidelines to address key ethical issues. Dalhousie University is one of the most recent additions to this list. In 2016, Dalhousie's REB convened an interdisciplinary working group tasked with articulating the key ethical challenges associated with SoTL research, recommending best practices, and communicating these to researchers to support the conduct of ethically sound SoTL research.

Dalhousie's guidelines begin by reiterating the three key ethical issues that are omnipresent throughout both the scholarship and existing policies. First is the matter of undue influence and coercion, which is underpinned by the unequal power relations between student and instructor. This captive relationship undermines the ability of participants to offer full and free consent to participate in the research; as such, students may feel pressured to participate to avoid real or perceived repercussions or to please their instructors (Ferguson et al., 2006; Loftin et al., 2011). The second issue is dual-role research. A teacher-researcher occupies two roles that carry different responsibilities and priorities. This dual-role issue is particularly pronounced within SoTL, where the role of the instructor is to act in the best interests of their students, while the role of the researcher is to move the research project forward (Ferguson, Yonge, & Myrick, 2004). The third issue is confidentiality and use of student data. According to the TCPS 2, researchers must ensure the privacy and confidentiality of their participants and their data. Concerns around privacy and confidentiality are heightened when collecting and using student data (Dommeyer, Baum, & Hanna, 2002).

Following the completion of Dalhousie University's SoTL guidelines (see Dalhousie University, 2017), the protocols were translated into an interactive user guide, which allows researchers to operationalize these guiding principles within their particular project and facilitate the implementation of best practices, along with the preparation of the REB submission itself (The user guide is available at www.sites.google.com/view/sotl-user-guide/). This process encourages researchers to consciously consider and reflect on the ethical dimensions and implications of their research design (Healey et al., 2013), while ensuring that the REB receives applications that have thoughtfully and comprehensively addressed the key ethical implications stipulated in the TCPS 2.

One of the key challenges of designing the user guide was to ensure that it can be easily adapted as both the practices and policies of SoTL research evolve. We gravitated towards free, easy-to-use online software to ensure that current and future university staff can adapt the user guide as needed. We settled on Google Slides because it is accessible and functions similar to Microsoft PowerPoint, which simplifies the process of future updates, while also allowing for the inclusion of interactive features designed to encourage the user to think carefully about various research design options.

Key Issues

The development of Dalhousie University's guidelines and user guide uncovered several key issues that are not extensively covered in either the scholarly literature or existing institutional guidelines at other institutions in the U15 Group of Canadian Research Universities. As Chair of the working group—who recently completed a three-year term serving on the REB—and the administrator charged with fashioning this user guide, we are uniquely positioned to reflect on the

most contentious issues that emerged through this process, which in our view, represent three of the most pressing ethical considerations facing SoTL research.

Issue 1: Using Class Time to Conduct SoTL Research

The prickliest issue that emerged throughout this process relates to the use of class time for research purposes. This debate took the working group by surprise, mostly because the ethical implications of using class time for research has scarcely been tackled in the existing scholarship. Conducting SoTL research during class takes time away from regular teaching activities; as such, this issue hinges on whether instructors should be granted permission to use class time for any purpose beyond teaching (Cleary, Walter, & Jackson, 2014). Since university-level students pay for teaching time, a number of Dalhousie REB members argued that the use of class time for any other purpose should be deemed unethical. Existing university guidelines similarly view the use of class time for SoTL research as an intrusion: of the six U15 institutions that offer guidance on the use of class time for research purposes, five mandate that the researcher must justify this intrusion as educationally or pedagogically valuable to students, and one prohibits the practice altogether.

We argued against this position on the basis that it represents a narrow and restrictive understanding of the teaching process. The major sticking point here is the emphasis on teaching quantity over teaching quality: in our view, taking class time to systematically evaluate student learning is a worthwhile use of class time (this is common practice when it comes to Student Ratings of Instruction, but such concessions are easier to make for program evaluation/quality improvement than for research). This emphasis on an intergenerational commitment to pedagogical improvement is akin to the principles governing a teaching hospital: university students are not just passive recipients of knowledge, but rather they are active participants in a long-term process of improving learning outcomes for future generations of learners. This model synchs with more transformative definitions of SoTL, and underscores how SoTL research plays an important yet undervalued role in the teaching process (Kern, Mettetal, Dixson, & Morgan, 2015).

Our working group opted for a more permissive regime than is standard across the U15. Dalhousie's guidelines encourage researchers to tie their project into the course learning objectives wherever possible. But, in cases where this is not possible, the guidelines require only that researchers justify why class time is the most appropriate venue for conducting research and ensure a suitable alternative is provided for students who choose not to participate in the research process. The guidelines further urge researchers to consider the burden that might be placed on students across multiple classes. In our view, this gives researchers sufficient room to choose the ideal forum in which to conduct SoTL research and offers students sufficient protection that their learning outcomes will be prioritized, while recognizing that SoTL research can play an important role in enhancing broader pedagogical outcomes (see also McGinn, 2018).

_

² We further raised a political objection to this argument, which reduces students to customers who are paying for a product; any minute of class time that is not focused on course objectives represents a deviation from this transactional commitment. While we recognize that students are paying for their education, we argued vehemently against this portrait that reduces the university to its neo-liberal shell.

Issue 2: Integrating SRI into SoTL Research

The second contentious issue that emerged throughout this process relates to the inclusion of SRI data that captures students' perspective on the learning experience. Almost all post-secondary institutions ask students to answer questions about the quality and effectiveness of the learning process at the end of the academic term. SRI data is generally gathered for the purpose of program evaluation or quality improvement, used both to enrich curriculum delivery and assess professional development (Linse, 2017). SRIs are subject to many of the same ethical issues as SoTL research including issues related to undue influence (Llewellyn, 2003; Ory, 1990) and confidentiality (Dommeyer, Baum, Hanna, & Chapman, 2004; Layne, DeCristoforo, & McGinty, 1999; Sorensen & Reiner, 2003). But because SRIs count as program evaluation or quality improvement, they remain exempt from REB approval.

But what if an instructor wants to include SRI results as data in a research project? This thorny question led to extensive conversations with both Dalhousie's legal counsel and data steward around whether the use of SRI data is permissible under the REB provisions of secondary use of data. These two experts gave conflicting responses. Legal counsel was unequivocal that any use of SRI data outside of its stated purpose is prohibited. According to Dalhousie's SRI policy, SRI data can only be used to provide instructors and students with feedback, for promotion or award purposes or to support program evaluation at the faculty level. All other purposes, including research, are forbidden. But the data steward clarified that, while the SRI policy does not explicitly sanction the use of SRI data for research purposes, the intent of the policy was never to limit individual researchers from using this data; rather, it was intended to govern the use of aggregate data. In short, limiting the use of SRI data for SoTL research was never intended in principle, even though this was the outcome in practice.

Most U15 institutions remain silent on this issue. Only two of the U15 offer guidance on the use of SRIs in research. The first is the University of Calgary. According to its 1998 policy, SRI data can be used for research and institutional purposes but will be subject to REB scrutiny like all other research. The second is McMaster University, who formed the Course and Teacher Evaluation Committee to review how the university evaluates teaching in 2014. In 2017, the committee released several recommendations including the establishment of guidelines for using course evaluation data to enhance pedagogical research (McMaster University, 2017). While the recommendations have yet to be implemented, this institution is clearly moving towards a broader recognition of the value SRI data can bring to the study of teaching and learning.

These developments signal the beginnings of a shift towards a more permissive use of SRIs in SoTL research across Canada, one that is in line with MacMillan, Manarin, and Mitchell's (2011) position that SRI data "can be used as part of an inquiry cycle into learning" (p. 2). We believe that SRI data is a valuable tool to enhance teaching effectiveness, and that the trivial distinction between program evaluation/quality improvement on the one hand and research on the other should not deter SoTL researchers from incorporating this data source into their research programs. Indeed, SRIs fall neatly within the TCPS 2 definition of secondary use of data (Chapter 5, Section D), which "refers to the use in research of information originally collected for a purpose other than the current research purpose" (CIHR, NSERC, & SSHRC, 2014, p. 64). We are continuing the fight to amend the SRI policy to ensure these data are able to inform teaching practice, regardless of whether this inquiry is labelled as program evaluation, quality improvement or scholarly research.

Issue 3: Incorporating Student Work as a Data Source

The purpose of the user guide is to prompt instructors to think about options and approaches they can use to conduct SoTL research. In doing so, the user guide opened up a space for a conversation about different sources of data that could be used to conduct SoTL research among the team. Student work could be a particularly useful source of data because it offers researchers a chance to study how different teaching approaches impact student learning and development (Joyce, Gitomer, & Iaconangelo, 2018; Monte-Sano & De La Paz, 2012). Almost every university-level course asks students to complete a range of assignments, papers, tests, and other tasks, so there is a wealth of data available. Student work, however, cannot be used without ethics approval, as it touches upon two of the REB cornerstones: consent and data ownership.

Our national scan reveals that consent remains the primary ethical concern when it comes to using student coursework in SoTL research. Of the U15 universities, only five address this issue. Four out of the five mandate that the use of student work requires prior consent from students. The fifth, the University of Calgary, requires an opt-out mechanism for students, which implies students must either offer consent or have some knowledge that the research is being conducted. In short, both of these scenarios impose a requirement for prospective or retroactive consent. This position is consistent with the limited scholarly research that explores this issue (Burman & Kleinsasser, 2004).

This requirement for consent is needed in cases where identifiable data is gathered during an on-going class. But it limits the possibility of SoTL research that is retrospective in nature. Denying permission to researchers who would like to look backwards on their teaching practice discourages longitudinal analysis of teaching effectively, which represents a significant lacuna within the existing scholarship (Haigh, 2012).

The issue of consent is further complicated by questions of data ownership. The question of who owns student course work creates a level of uncertainty for researchers embarking on SoTL research, as ownership can vary depending on the type of coursework that is undertaken (Barrow et al., 2014). This issue is further confounded by the complexity of the student-instructor relationship. The fact that student work was originally collected for educational purposes was a sticking point for Dalhousie's legal counsel. They felt that any change in the purpose of student work should require informed consent. But this position conflicts with the TCPS 2, which explicitly recognizes that collecting data for an alternative purpose such as research is allowed if consent is granted, or if there is sufficient evidence to justify the impracticality of consent. Article 5.5A requires researchers to demonstrate that the use of identifiable information is essential to the research project, the research is unlikely to impact the welfare of the individual, and that necessary measures will be taken to protect the identities of individuals. In our view, utilizing student coursework as data after the fact satisfies all of these criteria.

Finally, the researcher must demonstrate that seeking consent is either impractical or impossible. The ubiquity of Learning Management Systems makes it easier than ever for researchers to contact former students and seek consent retroactively, since many systems retain functionality that facilitates email distribution even after the course is completed. This consent process is likely to become more complicated in proportion to the time elapsed between the running of the course and impetus to research its learning outcomes; response rates amongst graduated students, for instance, will likely be lower given they are less prone to using their university-sanctioned email addresses. In our view, the risks associated with using de-identified coursework amongst graduated students are negligible, and these should be considered a viable

data source given that it is neither practical nor possible to contact these individuals to obtain their consent. We will continue to lobby Dalhousie's REB to create permissive policies that allow SoTL researchers to utilize student coursework as a data source that can enhance the rigor of research results.

Conclusion

Many of the U15 Group of Canadian Research Universities are grappling with the ethical implications of SoTL research. Dalhousie University's working group on SoTL has overseen the creation of guidelines and an interactive user guide, which together promote best practices for mitigating ethical issues within SoTL research. These tools serve as a response to De Courcy, Loblaw, Paterson, Southam, and Wilson (2017)'s call for innovative policies and protocols required to encourage the entrenchment and expansion of SoTL research at Canadian universities.

The creation of these protocols exposed several ethical issues that create barriers for researchers by limiting the type of data researchers can collect and the ways in which they can collect it. The three most contentious barriers—the use of class time for research, integrating SRIs into SoTL research, and incorporating student work as a data source—remain entrenched at most Canadian institutions, including our own. We have advocated for a more permissive approach to the REB/SoTL nexus that moves beyond quibbling between program evaluation and scholarly research, and instead recognizes that both represent legitimate points on the spectrum of teaching inquiry. This call echoes ones made in the health sciences, where colleagues have argued against splicing off program evaluation and quality improvement as distinct entities from research, as this serves to circumvent any formal review even though these items/distinctions/purposes present many of the same risks and ethical concerns (see Hicks 2016; Fiscella, Tobin, Carroll, He, & Ogedegbe, 2015; Ondrusek, Willison, Haroun, Bell, & Bornbaum, 2015).

Much of what constitutes SoTL straddles this grey area between program evaluation and quality improvement on the one hand and research on the other. Onerous REB protocols have the impact of compelling scholars to label their SoTL projects as evaluation instead of research, which threatens the very legitimacy of SoTL. First, this dodges any sort of mandated engagement with important ethical considerations. Second, research has a currency at Canadian universities: it facilitates access to funding and enables individuals to produce outputs in the form of peer-reviewed publications that enhance professional progression. Third, and most important in our view, is the implication for the research itself. Narrow interpretations of REB protocols limit the integration of multiple data sources within SoTL research. As Aysha, Lynn, Kelly, Phillip, and Tomljenovic-Berube (2017) note, SoTL research relies predominantly on student evaluation of their own learning as its primary source of data. More permissive REB protocols are needed to allow researchers the opportunity to draw on a plurality of data, including SRIs and coursework, which will in turn enrich the rigor and robustness of results, the foundation for meaningful scholarship.

References

Anderson, E., Solomon, S., Heitman, E., Dubois, J., Fisher, C., Kost, R., ... Ross, L. (2012). Research ethics education for community-engaged research: A review and research agenda. *Journal of Empirical Research on Human Research Ethics: An International Journal*, 7(2), 3-19. https://doi.org/10.1525/jer.2012.7.2.3

- Aysha, D., Lynn, L., Kelly, M., Phillip, M., & Tomljenovic-Berube, A. (2017). Research approaches in scholarship of teaching and learning publications: A systematic literature review. *Teaching & Learning Inquiry: The ISSOTL Journal*, *5*(2), 16-29. https://doi.org/10.20343/teachlearningu.5.2.3
- Barrow, A., Batchelor, L. A., Breger, A., Duval-Couetil, N., Scott, L., Skinner, J., Speser, P., & Weilerstein, P. (2014). *Managing student intellectual property issues at institutions of higher education: An AUTM primer*. Retrieved from https://www.autm.net/AUTMMain/media/ThirdEditionPDFs/V2/TTP_Manual_3rd_Edition_Volume2_StudentIP.pdf
- Burman, M. E., & Kleinsasser, A. (2004). Ethical guidelines for 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. https://doi.org/10.1353/jge.2004.0018
- Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council of Canada (NSERC) and Social Sciences and Humanities Research Council of Canada (SSHRC). (2014). *Tri-Council policy Statement: Ethical Conduct for Research Involving humans*. Retrieved from http://www.pre.ethics.gc.ca/pdf/eng/tcps2-2014/TCPS_2_FINAL_Web.pdf
- Chang, R. L., & Gray, K. (2013). Ethics of research into teaching and learning with web 2.0: Reflections on eight case studies. *Journal of Computing in Higher Education*, 25(3), 147-165. https://doi.org/10.1007/s12528-013-9071-9
- Cleary, M., Walter, G., & Jackson, D. (2014). Above all, 'do no harm': Key considerations when including students as research participants in higher education settings. *Contemporary Nurse: A Journal for the Australian Nursing Profession*, 49(1), 93-95. https://doi.org/10.5172/conu.2014.49.93
- Dalhousie University. (2017). *Dalhousie university research ethics board guidelines on the scholarship of teaching and learning*. Retrieved from https://cdn.dal.ca/content/dam/dalhousie/pdf/research-services/REB/SoLT_Guidelines_final_2017Feb10.pdf
- De Courcy, E., Loblaw, T., Paterson, J., Southam, T., & Wilson, M. (2017). Framework for strengthening the scholarship of teaching and learning in the Canadian college sector. *The Canadian Journal for the Scholarship of Teaching and Learning*, 8(2), 1-23. https://doi.org/10.5206/cjsotl-rcacea.2017.2.5
- Dommeyer, C. J., Baum, P., & Hanna, R. W. (2002). College students' attitudes toward methods of collecting teaching evaluations: In-class versus on-line. *Journal of Education for Business*, 78(1), 11-15. https://doi.org/10.1080/08832320209599691
- Dommeyer, C. J., Baum, P., Hanna, R. W., & Chapman, K. S. (2004). Gathering faculty teaching evaluations by in-class and online surveys: Their effects on response rates and evaluations. *Assessment & Evaluation in Higher Education*, 29(5), 611-623. https://doi.org/10.1080/02602930410001689171
- Ferguson, L., Yonge, O., & Myrick, F. (2004). Students' involvement in faculty research: Ethical and methodological issues. *International Journal of Qualitative Methods*, *3*(4), 56-68. https://doi.org/10.1177/160940690400300405
- Ferguson, L., Yonge, O., & Myrick, F. (2006). Ethically involving students in faculty research. *Nurse Education Today*, 26(8), 705-711. https://doi.org/10.1016/j.nedt.2006.07.021

- Fiscella, K., Tobin, J., Carroll, J., He, H., & Ogedegbe, G. (2015). Ethical oversight in quality improvement and quality improvement research: New approaches to promote a learning health care system. *BMC Medical Ethics*, *16*(1), 63. https://doi.org/10.1186/s12910-015-0056-2
- Gurung, R. A. R., Martin, R. C., Jarvis, P., & Creasey, G. (2007, July). *Code of conduct: Internationalizing the ethics of SoTL*. Poster presentation at the Fourth Annual Convention of the International Society for the Scholarship of Teaching and Learning, Sydney, Australia.
- Haigh, N. (2012). Sustaining and spreading the positive outcomes of SOTL projects: Issues, insights and strategies. *International Journal for Academic Development*, 17(1), 19-31. https://doi.org/10.1080/1360144X.2011.586462
- 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*, *1*(2), 23-33. https://doi.org/10.2979/teachlearningu.1.2.23
- Hicks, R. (2016). Maintaining ethics in quality improvement. *AORN Journal*, *103*(2), 139-141. https://doi.org/10.1016/j.aorn.2015.12.014
- Joyce, J., Gitomer, D., & Iaconangelo, C. (2018). Classroom assignments as measures of teaching quality. *Learning and Instruction*, *54*, 48-61. https://doi.org/10.1016/j.learninstruc.2017.08.001
- Kern, B., Mettetal, G., Dixson, M., & Morgan, R. (2015). The role of SoTL in the academy: Upon the 25th anniversary of Boyer's scholarship reconsidered. *Journal of the Scholarship of Teaching and Learning*, 15(3), 1-14. https://doi.org/10.14434/josotl.v15i3.13623
- Layne, B. H., DeCristoforo, J. R., & McGinty, D. (1999). Electronic versus traditional student ratings of instruction. *Research in Higher Education*, 40(2), 221-232. https://doi.org/10.1023/A:1018738731032
- 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 and Learning*, *14*(2), 1-14. https://doi.org/10.14434/josotl.v14i2.4217
- Linse, A. (2017). Interpreting and using student ratings data: Guidance for faculty serving as administrators and on evaluation committees. *Studies in Educational Evaluation*, *54*, 94-106. https://doi.org/10.1016/j.stueduc.2016.12.004
- Llewellyn, D. C. (2003). Online reporting of results for online student ratings. *New Directions for Teaching and Learning*, *96*, 61-68. https://doi.org/10.1002/tl.123
- Loftin, C., Campanella, H., & Gilbert, S. (2011). Ethical issues in nursing education: The dual-role researcher. *Teaching and Learning in Nursing*, *6*(3), 139-143. https://doi.org/10.1016/j.teln.2011.01.005
- MacMillan, M., Manarin, K., & Mitchell, M. (2011). Opening the door to SoTL: Teaching evaluations as part of the inquiry cycle. *Transformative Dialogues: Teaching & Learning Journal*, 5(2), 1-14.
- Martin, R. C. (2013). Navigating the IRB: The Ethics of SoTL. *New Directions for Teaching and Learning*, 136, 59-71. https://doi.org/10.1002/tl.20076

- McGinn, M. K. (2018). Teaching and researching ethically: Guidance for instructor-researchers, educational developers, and research ethics personnel. *The Canadian Journal for the Scholarship of Teaching and Learning*, 9(1), 1-14. https://doi.org/10.5206/cjsotl-reacea.2018.1.2
- McMaster University. (2017). *Recommendations to improve course and teacher evaluations*. Retrieved from https://www.mcmaster.ca/vpacademic/documents/Course Teacher Evaluatio
- Monte-Sano, C., & De La Paz, S. (2012). Using writing tasks to elicit adolescents' historical reasoning. *Journal of Literacy Research*, 44(3), 273-299. https://doi.org/10.1177/1086296X12450445
- Ondrusek, N., Willison, D., Haroun, V., Bell, J., & Bornbaum, C. (2015). A risk screening tool for ethical appraisal of evidence-generating initiatives. *BMC Medical Ethics*, *16*, 47. https://doi.org/10.1186/s12910-015-0039-3
- Ory, J. C. (1990). Student ratings of instruction: Ethics and practice. *New Directions for Teaching and Learning*, 1990(43), 63-74. https://doi.org/10.1002/tl.37219904307
- Pool, J., & Reitsma, G. (2017). Adhering to scientific and ethical criteria for scholarship of teaching and learning. *Critical Studies in Teaching & Learning*, *5*(1), 36-48. https://doi.org/10.14426/cristal.v5i1.98
- Sorenson, D. L, & Reiner, C. (2003). Charting the uncharted seas of online student ratings of instruction. *New Directions for Teaching and Learning*, 96, 1-24. https://doi.org/10.1002/tl.118
- Stockley, D., & Balkwill, L. (2013). Raising awareness of research ethics in SOTL: The role of educational developers. *The Canadian Journal for the Scholarship of Teaching and Learning*, 4(1), 1-8. https://doi.org/10.5206/cjsotl-rcacea.2013.1.3
- Swenson, E. V., & McCarthy, M. A. (2012). Ethically conducting the scholarship of teaching and learning research. In R. E. Landrum, M. A. McCarthy, R. E. Landrum & M. A. McCarthy (Eds.), *Teaching ethically: Challenges and opportunities*. (pp. 21-29). Washington, D.C.: American Psychological Association. https://doi.org/10.1037/13496-002
- Weijer, C., Dickens, B., & Meslin, E. (1997). Bioethics for clinicians: 10. research ethics. *CMAJ: Canadian Medical Association Journal*, *156*(8), 1153-1157.