

Douglas D. Karrow, Ph.D.

A. Formal Education

- 2006 Doctor of Philosophy (Curriculum, Teaching and Learning)
Educating-within-place: Recovering from Metaphysics as Technicity
Unpublished doctoral dissertation.
Department of Curriculum, Teaching and Learning
Faculty of Education
The Ontario Institute for Studies in Education of the University of Toronto,
ON.
- 1997 Master of Education (Educational Studies)
Science teachers' views of creativity.
Unpublished master's thesis.
Faculty of Education
The University of Western Ontario, London, ON.
- 1988 Bachelor of Education (Junior/Intermediate Division)
Faculty of Education
The University of Western Ontario, London, ON.
- 1987 Bachelor of Science (Honours Biology)
Faculty of Science
The University of Waterloo, ON.

B. Academic Distinctions, Awards, and Scholarships

- 2025 Nominee for the Michael Plyley Graduate Mentorship Award
- 2010 Awarded tenure and promotion to Associate Professor, Department of Teacher Education, Faculty of Education, Brock University, ON.
- 2008 Selected as a Canadian delegate for Al Gore's *The Climate Project (TCP)* Montreal, QC.
- 2007 Awarded Doctor of Philosophy. *Educating-within-place: Recovering from Metaphysics as Technicity.* Unpublished doctoral dissertation.
Department of Curriculum, Teaching and Learning
Faculty of Education. The Ontario Institute for Studies in Education of the University of Toronto, ON.
- 2006 Promoted to Assistant Professor, Department of Teacher Education, Faculty of Education, Brock University, ON.
- 2004 Lecturer, Department of Teacher Education, Faculty of Education, Brock University, ON.

- 1999 Nominated and Awarded *Teaching for Excellence*
Bluewater District School Board, Chesley, ON.
- 1998 Sponsorship to attend The Keystone Science School
Bluewater District School Board and Hobart Industry, Chesley, ON.
- 1997 Master of Education (Educational Studies)
Science teachers' views of creativity.
Unpublished master's thesis.
Faculty of Education
The University of Western Ontario, London, ON.
- 1994 The University of Western Ontario, London, ON.
Awarded Teaching Assistantship
University of Western Ontario, London, ON.
- 1994 Awarded Sabbatical Leave to pursue graduate studies in education
Bluewater District School Board, Chesley, ON.
- 1988 Dean's Honour Roll, Bachelor of Education
The University of Western Ontario, London, ON.
- 1988 Bachelor of Education (Junior/Intermediate Division)
Faculty of Education
The University of Western Ontario, London, ON.
- 1987 Bachelor of Science (Honours Biology)
Faculty of Science
The University of Waterloo, ON.

C. Academic Positions Held

- 2010- *Associate Professor*, Faculty of Education, Brock University
- 2006- *Assistant Professor* (Tenure Stream), Faculty of Education, Brock
2010 University
- 2004- *Lecturer*, Faculty of Education, Brock University
2006
- 2004 *Lecturer*, Faculty of Arts and Sciences, University of Toronto
- 2003 *Lecturer*, Faculty of Arts and Sciences, University of Toronto
- 1999- *Teaching Assistant*, Department Curriculum, Teaching and
2003 Learning, University of Toronto

- 1996-1998 *Elementary School Teacher (Intermediate grades) and Nipissing University Associate Teacher*, James A. Magee Community School Bluewater District School Board, Chesley, ON.
- 1990-1996 *Elementary School Teacher (Junior-Intermediate grades)* Holland-Chatsworth Community School, Bluewater District School Board, Chesley, ON.
- 1988-1990 *Elementary School Teacher (Junior-Intermediate grades)* Dundalk Proton Community School, Bluewater District School Board, Chesley, ON.

D. Creative and Scholarly Activities

1. Publications (*P* = primary author, *E* = co-author, *S* = co-author secondary)

(a). Books

- (P) Karrow, D., & DiGiuseppe, M. (Eds.). (2019). *Environmental and sustainability education: Canadian perspectives*. Cham, Switzerland: Springer Nature AG. (327pages). ISBN: 978-3-030-25015-7.
- (P) Karrow, D., DiGiuseppe, M., Elliott, P., Gwekwerere, Y., & Inwood, H. (Eds.). (2016). *Canadian perspectives on initial teacher environmental education praxis*. Ottawa, ON: Canadian Association for Teacher Education (CATE) (232 pages). ISBN 978-0-9947451-5-6
- (P) Karrow, D. (2010). *Educating-within-place: Recovering from metaphysics as technicity*. Saarbruken, Germany: Lambert Academic Publishing. (203 pages) ISBN 978-3-8383-6565-7

(b). Chapters in Books

- (P) Karrow, D., & Harvey, S. R. (2023). Meditative thinking and the naturalist current of environmental education: Principles informing a philosophy of reclaiming mystery. In M. Etherington (Ed.), *Environmental Education: Interdisciplinary Approaches to Nature*. (pp. 206-217). Wipf & Stock.
- (P) Karrow, D., Fazio, X., & Zandvliet, D. (2022). Environmental education nomenclature and discourse. In M. Peters (Ed.), *Encyclopedia of teacher education*. Springer. Singapore. https://doi.org/10.1007/978-981-13-1179-6_460-1

- (S) Khan, S., **Karrow, D.** Tran, H. T. T., & La France, S. (2022). Plantation logics and STEM economics: Making kin as education for multispecies flourishing after man. In S. Farrell, C. Skyhar & M. Lam (Eds.), *Teaching in the Anthropocene: Education in the face of environmental crisis*. Canadian Scholars. ISBN: 9781773382821
- (P) **Karrow, D.**, & DiGiuseppe, M. (2019). Connecting Canadian preservice teacher environmental and sustainability education with international practices. In D. Karrow & M. DiGiuseppe (Eds.), *Environmental and sustainability education in teacher education: Canadian perspectives*, (pp. 305-320). Cham, Switzerland: Springer Nature AG. ISBN: 978-3-030-25015-7
- (S) Sperling, E., Hoeg, D., & **Karrow, D.** (2019). A syllabus for outdoor and environmental education: Assessing capacities for preservice teachers. In D. Karrow & M. DiGiuseppe (Eds.), *Environmental and sustainability education in teacher education: Canadian perspectives*, (pp. 237-252). Cham, Switzerland: Springer Nature AG. ISBN: 978-3-030-25015-7
- (P) **Karrow, D.** DiGiuseppe, M., Elliott, P., Inwood, H., & Fazio, X. (2019). What should Canadian teachers know? Teacher capacities: knowledge, skills, and dispositions. In D. Karrow & M. DiGiuseppe (Eds.), *Environmental and sustainability education in teacher education: Canadian perspectives*, (pp. 89-110). Cham, Switzerland: Springer Nature AG. ISBN: 978-3-030-25015-7.
- (P) **Karrow, D.**, Harvey, S. R., & Yu, J. (2019). Critical theory's nod to Heidegger: Contributions of phenomenological ontology to teacher education research. In K. Nolan & J. Tupper (Eds.), *Beyond the technical rational: Drawing on social theory for teacher education research*, (pp. 243-262). New York, NY: Bloomsbury. ISBN 9784-1-3500-8639-5
- (P) **Karrow, D.** DiGiuseppe, M., Elliott, P., Inwood, H., & Fazio, X. (2016). Initial teacher environmental education capacities. In M. Hirschkorn & J. Mueller (Eds.), *What should Canadian teachers know? Teacher capacities: knowledge, skills, and dispositions*, (pp. 162-191). Ottawa, ON: Canadian Association for Teacher Education (CATE). ISBN 978-0-9947451-6-3

- (P) **Karrow, D.** DiGiuseppe, M., Elliott, P., & Inwood, H. (2016). Introduction to Canadian perspectives on initial teacher environmental education praxis. In D. Karrow, M. DiGiuseppe, P. Elliott, Y. Gwekwerere, & H. Inwood (Eds.), *Canadian perspectives on initial teacher environmental education praxis*, (pp. 1-16). Ottawa, ON: Canadian Association for Teacher Education (CATE). ISBN 978-0-9947451-5-6
- (P) **Karrow, D.** (2016). Pedagogically succeeding in life: Executing a consequently unprepared program. In N. Ng-A-Fook, A. Ibrahim, & G. Reis (Eds.), *Provoking curriculum studies: Strong poetry and arts of the possible*, (pp. 227-234). Florence, KY: Taylor & Francis Group (9 pages).
- (S) Fazio, X., & **Karrow, D.** (2015). The commonplaces of schooling and citizen science. In M. P. Mueller and D. J. Tippins (Eds.), *Ecojustice, citizen science and youth activism: Situated tensions for science education*, (pp. 179-191). Dordrecht, NLD: Springer Publications (12 pages).
- (S) Fazio, X., & **Karrow, D.** (2014). From local observations to global relationships. In M. P. Mueller, D. J. Tippins, and A. J. Stewart (Eds.), *Assessing schools for generation R (responsibility): A guide to legislation and school policy in science education*, (pp. 333-346). Dordrecht, NLD: Springer Publications (18 pages).
- (P) **Karrow, D.**, & Fazio, X. (2010). Educating-within-place: Enactments of care within citizen science for ecojustice. In D. J. Tippins, M. P. Mueller, M. van Eijck, J. D. Adams (Eds.), *Cultural studies and environmentalism: The confluence of eco-justice, place-based (science) education, and indigenous knowledge systems*, (pp. 193-214). Dordrecht, NLD: Springer Publications (23 pages).
- (E) Geddis, A., & **Karrow, D.** (2003). Exploring science teachers' views of creativity. In D. Hodson (Ed.), *OISE papers in STSE education volume 4* (pp. 154-172). Toronto: University of Toronto Press (18 pages).

(c). Papers in Peer Refereed Journals

- (P) **Karrow, D.**, Harvey, S. R. (2026). Canadian forest imaginaries: The roots of poetism. *Australian Journal of Environmental Education*, 1-19, doi:[10.1017/ae.2025.10103](https://doi.org/10.1017/ae.2025.10103)
- (P) **Karrow, D.**, & Harvey, S. R. (2025). Sojourn of the sylvan fringe: Receptivity to mystery and curricular ruminations. *Journal of the Canadian Association for Curriculum Studies*. 22(1), 12-29.

- (S) Harvey, S. R., **Karrow, D.** (2025). Mystery: Poetizing by way of *Gelassenheit* toward a pedagogy of awe. *Journal of the Canadian Association for Curriculum Studies*, 22(1), 89-101.
- (S) Krushelnycky, E., & **Karrow, D.** (2024). Science, technology, engineering, & mathematics, curricular integration, and the story form. *Future in Educational Research*, 1-25. <https://doi.org/10.1002/fer3.48>
- (P) **Karrow, D.**, & Harvey, S. R. (2024). The ‘thalweg’ of currents: Naturalist environmental education. *Canadian Journal of Environmental Education*, 26, 32-50.
- (S) Blom, R., & **Karrow, D.** (2024). Environmental and sustainability education in teacher education research: An international scoping review of the literature. *International Journal of Sustainability in Higher Education*, 25(5), pp. 903-926. <https://doi.org/10.1108/IJSHE-07-2023-0288>
- (S) da Silva, M. L., de Azambuja Elali, G. V. M., & **Karrow, D.** (2023). Environmental perception: A study with the Federal Institute of Rio Grande do Norte (IFRN)-SGA students. *Environmental and Education Magazine*, 28(2), 1-18.
- (S) Khan, S., Bowen, M., & **Karrow, D.** (2023). Abeing for multispecies flourishing. *American Association for the Advancement of Curriculum Studies*, 15(2), 1-35.
- (P) **Karrow, D.**, Fazio, X., & Zandvliet, D. (2022). What’s in a name? The signifiers and empty-signifiers of environmental and sustainability education: Implications for teacher education. *Brock Education Journal*, 31(2), 109-130.
- (P) **Karrow, D.**, & Howard, P. (2020). Research activities of the Canadian standing committee on environmental and sustainability education in teacher education. *Canadian Journal of Environmental Education*, 23(1), 102-120.
- (S) Docherty-Skippen, S. M., **Karrow, D.**, & Ahmed, G. (2020). Doing science: Pre-service teachers’ attitudes and confidence teaching elementary science and technology. *Brock Education Journal*, 29(1), 24-34.

- (P) **Karrow, D.**, Khan, S., & Fleener, Y. (2017). Mathematics education's ethical *relation with and response to* climate change. *Philosophy of Mathematics Education Journal*. 32(Special Issues on Mathematics Education and the Living World: Responses to Ecological Crisis). ISBN: 1465-2978.
- (P) **Karrow, D.**, & Fazio, X. (2015): Curricular critique of an environmental education policy: Implications for practice. *Brock Education Journal*. 24(2). 88-108.
- (S) Fazio, X., & **Karrow, D.** (2013). Exploring the professional characteristics and contexts of school-based environmental education 'leaders.' *Alberta Journal of Educational Research*, 59(4), 613-629.
- (S) Fazio, X., & **Karrow, D.** (2012). Negotiating the constraints of schools: Environmental education practices within a school district. *Environmental Education Research*, 19(5), 639-655.
- (P) **Karrow, D.** (2010). Ecophenomenology as ecosophical education: The liminality of swamps. *Trumpeter*, 26(3), 91-110.
- (P) **Karrow, D.**, Fazio, X. (2010). Viewpoint: NatureWatch, schools and environmental education practice. *Canadian Journal of Science, Mathematics and Technology Education*, 10(2), 160-172.
- (E) Kentel, J., **Karrow, D.** (2009). (Ek)static educating: Educating-within-place and the ecological imagination. *Journal of the Canadian Association for Curriculum Studies*, 7(2), 6-29.
- (S) Hart, P., Fazio, X., **Karrow, D.**, et al (2009). Canadian perspectives on environmental education. *Educação em Revista*, 25(3), 159-190.
- (P) **Karrow, D.**, Kentel, J., & Henderson, B. (2007). Paul Shepard: In thought, word and deed. *Trumpeter*, 23(3), 26-44.
- (E) Kentel, J., & **Karrow, D.** (2007). Mystery and the body: Provoking a deep ecology through the situated bodies of teacher candidates. *Complicity: An International Journal of Complexity and Education*, 4(1), 85-101.
- (E) Gettes, A. N., & **Karrow, D.** (2003). Exploring teachers' view of creativity. *OISE Paper in STSE Education*, 4, 157-172.
- (P) **Karrow, D.** (1995). Egan and imagination in education. *Journal of the Ontario Society for Education through Art*, 24, 45-47.

(d) Book Reviews and Editorials

(S) Tsun Haggarty, H., **Karrow, D. D.**, & Harvey, S. R. (2025). Mystery—Whereof We Cannot Know, Yet Cannot Keep Silent. *Journal of the Canadian Association for Curriculum Studies*, 22(1), 11. <https://doi.org/10.25071/1916-4467.40912>

(P) **Karrow, D.**, Evans, N. (Snowy), & Harwood, D. (2022). Guest editorial: From the margins to the mainstream: Canadian and international teacher ESE. *Brock Education Journal*, 31(2), 4-16.

(P) **Karrow, D.**, Inwood, H., & Sims, L. (2020). Guest editorial: Environmental and sustainability in teacher education. *Canadian Journal of Environmental Education*, 23(1), 5-13.

(P) **Karrow, D.** (2011). [Review of the book *Fields of Green: Re-storying culture, environment, and education.*] *Canadian Journal of Education*, 34(4), 236-239.

(e). Senior Scholars' Letters of Reference (available on request)

(f). Published Refereed Conference Proceedings

(P) Khan, S. K., **Karrow, D.**, & Bowen, M. (2021). Abeng for multispecies' flourishing. In D. Kolloche (Ed.), *Proceedings of the Eleventh International Mathematics Education and Society Conference* (Vol. 1, pp. 166–XX). Tredition. <https://doi.org/10.5281/zenodo>.

(S) DiGiuseppe, M., Kool, R., **Karrow, D.**, Donnell, A., Howard, Pl, Lin, E., McVitte, J., Sims, L., Sperling, E., & Vanwysberghe, R. (2020, June 1-5). Survey of environmental and sustainability education practices in Canadian faculties of education. [Abstract]. *Proceedings of the Canadian Association for Teacher Education (CATE), Journal of the Canadian Association for Curriculum Studies*. London, Ontario. <https://jcacs.journals.yorku.ca/index.php/jcacs/article/view/40485>

(P) **Karrow, D.**, & Harvey, S. R. (2020, June 1-5). Teaching as reclaiming mystery: An educational philosophy. [Abstract]. *Proceedings of the Canadian Association for Foundations of Education (CAFÉ)*. London, ON. https://drive.google.com/file/d/14v_ET6yE0UuwrJQZ8TR9IBnveexDye/view

(S) Fazio, X., & **Karrow, D.** (2008). Implementation of *NatureWatch*: Ecological monitoring program within a local elementary school [Abstract]. *Proceedings of the Association for Science Teacher Education (ASTE)*, St. Louis, MO. <http://theaste.org/publications/index/htm>.

- (P) **Karrow, D., & Kentel, J. A.** (2007). Educating-within-place: Place, Being and the ecological imagination [Abstract]. *Proceedings of the 5th International Conference on Imagination and Education*. Vancouver, BC. <http://www.ierg.net/confs/viewabstract.php?id=311&cf=2>.
- (P) **Karrow, D.** (2007). Metaphysics and Physis: An alternate disposition for the teaching and learning relationship in science education. *Proceedings of the National Association for Research in Science Teaching (NARST)*. New Orleans, LA. 1124-1158.
- (P) **Karrow, D. & Kentel, J. A.** (2005). Educated myopia: Permeating the boundaries of the pre-service teacher-training model [Abstract]. *Proceedings of the Imaginative Education Research Group Conference (IERG)*. Vancouver, BC. http://www3.educ.sfu.ca/conferences/ierg2005/papers/062-Karrow_Kentel.pdf.
- (P) **Karrow, D.** (2003). Place, metaphysics and technology: Place-based science education. *Proceedings of the Seventh International History, Philosophy and Science Teaching Conference (IHPST)*, Winnipeg, Canada, 7. 418-435.

(g). Contributions to Panels, Workshops and Clinics

- Karrow, D.** *Uncertain future(s): Teaching during tumultuous times*. Panel participant at the Canadian Association for Teacher Education (CATE), of the Canadian Association for Studies in Education (CSSE), University of Alberta, Edmonton, AB., May 31, 2021.
- Karrow, D.** *Posthumanism and education: Educating as reclaiming mystery*. Roundtable panelist at the Posthumanist Research Institute (PRI), Brock University, St. Catharines, ON., March 19, 2021.
- Karrow, D.** *Leading in times of change: 20th anniversary joint PhD in educational studies celebration series--Innovative writing practices and methodologies*. Panelist for the Joint Ph.D. in Educational Studies 20th Anniversary Committee, Brock University, St. Catharines, ON., January 28, 2021.
- Karrow, D.** *The conservation stream of environmental education: Bats, habitats, and conservation*. Workshop delivered at the Faculty of Education Environmental Education Conference, Ontario Tech University, Oshawa, January 24, 2020.

- Karrow, D., & Sperling, E.** *Developing a sense of place and being*. Workshop delivered at the Canadian Network for Environmental Education and Communication (EECOM) conference, Cranbrook, BC., October 18-21, 2018.
- Karrow, D.** (2015). *Exploring models for integrating environmental education in faculties of education*. Workshop presented at the University of Ontario Institute of Technology (UOIT), Oshawa, Ontario, March 7, 2015.
- Inwood, H., Cousineau, A., DiGiuseppe, M., Elliott, P., & **Karrow, D.** (November, 2014). Presentation to the Ontario Association of Deans of Education (OADE), Toronto, Ontario, November 21, 2014.
- Karrow, D. & Fazio, X.** (October, 2014). *How to integrate environmental education within K-12 education*. Workshop presented at the North American Association for Environmental Education (NAAEE), Ottawa, Ontario, October 7-11.
- Engemann, J., Fazio, X., Jaipal-Jamini, K., & **Karrow, D.** (November, 2010). *Equity for science and technology education within our schools*. Paper presented at the Science Teachers' Association of Ontario (STAO), Toronto, ON.
- Engemann, J. Fazio, X., Jaipal-Jamini, K., & **Karrow, D.** (November, 2009). *Exploring science education research collaborations between boards of education and Brock University*. Panel discussion with Golden Horseshoe science consultants and Brock University science education faculty, Hamilton, ON.
- Karrow, D.** (November, 2008). *Using the story form as a framework for STSE education: The story of the York boat and Archimedes' principle*. Workshop presented at the Science Teachers' Association of Ontario (STAO), Toronto, ON.
- Fazio, X. & **Karrow, D.** (November, 2008). *Promoting environmental education through a school, university and community partnership*. Workshop presented at the Science Teachers' Association of Ontario (STAO), Toronto, ON.
- Karrow, D., Fazio, X., Daniels, C. & Andrachuk, H.** (May, 2008). *NatureWatch as environmental education: Lessons learned within elementary schools*. Workshop presented at the annual conference of the Ontario Society of Environmental Education (OSEE), Bark Lake Leadership Centre, ON.

Karrow, D., & Fazio, X. (May, 2008). Ministry of Education Forum *Preparing Ontario's teachers for the challenge ahead: Environmental education success stories from Brock university*. Ministry of Education Forum, OISE/University of Toronto, ON.

Karrow, D., & Fazio, X. (April, 2007). *Teaching and learning about climate change*. Workshop presented at the annual conference of the Ontario Society of Environmental Education (OSEE), Kawartha Lakes, ON.

Karrow, D. (July, 2006). *The story of the York boat: Settlement of the west and Archimedes' principle*. Workshop presented at the 4th International Conference on Imagination and Education, Vancouver, BC.

Karrow, D., & Fazio, X. (May, 2006). *Teaching and learning about climate change*. Workshop presented at the annual conference of the Ontario Society for Environmental Education (OSEE), Waterloo, ON.

Karrow, D. (December, 2004). *Navigating the dissertation journey*. Panel discussion for Brock University graduate students, Brock University, St. Catharines, ON.

(h). Consulting with government, related professionals, and agencies, or preparation of instructional clinical, curriculum or policy materials for such agencies.

2021 Ministry of Education Ontario Grades 1-8: Science and Technology, curriculum review, Toronto, ON.

2017 Environmental Sustainability Research Centre (ESRC), Brock University, contributor to e-textbook, Environmental Sustainability, <https://openlibrary.ecampusontario.ca/catalogue/item/?id=20fdb849-e086-4218-a471-67494049a2fb>

2017 Ontario College of Teachers, faculty of education participant in *Open Space Policy Forum: Ecological Sustainability within Teacher Education and Professional Practice*.

2015 Ryerson Urban Water Institute, Ryerson University, faculty participant in *An education experts' workshop: Implementing 2007 Bondar report's 'intended outcomes' by 2015*.

2013 The OISE/UT Environmental and Sustainability Working Group and the Dr. Eric Jackman Institute of Child Study (ICS) *Deepening environmental education in pre-service education roundtable (DEEPER)*. Developing a framework for environmental education within pre-service education across Faculties of Education within Ontario, Toronto, ON.

- 2008 Ministry of Education Environmental Education Policy, faculty representative, Toronto, ON.
- 2008 Ministry of Education Ontario Grades 1-8: Science and Technology, curriculum fact checker, Toronto, ON.
- 2007 Ministry of Education Ontario Grades 9 and 10: Science, curriculum review, Toronto, ON.
- 2006 Ministry of Education Ontario Grades 1-8: Science and Technology, curriculum review, elementary faculty representative, Toronto, ON.
- 2005 Ministry of Education, Boys and Literacy Symposium, faculty representative, Toronto, ON.

(i). Editorial and Refereeing Duties

- 2026 Journal article reviewer for *Canadian Journal of Environmental Education* (CJEE), 1 review.
- 2026 Journal article reviewer for *Philosophical Inquiry in Education* (PIE), 1 review.
- 2026 Journal article reviewer for *International Journal of Sustainability in Higher Education* (IJSHE), 1 review.
- 2025 Journal article reviewer for *Contemporary Issues in Education* (CIE), 1 review.
- 2025 Journal article reviewer for *Australian Journal of Environmental Education* (AJEE), Special Issue—Critical Forest Studies, 2 reviews.
- 2025 Reviewer for the Canadian Association for Teacher Education (CATE), of the Canadian Association for Studies in Education (CSSE), University of Winnipeg, MB., 4 reviews.
- 2025 Reviewer for Canadian Association for Teacher Education (CATE), of the Canadian Society for Studies in Education (CSSE), George Brown University, Toronto, ON., 3 reviews.
- 2025 Reviewer for the Canadian Association for Teacher Education (CATE) Working Conference, 3 reviews.
- 2025 Journal article reviewers for *Journal of Science, Mathematics, and Technology Education* (JSMTE), 2 reviews.

- 2024-present *Brock Education Journal* member of the core editorial committee.
- 2024 Journal article reviewer for *Brock Education Journal* (BEJ), 1 review.
- 2024 Journal article reviewer for *Canadian Journal of Education* (CJE), 1 review.
- 2023-present Guest editor for *Journal of Environmental Education* (JEE)—special issue: Curriculum and Pedagogy for Climate Change Education, 16 reviews.
- 2023-present Guest editor for *Journal of Canadian Association of Curriculum Studies* (JCACS)—special issue: World, Mystery, and Curriculum, 12 reviews.
- 2024 Journal article reviewer for *Philosophical Inquiry in Education* (PIE), 1 review.
- 2023 Book prospectus reviewer for *Canadian Scholars' Press* (CSP) and *Women's Press* (WP), 1 review.
- 2022 Journal article reviewer for *Research in Mathematics Education* (RME), 1 review.
- 2021-22 Section editor for *Springer International Encyclopedia: Teacher Education—Environmental and Sustainability Education*, 12 reviews.
- 2021-22 Guest editor for *Brock Education Journal*—special issue: Teacher Environmental and Sustainability Education: Canada and the International Field, 7 reviews.
- 2021 Book prospectus reviewer for Routledge.
- 2021 Journal article reviewer for special issue of the *Canadian Journal of Environmental Education* (CJEE), 1 review.
- 2021 Journal article reviewer for *Canadian Journal of Education* (CJE), 1 review
- 2020-21 Journal article reviewer for *International Journal of Sustainability in Higher Education* (IJSHE), 1 review.
- 2020 Reviewer for the Canadian Network for Environmental Education and Communication's Research Symposium 2021: *Environmental and Sustainability Education in Canadian Faculties of Education*, 7 reviews.

- 2019 Guest editor for special issue of the *Canadian Journal of Environmental Education* (CJEE), 16 reviews.
- 2019 Journal article reviewer for *International Journal of Environmental Education* (IJEE), 1 review.
- 2018 Book chapter reviewer for Bloomsbury book, 2 reviews.
- 2018 Journal article reviewer for *Canadian Journal of Science, Mathematics, and Technology*, 1 review.
- 2018 Journal article reviewer for *Brock Journal of Education* (BJE), one review, St. Catharines, ON.
- 2018 Reviewer for the North American Association for Environmental Education (NAAEE), sixteen reviews, Spokane, WA.
- 2017 Journal article review for *Environmental Education Research* (EER), one review.
- 2016 Book chapter reviewer for *Canadian Association for Teacher Education* (CATE) working conference, 3 reviews.
- 2016 Journal article reviewer for *Philosophy of Mathematics Education Journal* (PMEJ), two reviews, University of Exeter, UK.
- 2016 Journal article reviewer for the *Journal of the Canadian Association for Curriculum Studies* (JCACS), one review, York University, Toronto, ON.
- 2016 Reviewer for *National Roundtable 2016: Environmental and Sustainability Education in Canadian Faculties of Education*, 35 roundtable submission reviews.
- 2015 External examiner, Howard, R. (2015). *The conceptualization and exploration of place allegiance: Towards a unified model of person-place relationships within outdoor education*. Unpublished doctoral thesis. Faculty of Applied Health Sciences, Brock University, St. Catharines, ON.
- 2015 Journal article reviews for the *Brock Journal of Education* (BJE), two reviews, St. Catharines, ON.
- 2014 Journal article review for the *Canadian Journal of Science, Mathematics, and Technology Education* (CJSMTE), one review, Toronto, ON.

- 2014 Reviewer and editor for *DEEPER: Deeping environmental education in pre-service education resource*. OISE/University of Toronto, ON.
- 2013 Reviewer for Science Education Research Group (SERG), a SIG of the Canadian Association for Curriculum Studies (CACS) of the Canadian Society for Studies in Education (CSSE), three reviews, Brock University, St. Catharines, ON.
- 2013 Journal article review for *Environmental Education Research* (EER), one review,
- 2013 Journal article review for the *Journal of the Canadian Association for Curriculum Studies* (JCACS), one review, York University, Toronto, ON.
- 2013 Journal article review for *Canadian Journal of Science, Mathematics, and Technology Education* (CJSMTE), one review, OISE/University of Toronto, ON.
- 2012 Journal article review for *Cultural Studies in Science Education* (CSSE), one review, University of Victoria, BC.
- 2012 Journal article review for *Brock Journal of Education* (BJE), one review, St. Catharines, ON.
- 2012 Reviewer for the Research Symposium of the North American Environmental Education Association (NAAEE), five reviews, Oakland, CA.
- 2012 Journal article review, for the *Canadian Journal of Environmental Education* (CJEE), one review, Lakehead University, Thunder Bay, ON.
- 2011 Journal article review, for the *Canadian Journal of Environmental Education* (CJEE), one review. Lakehead University, Thunder Bay, ON.
- 2011 External examiner, Ritter, A. (2011). *Ecological concept development at the elementary school level*. Unpublished master's thesis. Faculty of Education, Lakehead University, Thunder Bay, ON.
- 2010 Reviewer for the Ecological/Environmental Education SIG of the American Education Research Association (AERA), seven reviews, New Orleans, LA.

- 2010 Paper review for Dr. Jaipal-Jamani (2010). *A semiotics discourse analysis framework: Understanding meaning-making in science education contexts*. Faculty of Education, Brock University.
- 2010 External examiner, Clark, A. (2010). *An investigation of the influence guiding students' ethics in regard to socio-scientific issues*. Unpublished master's thesis. Faculty of Education, Lakehead University.
- 2010 Reviewer for the North American Association for Environmental Education (NAAEE), three reviews, Buffalo, NY.
- 2010 Reviewer for the International Organization for Science and Technology Education (IOSTE), five reviews, Bled, Slovenia.
- 2010 Journal article review for the *Canadian Journal of Environmental Education* (CJEE), two reviews. Lakehead University, Thunder Bay.
- 2009 Reviewer for the Ecological/Environmental Education SIG of the American Education Research Association (AERA), five reviews, Denver, CO.
- 2008 Reviewer for the Canadian Association for Curriculum Studies (CACS) of the Canadian Society for Studies in Education (CSSE), two reviews, Vancouver, BC.
- 2008 Reviewer for Science Education Research Group (SERG), a SIG of the Canadian Association for Curriculum Studies (CACS) of the Canadian Society for Studies in Education (CSSE), five reviews, Vancouver, BC.
- 2008 Assessor for the Social Sciences and Humanities Research Council Canada (SSHRC).
- 2007 Reviewer for Science Education Research Group (SERG), a SIG of the Canadian Association for Curriculum Studies (CACS) of the Canadian Society for Studies in Education (CSSE), three reviews, Saskatoon, SK.
- 2006 Journal article review for *Brock Education of Education* (BJE), one review, St. Catharines, ON.

(j) Scholarly contributions to pedagogy. (Publications or Activities previously listed in Section D may be cross-listed here and identified with an asterisk.)

- * **Karrow, D.** (April, 2009). *Engaging the pre-theoretical through place-based education: A foundation for environmental/science education*. Paper presented at the National Association for Research in Science Teaching (NARST), Garden Grove, CA
- * **Karrow, D., & Fazio, X.** (May, 2008). Ministry of Education Forum *Preparing Ontario's Teachers for the Challenge Ahead: Environmental Education Success Stories from Brock University*. Ministry of Education Forum, OISE/University of Toronto, ON.
- * **Karrow, D.** (April, 2007). Metaphysics and Physis: An alternate disposition for the teaching and learning relationship in science education. *Proceedings of the National Association for Research in Science Teaching (NARST)*, New Orleans, LA, 1124-1158.
- * **Karrow, D. & Kentel, J. A.** (May, 2007). *Re-conceptualizing teacher education through the nuance of mystery and the body*. Paper presented at the meeting of the Canadian Association of Teacher Education (CATE) of the Canadian Society of Studies in Education (CSSE), Saskatoon, SK.
- * **Karrow, D. & Kentel, J. A.** (July, 2005). Educated myopia: Permeating the boundaries of the pre-service teacher-training model [Abstract]. *Proceedings of the Imaginative Education Research Group (IERG) Conference*, Available from: http://www3.educ.sfu.ca/conferences/ierg2005/papers/062-Karrow_Kentel.pdf. Vancouver, BC.

(k) Scholarship as evidenced by the candidate's depth and breadth of knowledge and general contributions to the research life of the University

- Karrow, D., Collier, D., Rowsell, J.** (2014). *Program proposal brief: Master of Teacher Education in disciplinary and integrated studies*. Department of Teacher Education, Faculty of Education, Brock University, St. Catharines, ON.
- Karrow, D., Barrett, J., Bennett, S., Fazio, X., Gallagher, T., Hutchison, D., Lu, C., Maich, K., & Volante, L.** (2012). *Statement of intent for a Master of Education in disciplinary and integrated studies*. Department of Teacher Education, Faculty of Education, Brock University, St. Catharines, ON.

Karrow, D., Fazio, X., Hutchison, D., & O'Sullivan, M. (2010). *Application for approval of a research unit within the teacher education department of the Faculty of Education, Brock University: The research unit for global education and environmental education (RUGEE)*. Brock University, St. Catharines, ON.

Karrow, D., Fazio, X., Jaipal-Jamani, K., Gallagher, T., Griffin, S., Hutchison, D. et al. (2008). *Committee on re-imagining the Faculty of Education, report on activities*. Brock University, St. Catharines, ON.

Karrow, D., Fazio, X., & Andrachuk, H. (2006). *A collaborative research proposal for the ecological monitoring and assessment network (EMAN), Brock University Faculty of Education, and the Hamilton-Wentworth District School Board*. Unpublished manuscript, Brock University. St. Catharines, ON.

(l) Other publications demonstrating a high quality of scholarship with significant public impact:

Karrow, D. (1995). *Imagination and education*. A Resource for Teachers, Bluewater District School Board, Chesley, ON.

Karrow, D., & Sebesta, J. (1992). *Visual literacy*. Transition Years Pilot Project, Bluewater District School Board, Chesley, ON.

Diemert, V., & Karrow, D. (1991). *Without exception*. Multiculturalism Pilot Project, Bluewater District School Board, Chesley, ON.

(m) Other evidence appropriate to the discipline

Papers in Non-refereed Journals

(P) Karrow, D., Bell, N., DiGiuseppe, M., Elliott, P., & Inwood, H. (2018). Training teachers in environmental sustainability. *Alternatives Journal*, 43(3 & 4), 51.

(S) Fazio, X., & Karrow D. (2013). Science takes a back seat: Unintended consequences of high-stakes testing. *Education Canada*. 53(3).

(P) Karrow, D., Andrachuk, H., & Fazio, X., (2007, February). Using NatureWatch to create communities of engagement in schools. *The EMAN Monitor*, 5(1), 1-16.

(P) Karrow, D., & Fazio, X. (2007, October 15). Ecological monitoring cuts hurt us all. *The Hamilton Spectator*, p. A15.

(P) Bencze, L. (2007, July) Newsround: NatureWatch. *Canadian Journal of Science, Mathematics, and Technology Education*. 7(2/3), 271-274.

Reports

Kool, R., **Karrow, D.**, & DiGiuseppe, M. (2021). Environmental and Sustainability Education in Canadian Faculties of Education, 2017-2018: A research report for the EECOM Standing Committee on Environmental and Sustainability Education in Teacher Education. Available at <http://www.eseinfacultiesofed.ca/research-pages/policy-reports.html>

Inwood, H., Kennedy, A., **Karrow, D.**, & Skippen-Docherty, S. Canadian and international bibliographic literature review and meta-analysis of environmental and sustainability education in teacher education. A research report for the Research Symposium of the Canadian Network for Environmental Education and Communication (EECOM) virtual conference, Toronto, ON., April 21, 2021.

Refereed Conference Papers (* cancelled because of COVID-19)

Karrow, D., Harvey, S., & Kulnieks, A. (2025, October 23). *Discursions in place-based and land-based education: Phenomenalism's 'dwelling as curriculum'*. Paper presented at the Canadian Association for Teacher Education (CATE) Working Conference, University of British Columbia, Vancouver, BC.

Krushelnycky, E., & **Karrow, D.** (2025, June 2). *STEM, curricular integration, and the story form*. Paper presented at the Science Education Research Group (SERG) of the Canadian Society for Studies in Education conference, George Brown University, Toronto, ON.

Blom, R., & **Karrow, D.** (2025, June 2). *Theorizing curriculum for climate change education: An ethos of mystery*. Paper presented at the Canadian Association for Curriculum Studies (CACS) of the Canadian Society for Studies in Education (CSSE), George Brown University, Toronto, ON.

Karrow, D., & Harvey, S. R. (2025, June 3). *Receptivity to mystery: Dwelling and the ethos of place*. Paper presented at the Canadian Association for Curriculum Studies (CACS) of the Canadian Society for Studies in Education (CSSE), George Brown University, Toronto, ON.

- Karrow, D.**, & Harvey, S. R. (2025, May 30). The Question Concerning, “Questioning Technology in Education”: Poetism as a Philosophy of Education. Paper presented at the Canadian Philosophy of Education Society pre-conference (CPES) of the Canadian Society for Studies in Education (CSSE), George Brown University, Toronto, ON.
- Tsun-Haggarty, H., **Karrow, D.**, & Harvey, S. R. (2025, June 3). *World, mystery, and curriculum*. Joint-paper session presented at the Canadian Association for Curriculum Studies (CACS) of the Canadian Society for Studies in Education (CSSE), George Brown University, Toronto, ON.
- DiGiuseppe, M., **Karrow, D.**, & Kool, R. (2025, June 3). *Evolving trends in Canadian environmental and sustainability education in teacher education: A 20-year comparison*. Paper presented at the Canadian Association for Teacher Education (CATE) of the Canadian Society for Studies in Education (CSSE), George Brown University, Toronto, ON.
- Karrow, D.** (2025, June 2). *Climate change education: Critically temporalizing utopian-apocalyptic meta-narratives*. Paper presented at the Canadian Association for Foundations of Education (CAFÉ) of the Canadian Society for Studies in Education (CSSE), 2025, George Brown University, Toronto, ON.
- Blom, R. & **Karrow, D.** (2024, June 16). *Macro-challenges of environmental and sustainability education in teacher education research: A philosophical approach to mature the field*. [Multi-paper presentation]. 52nd Annual Conference for the Canadian Society for the Study of Education (CSSE) for the Canadian Association for Teacher Education (CATE-ACFE). Montreal, QC, Canada. Free Access: <http://hdl.handle.net/10464/18508>
- Blom, R. & **Karrow, D.** (2024, June 14). *Environmental and sustainability education in teacher education research: An international scoping review of the literature*. [Multi-paper presentation]. 52nd Annual Conference for the Canadian Society for the Study of Education (CSSE) for the Science Education Research Group (SERG-GRES). Montreal, QC, Canada. Free Access: <http://hdl.handle.net/10464/18507>
- Karrow, D.**, & Harvey, S. (2024, June 12). *Poetism, an ethos of mystery and the climate crisis*. [Paper presentation]. 52nd Annual Conference for the Canadian Society for the Study of Education (CSSE), Montreal, QC, Canada. (Presentation canceled due to labour disruption).

- Karrow, D.,** & da Silva, M. (2023, May 30). *Brazilian and Canadian ESE-TE Research Symposium of the Standing Committee of ESE-TE of the Canadian Network for Environmental Education and Communication (EECOM)*. Toronto, ON.
- Krushelnycky, E., & **Karrow, D.** (2024, January 12). *Curriculum Integration and Kieran Egan's Theory of Imagination in Science Education: The Story of the York Boat*. Poster presented at Association for Science Teacher Education (ASTE) International Conference, New Orleans, LA.
- DiGiuseppe, M., Kool, R., & **Karrow, D.** (2023, May 25). *Change resistance to ESE in Canadian faculties of education*. Paper presented at the Research Symposium of the Environmental and Sustainability Education in Teacher Education Standing Committee (ESE-TE SC) of the Canadian Network for Environment Education and Communication (EECOM), Toronto, ON.
- Karrow, D.,** Evans, S., Hardwood, D. (2023, May 5). *Consequential teacher environmental and sustainability education research: From the margins to mainstream "truth"*. Symposium presented at the American Educational Research Association (AERA) conference, Chicago, IL.
- Zandvliet, D., **Karrow, D.,** & Fazio, X. (2022, October 12). *Signifiers and empty-signifiers in ESE: Implications for teacher education*. Paper presented at the North American Association for Environmental Education (NAAEE) conference, Tucson, AZ.
- DiGiuseppe, M., Kool, R., & **Karrow, D.** (2022, October 14). *Change resistance to ESE in Canadian faculties of education*. Paper presented at the North American Association for Environmental Education (NAAEE) conference, Tucson, AZ.
- Khan, S. Bowen, M., & **Karrow, D.** (2022, August 17). *Revisiting abeng for multispecies' flourishing*. Paper presented at the Mathematics and the Connection to the Arts and Sciences Symposium, University of Moncton, NB.
- Karrow, D.,** & Docherty-Skippen, S. (2022, March 14). *Teacher environmental and sustainability education international literature review: Program mainstreaming and challenges*. Paper presented at the World Environmental Education Congress (WEEC), Prague, Czechia.

- Kool, R., **Karrow, D.**, DiGiuseppe, M. (2022, March 16). *The fifty-year-old new subject: The place of environmental and sustainability education in Canadian faculties of education*. Paper presented at the World Environmental Education Congress (WEEC), Prague, Czech Republic.
- Karrow, D.**, & Docherty-Skippen, S. (2022, April 22). *Environmental and sustainability education in teacher education research: An international scoping review of the literature*. Paper presented at the Environmental Education SIG of the American Educational Research Association (AERA), San Diego, CA.
- Khan, S. K., **Karrow, D.**, & Bowen, M. (2021, September 25). *Abeng for multispecies' flourishing*. Paper presented at the Eleventh International Mathematics Education and Society Conference, University of Klagenfurt, Vienna, Austria.
- DiGiuseppe, M., **Karrow, D.**, & Kool, R. (2021, May 30). *The status of environmental and sustainability education in Canadian faculties of education*. Paper presented at the Canadian Association of Teacher Education (CATE) of the Canadian Society for Studies in Education (CSSE), Edmonton, AB.
- Karrow, D.**, Fazio, X., & Zandvliet, D. (2021, June 2). *What's in a name? The signifiers and empty-signifiers of 'environmental and sustainability education': Implications for teacher education*. Paper presented at the Science Education Research Group (SERG) of the Canadian Association of Curriculum Studies (CACS) of the Canadian Society for Studies in Education (CSSE). Edmonton, AB.
- Khan, S., **Karrow, D.** Tran, H. T. T., & La France, S. (2021, May 30). *Plantation logics and STEM economics: Make kin as education for multispecies flourishing after man*. Paper presented at the Canadian Association for Curriculum Studies (CACS) of the Canadian Society for Studies in Education (CSSE). Edmonton, AB.
- Karrow, D.**, & Harvey, S. (2021, May 30). *Non-western perspectives of mystery: Indigenous and eastern worldview contributions*. Paper presented at the Canadian Association for Foundations in Education (CAFÉ) of the Canadian Society of Studies in Education (CSSE). Edmonton, AB.
- Karrow, D.** (2021, June 2). *The sojourn between field and forest: Mystery as eco-pedagogy*. Paper presented at the Canadian Association for Curriculum Studies (CACS) of the Canadian Society for the Study of Education (CSSE). Edmonton, AB.

- Kennedy, A., **Karrow, D.**, Inwood, H., & Skippen-Docherty, S. (2021, June). *Environmental and sustainability education in teacher education: International meta-analysis*. Paper presented at the Canadian Association of Teacher Education (CATE) of the Canadian Society for Studies in Education (CSSE). Edmonton, AB.
- Karrow, D.**, Zandvliet, D., & Fazio, X. (2021, April). *What's in a name? The signifiers and empty-signifiers of 'environmental and sustainability education': Implications for teacher education*. Paper presented at the Research Symposium of the Canadian Environmental Education and Communication Network (EECOM), virtual conference, Toronto, ON.
- DiGiuseppe, M., **Karrow, D.**, Inwood, H., Elliott, P. & Howard, P. (2021, April). *Environmental and sustainability education in teacher education: Canadian perspectives*. Paper presented at the Research Symposium of the Canadian Environmental Education and Communication Network (EECOM), Toronto, ON.
- * **Karrow, D.**, & DiGiuseppe, M. (2020, June). *Environmental and sustainability education in teacher education: Canadian perspectives*. Symposium presented for the SIG—Science Education Research Group (SERG), of the Canadian Association for Teacher Education (CATE), the Canadian Society for the Study of Education (CSSE), London, ON.
- * DiGiuseppe, M., & **Karrow, D.** (2020, June). *Exploring how curriculum policy may enhance preservice environmental sustainability education globally: Emphasizing international research collaborations*. Paper presented for the SIG—Science Education Research Group (SERG), of the Canadian Association for Teacher Education (CATE), the Canadian Society for the Study of Education (CSSE), London, ON.
- * DiGiuseppe, M., Kool, R., **Karrow, D.**, Donnell, A., Howard, P., Lin, E., McVitte, J., Sims, L., Sperling, E., & Vanwynsberghe, R. (2020, June). *Survey of environmental and sustainability education practices in Canadian faculties of education*. Paper presented for the SIG-- Science Education Research Group (SERG), of the Canadian Association for Teacher Education (CATE), Canadian Society for Studies in Education (CSSE), London, ON.
- * Docherty-Skippen, S., **Karrow, D.**, Ahmed, G. (2020, June). *Pre-service teachers' attitudes toward teaching science and technology*. Paper presented for the Science Education Research Group (SERG) SIG of the Canadian Association for Teacher Education (CATE) of the Canadian Society for Studies in Education (CSSE), London, ON.

- * **Karrow, D.**, & Harvey, S. (2020, June). *Teaching as reclaiming mystery: An educational philosophy*. Paper presented for the SIG—Canadian Philosophy of Education Society (CPES), of the Canadian Association of Foundations of Education (CAFÉ), of the Canadian Society for Studies in Education (CSSE), London, ON.

- * **Karrow, D.** (2020, April). *Canadian perspectives on environmental and sustainability education in teacher education: Establishing a research community*. Symposia chair for the SIG—Environmental Education, of the American Educational Research Association (AERA), San Francisco, CA.

- * DiGiuseppe, M., & **Karrow, D.** (2020, April). *Exploring how curriculum policy may enhance preservice environmental sustainability education globally: Emphasizing international research collaborations*. Paper presented for the symposium of the SIG—Environmental Education, of the American Educational Research Association, San Francisco, CA.

- * Sperling, E., Hoeg, D., & **Karrow, D.** (2020, April). *Advancing a direction for environmental education: Assessing and addressing UNECE competences for teacher candidates*. Paper presented for the symposium of the SIG—Environmental Education, of the American Educational Research Association, San Francisco, CA.

- DiGiuseppe, M., **Karrow, D.**, & Kool, R. (2019, November). *Environmental and sustainability education in Canadian faculties of education*. Paper presented as the Global Conference on Teacher Education for Education for Sustainable Development (GCTEESD). Okayama, Japan.

- Karrow, D.** *Is another mathematics possible? Mathematics and the living world*. (2019, April). Symposia chair for the SIG—Research in Mathematics Education, of the American Educational Research Association (AERA), Toronto, ON.

- Khan, S., **Karrow, D.**, & Fleener, J. *Is another mathematics possible? Mathematics and the living world*. (2019, April). Paper for symposium presented at the SIG—Research in Mathematics Education, of the American Educational Research Association (AERA), Toronto, ON.

- Karrow, D.** & Harvey, S. (2019, April). *A 'doctrine of mystery' as a philosophy of education*. Paper presented at roundtable of the SIG—Philosophical Studies in Education, of the American Educational Research Association (AERA), Toronto, ON.

- DiGiuseppe, M., Kool, R., **Karrow, D.**, Donnell, A., Howard, P., Lin, E., McVitte, J., Sims, L., Sperling, E., & Vanwynsberghe, R. (2019, April). *Assessing the state of Canadian environmental sustainability education in teacher education in a post-truth era*. Paper presented at the SIG—Environmental Education, of the American Educational Research Association (AERA), Toronto, ON.
- Karrow, D.**, & DiGiuseppe, M. (2018, October). *Situating Canadian environmental and sustainability preservice teacher education in the international scene*. Poster presented at the 47th Annual North American Association for Environmental Education, Spokane, WA.
- Karrow D.**, DiGiuseppe, M., Elliott, P., Inwood, H. (2018, October). *The Canadian national roundtable for environmental sustainability education in teacher education*. Bright-spot presented at the 47th Annual North American Association for Environmental Education (NAAEE) conference, Spokane, WA.
- Karrow, D.**, & DiGiuseppe, M. (2018, October). *Situating Canadian environmental and sustainability preservice teacher education in the international scene*. Paper presented at the Research Roundtable of the Canadian Network for Environmental Education and Communication (EECOM) conference, Cranbrook, BC.
- Sperling, E., Hoeg, D., & **Karrow, D.** (2018, May). *A direction for outdoor and environmental education: Assessing and addressing UNECE capacities for preservice teachers*. Paper presented at the Canadian Association for Curriculum Studies (CACS) of the Canadian Society for the Study of Education (CSSE), Regina, SK.
- Elliott, P., Bell, N., DiGiuseppe, M., **Karrow, D.**, & Inwood, H. (2017, September). *Prioritizing environmental and sustainability education in Canadian teacher education*. Paper presented at the 9th Annual World Environmental Education Congress (WEEC), Vancouver, BC.
- DiGiuseppe, M., Bell, N., Elliott, P., **Karrow, D.**, & Inwood, H. (2017, September). *Environmental and sustainability teacher preparation: A global perspective*. Paper presented at the 9th Annual World Environmental Education Congress (WEEC), Vancouver, BC.
- Karrow D.**, DiGiuseppe, M., Elliott, P., Gwekwerere, Y., & Inwood, H. (2017, May). *Canadian teachers perspectives on initial teacher environmental education*. Symposium presented at the Canadian Association for Teacher Education (CATE) of the Canadian Society for the Study of Education (CSSE), Toronto, ON.

- Karrow, D.**, DiGiuseppe, M., Elliott, P. & Inwood, H. (2017, May). *What might environmental education look like in K-12 schools and initial teacher education? Reconciling policy with practice*. Paper presented the Canadian Association for Curriculum Studies (CACS) of the Canadian Society for the Study of Education (CSSE), Toronto, ON.,
- DiGiuseppe, M., Bell, N., Elliott, P., Inwood, H., & **Karrow, D.** (2017, May). *National roundtable on environmental sustainability education in initial teacher education*. Paper presented the Canadian Association or Curriculum Studies (CACS) of the Canadian Society for the Study of Education (CSSE), Toronto, ON.
- Harvey, S., Fleener, J., **Karrow, D.**, & Yu, J. (2017, May). *Fanning the flames of curriculum's desire through complicated conversations with Martin Heidegger*. Paper presented at the American Educational Research Association (AERA), San Antonio, TX.
- Karrow, D.**, Harvey, S. (2017, April). *The 'thalweg' of currents: 'Naturalist' environmental education*. Paper presented at the American Educational Research Association (AERA), San Antonio, TX.
- Harvey, S., **Karrow, D.**, Fleener, J., & Yu, J. (2016, October). *Questioning teacher education models for a hopeful future: Relationality for ontology*. Paper presented at the 17th Curriculum & Pedagogy conference, Cleveland, OH.
- Karrow, D.**, & Kentel, J. (2016, July). *Teaching as reclaiming mystery: The phenomenological possibilities of physis*. Paper presented at the International Human Science Research Conference (IHSRC), Ottawa, Ontario.
- Karrow, D.**, DiGiuseppe, M., Fazio, X. (2016, June). *Initial teacher environmental education capacities: What is the role of Ontario's faculties of education?* Paper presented at National Roundtable 2016: Environmental and Sustainability in Canadian Faculties of Education, Peterborough, Trent University.
- Sperling, E., & **Karrow, D.** (2016, June). *A syllabus for outdoor and environmental education: Assessing capacities for preservice teachers*. Paper presented at National Roundtable 2016: Environmental and Sustainability in Canadian Faculties of Education, Peterborough, Trent University.

- Karrow, D.,** Elliott, P., Gwekwerere, Y., Howard, P., & Ostertag, J. (2016, June). *Canadian perspectives on initial teacher environmental education praxis*. Joint session presented at National Roundtable 2016: Environmental and Sustainability in Canadian Faculties of Education, Peterborough, Trent University.
- Karrow, D.,** DiGiuseppe, M., Elliott, P., Inwood, H., & Scully, A. (2016, May). *Facilitating capacity-building and collaborative inquiry in environmental and sustainability education in initial teacher education*. Paper presented at the Ontario Ministry of Education Faculty Forum, Toronto, Ontario.
- Harvey, S. & **Karrow, D.** (2016, April). *Curi-awe-sity: Resituating wonder's attributes in environmental education*. Paper presented at the American Educational Research Association (AERA), Washington, DC.
- Karrow, D.** DiGiuseppe, M. & Fazio, X. (2016, April). *Teasing through the rhetoric of 'integration': Moving environmental education from the margins to the mainstream*. Paper presented at the American Educational Research Association (AERA), Washington, DC.
- Karrow, D.,** Harvey, S. (2016, April). *Heidegger's doctrine of mystery: Educational implications beyond metaphysics as presence*. Paper presented at the American Association for the Advancement of Curriculum Studies (AAACS), Washington, DC.
- Karrow, D.,** DiGiuseppe, M., Elliot, P., Fazio, X., Greenwood, D., Inwood, H. (2015, November). Paper presented at the 8th Canadian Association for Teacher Education (CATE) Working Conference, Toronto, Ontario.
- Berger, P., Gerum, N., Moon, M., DiGiuseppe, M., Inwood, D., Cousineau, A., **Karrow, D.,** & Elliott, P. (2015, May). *Nudging environmental and climate change education into the mainstream*. Paper presented at the Ontario Ministry of Education Faculty Forum, Toronto, Ontario.
- Karrow, D.,** & Harvey, S. (2015, May). *The value of mystery after its distain in education*. Paper presented at the American Educational Research Association (AERA), Chicago, IL.
- Inwood, H., **Karrow, D.** Ashmann, S., DiGiuseppe, M., Frazen, R., & Elliott, P. (2015, April). *Questioning the place of environmental education in preservice education*. Paper presented at the American Educational Research Association (AERA), Chicago, IL.
- Karrow, D.** (2014, November). *An eco-phenomenological journey: Reinvigorating the knowledge-mystery dynamic*. Paper presented at the 9th Annual Curriculum & Pedagogy Conference, New Orleans, LA.

- Fazio, X., & **Karrow, D.** (2014, October). *Exploring the professional characteristics of school-based environmental education leaders*. Paper presented at the North American Association for Environmental Education (NAAEE), Ottawa, Ontario.
- Karrow, D.** & Fazio, X. (2014, October). *A curricular critique of a provincial environmental education policy framework*. Paper presented at the North American Association for Environmental Education (NAAEE), Ottawa, Ontario.
- Karrow, D.** (2014, October). *An eco-phenomenological journey: Beginning and ending in wonder*. Paper presented at the Research Symposium of the North American Association for Environmental Education (NAAEE), Ottawa, Ontario.
- Inwood, H., DiGiuseppe, M., Elliott, P., & **Karrow, D.** (2014, October). *Deepening environmental education in preservice programs*. Paper presented at the North American Association for Environmental Education (NAAEE), Ottawa, Ontario.
- Karrow, D.**, & Fazio, X. (2014, May). *A curricular critique of Ontario's environmental education policy framework: Acting Today, Shaping Tomorrow*. Paper presented at the Science Education Research Group (SERG), of the Canadian Association of Curriculum Studies (CACS), at the Canadian Society for the Study of Education (CSSE), St. Catharines, Ontario.
- Bowen, M. Engemann, J., Fazio, X., Jaipal, K., & **Karrow, D.** (2014, May). *Critical discussions of graduate student progressions through graduate science education programs*. A symposium of the Science Education Research Group (SERG) of the Canadian Association of Curriculum Studies (CACS) of the Canadian Society for the Study of Education (CSSE), St. Catharines, Ontario.
- Kentel, J. A., Ratković, S., **Karrow, D.**, Francis, N., & Nashon, S. (2014, May). *The apple that falls far from the tree: Troubling the power relation in the academy*. A symposium of the Canadian Society for the Study of Education, St. Catharines, ON.
- Inwood, H., Cousineau, A., DiGiuseppe, M., Elliott, P., & **Karrow, D.** (2014, May). *Moving deeper into environmental well-being: Using collaboration to facilitate research and practice in faculties of education*. Paper presented at the Ontario Ministry of Education Forum, Ontario Institute for Studies in Education of the University of Toronto, Ontario.

- Karrow, D.** (2014, April). *An eco-phenomenological journey: The constancy of departure, the approximation of arrival*. Paper presented at the American Educational Research Association (AERA), Philadelphia, PA.
- Inwood, H., DiGiuseppe, M., Elliott, P., **Karrow, D.** (2014, February). *Rolling up our sleeves: Hopeful environmental education practices in pre-service programs*. Paper presented at the Ontario Teachers' Federation/Ontario Association of Deans of Education Conference, York University, Toronto, Ontario.
- Karrow, D.** (2013, November). *Heideggerian thoughtfulness: Teaching as reclaiming mystery*. Paper presented at the 8th Annual Curriculum & Pedagogy, New Orleans, LA.
- Karrow, D., & Fazio, X.** (2013, May). *Meanings of environmental education within Ecoschools*. Paper presented at the American Educational Research Association (AERA), San Francisco, CA.
- Karrow, D.** (February, 2013). *Pedagogically succeeding in life: Executing a consequently unprepared program*. Paper presented at the 6th Biennial Provoking Curriculum Conference, Ottawa, Ontario, February 22-23.
- Karrow, D.** (2012, November). *Unveiling the cloak of academic patriarchy: Re-storying who we are and what we do in departments of teacher education*. Paper presented at the 7th Annual Curriculum and Pedagogy Conference, New Orleans, LA.
- Karrow, D., & Fazio, X.** (2012, October). *Exploring environmental education from a rural education perspective*. Roundtable paper presented at the Research Symposium of the North American Association for Environmental Education (NAAEE), Oakland, CA.
- Karrow, D., & Fazio, X.** (2012, October). *How Eco-schools shape teacher understandings of the meaning of environmental education*. Paper presented at the North American Association for Environmental Education (NAAEE), Oakland, CA.
- Fazio, X., & **Karrow, D.** (2012, may). *Environmental education in schools: Addressing the normative constraints*. Paper presented at the annual Canadian Society for the Study of Education (CSSE) conference, Waterloo, ON.
- Karrow, D.** (2012, March). *Lessons learned from the research on rural schools and environmental education*. Paper presented at the 17th Annual National Congress on Rural Education (NCRE), Saskatoon, SK.

- Fazio, X., & **Karrow, D.** (2012, January). *Curricular and teaching perspectives of environmental education in schools*. Paper presented at the Association of Science Teacher Education (ASTE) International Conference, Clearwater, FL.
- Karrow, D.** & Fazio, X. (2011, October). *Environmental education's philosophical roots: Branching beyond the constraints of schooling contexts*. Roundtable paper presented at the 8th Annual Research Symposium of North American Association for Environmental Education (NAAEE) conference, Raleigh, NC.
- Fazio, X., & **Karrow, D.** (2011, October). *Approaches to environmental education in schools: Implications for practice*. Paper presented at the 8th Annual Research Symposium of the North American Association for Environmental Education (NAAEE) conference, Raleigh, NC.
- Fazio, X. & **Karrow, D.** (2011, September). *Environmental education practices in schools: Implications for science education*. Paper presented at the European Science Education Research Association Bi-annual Conference, Lyon, France, September 5-9.
- Karrow, D.**, & Fazio, X. (2011, April). *A Phenomenological exploration of situative environmental literacy practices within schools*. Roundtable paper presented at the American Educational Research Association (AERA), New Orleans, LA.
- Fazio, X., & **Karrow, D.** (2011, April). *Exploring school-based environmental education practices*. Paper presented at the National Association for Research in Science Education (NARST), Orlando, FL.
- Karrow, D.**, & Fazio, X. (2010, October). *Elaborating a theory of place-based education: Natural, cultural and ontological realms of experience*. Paper presented the North American Association for Environmental Education (NAAEE) conference, Buffalo-Niagara, NY.
- Fazio, X., & **Karrow, D.** (2010, October). *Exploring the role of environmental education policy and community school programs*. Paper presented at the 7th Annual Research Symposium of North American Association for Environmental Education (NAAEE) conference, Buffalo-Niagara, NY.
- Karrow, D.**, & Fazio, X. (2010, May). *What the ontological realm offers place-based education (PBE) theory: Educating-within-place*. Paper presented at the American Educational Research Association (AERA), Denver, CO.

- Fazio, X., & **Karrow, D.** (2009, October). *Collaborative communities: Exploring a school-university-government ecological monitoring partnership*. Paper presented at the North American Association for Environmental Education (NAAEE), Portland, OR.
- Karrow, D.**, & Fazio, X. (2009, May). *Playing the "literacy" game: Thwarting the development of environmental education's intrinsic value*. Paper presented at the World Environmental Education Congress (WEEC), Montreal, QC.
- Fazio, X., & **Karrow, D.** (2009, May). *Promoting environmental education through school-based ecological monitoring: Pitfalls and possibilities*. Poster presented at the World Environmental Education Congress (WEEC), Montreal, QC.
- Karrow, D.** (2009, April). *Engaging the pre-theoretical through place-based education: A foundation for environmental/science education*. Paper presented at the National Association for Research in Science Teaching (NARST), Garden Grove, CA.
- Karrow, D.**, & Fazio, X. (2009, April). *Interdisciplinary explorations around the mandate of literacy: Elementary schools as sites for environmental education*. Paper presented at the meeting of the Environmental/Ecological Education Special Interest Group (EEE SIG) of the American Educational Research Association (AERA), San Diego, CA.
- Karrow, D.**, & Fazio, X. (2008, October). *Ecological monitoring and assessment networks: Elementary schools participation in NatureWatch programs*. Poster presented at the annual North American Association for Environmental Education (NAAEE), Wichita, KA.
- Karrow, D.**, & Fazio, X. (2008, May). *Engaging children in NatureWatch beyond the handmaiden of literacy*. Poster session presented at the meeting of the Science Education Research Group (SERG) of the Canadian Association for Curriculum Studies of the Canadian Society for the Study of Education (CSSE), Vancouver, BC.
- Kentel, J., & **Karrow, D.** (2008, June). *(Ek)static educating: Exploring locales for intuiting ecological imagination in teacher education*. Paper presented at the meeting of the Canadian Association of Teacher Education (CATE) of the Canadian Society for the Study of Education (CSSE), Vancouver, BC.

- Karrow D., & Fazio, X.** (2008, April). *A case study of NatureWatch within an elementary school: Schools, teachers, students, and community based monitoring (CBM)*. Paper presented at the National Association for Research in Science Teaching (NARST), Baltimore, MA.
- Fazio, X., **Karrow, D.**, & Andrachuk, H. (2008, January). *Lessons learned from piloting the NatureWatch program within an elementary school*. Paper presented at the National Science Teachers' Association (NSTA), Boston, MA.
- Karrow, D.** (2007, May). *Educating in science and the organic metaphor of physis*. Poster session presented at the meeting of the Science Education Research Group (SERG) of the Canadian Association for Curriculum Studies at the Canadian Society for the Study of Education (CSSE), Saskatoon, SK.
- Karrow, D., & Kentel, J. A.** (2007, May). *Re-conceptualizing teacher education through the nuance of mystery and the body*. Paper presented at the meeting of the Canadian Association of Teacher Education (CATE) of the Canadian Society for the Study of Education (CSSE), Saskatoon, Saskatchewan.
- Karrow, D., & Kentel, J. A.** (2007, May). *Paul Shepard (1925-1996): In thought, word and deed*. Paper presented at the Environmental Studies Association of Canada (ESAC), Saskatoon, Saskatchewan.
- Karrow, D.** (2007, May). *Response to, 'Texturing one's life-world through technology: The in-between of the textured.'* Paper presented at The Society for Existential and Phenomenological Theory and Culture (EPTC), Saskatoon, Saskatchewan.
- Karrow, D., & Kentel, J.** (2007, May). *Educating-within-place: Place, being and the ecological imagination*. Paper presented at the 5th International Conference on Imagination and Education, Vancouver, BC.
- Karrow, D.** (2007, May). *Metaphysics as physis: An alternative disposition for the teaching and learning relationship in science education*. Paper presented at the meeting of the National Association for Research in Science Teaching (NARST), New Orleans, LA.
- Kentel, J. A. & **Karrow, D.** (2007, April). *Resituating the situated bodies of teacher candidates*. Paper presented at the meeting of the American Educational Research Association (AERA), Chicago, Illinois
- Kentel, J. A. & **Karrow, D.** (2007, February). *Becoming a teacher: Provoking ecological imagination through sensing bodies*. Paper presented at the 3rd Biennial Provoking Curriculum Conference, Banff Alberta.

- Kentel, J., & **Karrow, D.** (2006, July). *Mystery and the body: Site-based experiences of teacher candidates*. Paper presented at the 4th International Conference on Imagination and Education (IERG), Vancouver, BC.
- Karrow, D.** (2006, May). "Wily coyote"--Rural villain or urban hero? *Examining competing "resource" claims as a lens to focus our constructions of cultural and natural environments*. Paper presented at the conference for the Environmental Studies Association of Canada (ESAC), York University, ON.
- Karrow, D.** (2004, March). *Technological enframing and the ontological crisis: Place-based science education*. Paper presented at the meeting of the National Association for Research in Science Teaching (NARST), Vancouver, BC.
- Karrow, D.** (2004, January). *STSE education and place-based science education: Creating a dialogue*. Paper presented at the meeting of the Imperial Oil Centre for Studies in Science, Mathematics and Technology Education, Toronto, ON.
- Karrow, D.** (2003, March). *Place: Education, metaphysics and technology*. Paper presented at the Graduate Students' Diverse Perspectives Conference at The Ontario Institute for Studies in Education of the University of Toronto, ON.
- Geddis, A., & **Karrow, D.** (1998, May). *Exploring science teachers' views of creativity*. Paper presented at the meeting of the Canadian Association of Curriculum Studies (CACCS) of the Canadian Society for the Study of Education (CSSE), Ottawa, ON.

2. Works in Progress

(a). Books

Accepted

Submitted

To Be Submitted

Karrow, D., & Harvey, S. R. *An ethos of mystery for education theory and practice*. Routledge.

(b). Chapters in Books

Accepted

Submitted

To Be Submitted

(c). Papers in Peer Refereed Journals

Accepted

Submitted

(P) Karrow, D., Kool, R., Trafford, M., & DiGiuseppe, M., Sturgeon, M. Canadian environmental and sustainability education in preservice teacher education. *Canadian Journal of Environmental Education*.

(S) Snowy, E., Eames, C., Field, E., and **Karrow, D.** Climate change education: The shape of curriculum and pedagogy. *Journal of Environmental Education*.

To Be Submitted

(S) DiGiuseppe, M., **Karrow, D.,** & Kool, R. *Environmental sustainability education in Canadian preservice teacher education – Where are we 20-years after Lin (2002)?*

(d). Book Reviews

Accepted

(P) Karrow, D., & Trafford, M. [Review of the book *The New Leviathans: Thoughts 'After Liberalism'* by John Gray]. *Philosophical Inquiry in Education*

Submitted

To be Submitted

(e). Papers to be Presented at Conferences or Learned Societies

Accepted

Submitted

Karrow, D., & Harvey, S. R. *Nurturing an ethos of mystery in teacher environmental and sustainability education.* Paper to be presented at the Canadian Association for Teacher Education (CATE), of the Canadian Association for Studies in Education (CSSE), University of Winnipeg, MB., May. 30-June 3, 2026.

To Be Submitted

(e). Research

- Climate Change Education (CCE) and curriculum theory.
- Philosophy of education and education theory (e.g. poetism and phenomenism)
- Environmental and sustainability education in teacher education.
- Sauvé's modern typology re-interpreted through meta-modernism.

3. Patents applied for or received (not applicable)

4. Grants obtained

(PI = principal investigator, Co-PI = co-principal investigator, C = collaborator)

(a) internal grants

Obtained

2024	• Research Assistantship Grant	\$1000.00
2024	• GRAD Grant	\$1000.00
2023	<ul style="list-style-type: none"> • Special M.Ed. Research Assistantship Grant • Dean Graduate Studies • Karrow, D. • assistance with manuscript preparation, conference presentation, book copy-editing. 	\$2000.00
2023	<ul style="list-style-type: none"> • Special M.Ed. Research Assistantship Grant. • Dean Graduate Studies • Karrow, D. • assistance with course supplementary manuscript, publication, chapter contribution to book project. 	\$2000.00

2022	<ul style="list-style-type: none"> • Research Assistantship Grant • Research and Development Committee, Faculty of Education • Karrow, D. • editing assistance with book publication 	\$750.00
2022	<ul style="list-style-type: none"> • GRAD Grant • Research and Development Committee, Faculty of Education • Karrow, D. • data visualization and analysis of scoping literature review data. 	\$1700.00
2021	<ul style="list-style-type: none"> • GRAD Grant • Research and Development Committee, Faculty of Education • Karrow, D. • data visualization and analysis of scoping literature review data. 	\$1700.00
2020	<ul style="list-style-type: none"> • Research Assistantship Grant • Research and Development Committee, Faculty of Education • Karrow, D. • assistance with international environmental and sustainability in teacher education literature review and conference planning. 	\$1000.00
2019	<ul style="list-style-type: none"> • Brock Research Initiative Award (RIA) • Brock Office Research Services • Karrow, D. et al. • assistance with SSHRC-PDG application re-submission 	\$2000.00
2019	<ul style="list-style-type: none"> • GRAD Grant • Research and Development Committee, Faculty of Education • Karrow, D. • assistance with book publication 	\$1700.00
2018	<ul style="list-style-type: none"> • Research Assistantship Grant • Research and Development Committee, Faculty of Education • Karrow, D. • assistance with book editing 	\$1000.00

2017	<ul style="list-style-type: none"> • GRAD Grant • Research and Development Committee, Faculty of Education • Karrow, D. • assistance with book prospectus 	\$1700.00
2016	<ul style="list-style-type: none"> • Research Assistantship Grant • Research and Development Committee, Faculty of Education • Karrow, D. • book chapter abstract translations 	\$568.33
2015	<ul style="list-style-type: none"> • GRAD Grant • Research and Development Committee, Faculty of Education • Karrow, D. • graduate student training: literature review 	\$1700.00
2014	<ul style="list-style-type: none"> • GRAD Grant • Research and Development Committee, Faculty of Education • Karrow, D. • graduate student training: conference paper publication 	\$1700.00
2012	<ul style="list-style-type: none"> • GRAD Grant • Research and Development Committee, Faculty of Education • Karrow, D. • graduate student training: interview transcription 	\$1700.00
2012	<ul style="list-style-type: none"> • Dean's Research Funds Initiative (RFI) • Research and Development Committee, Faculty of Education • Karrow, D. • graduate student training: literature review, report writing, publication assistance. 	\$4500.00
2011	<ul style="list-style-type: none"> • Research Assistantship Grant • Research Development Committee, Faculty of Education • Karrow, D. • graduate student training: literature reviews, report writing 	\$1700.00

2010	<ul style="list-style-type: none"> • Research Assistantship Grant • Research and Development Committee, Faculty of Education • Karrow, D. • graduate student training: literature reviews, analysis 	\$1700.00
2009	<ul style="list-style-type: none"> • Research Assistantship Grant • Research and Development Committee, Faculty of Education • Karrow, D. • graduate student training: data transcription and analysis. 	\$1000.00
2008	<ul style="list-style-type: none"> • Research Assistantship Grant • Research and Development Committee, Faculty of Education • Karrow, D. • graduate student training: data analysis and dissemination. 	\$1000.00
2008	<ul style="list-style-type: none"> • Research Assistantship Grant • Research and Development Committee, Faculty of Education • Karrow, D. • graduate student training: data transcription and analysis. 	\$1000.00
2007	<ul style="list-style-type: none"> • Research Assistantship Grant • Research and Development Committee, Faculty of Education • Karrow, D. • graduate student training: data collection and transcription. 	\$1000.00
2008	<ul style="list-style-type: none"> • <i>Exploring Citizen Science in Secondary Schools</i> • Brock SSHRCC Institutional Grant (BSIG) • (PI) Faxio, X. & (Co-PI) Karrow, D. • teacher inservice, graduate student training, dissemination. 	\$3800.00
2007	<ul style="list-style-type: none"> • <i>Piloting NatureWatch within an Elementary School: Citizen Science and Community Based Monitoring</i> • Brock University Advancement Fund (BUAF) • (PI) Karrow, D., & (Co-PI) Fazio, X. • teacher inservice, graduate student training, dissemination, publication 	\$3600.00

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| 2007 | <ul style="list-style-type: none"> • <i>Scholarly Learning Community Project: Science Education</i> • Dean's Office, Faculty of Education, Brock University • Joe Engemann, Fazio, X., Jaipal-Jamini, K., & Karrow, D • meeting facilitation, research into science education graduate programs, science education research collaborations with district school boards | \$2700.00 |
| 2007 | <ul style="list-style-type: none"> • <i>Scholarly Learning Community Project: Research Unit in Global Education (RUGE)</i> • Dean's Office, Faculty of Education, Brock University • Karrow, D., Fazio, X., Hutchison, D., & O'Sullivan, M. • meeting facilitation, resource sharing. | \$1700.00 |
| 2006 | <ul style="list-style-type: none"> • <i>Mystery and the Body: Place-based Experiences of Teacher Candidates</i> • Research and Development Committee, Faculty of Education • (PI) Karrow, D., & (C) Kentel, J. • graduate student training, dissemination, publication. | \$1250.00 |
| 2006 | <ul style="list-style-type: none"> • <i>Scholarly Learning Community Initiative: Environmental Education</i> • Dean's Office, Faculty of Education, Brock University • Karrow, D., Fazio, X., Hutchison, D., & O'Sullivan, M. • meeting facilitation, resource sharing. | \$1000.00 |

Not Obtained

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|------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 2016 | <ul style="list-style-type: none"> • Brock SSHRC Institutional Grant (BSIG—special purposes) • manuscript preparation | \$1500. |
| 2015 | <ul style="list-style-type: none"> • Brock SSHRC Institutional Grant (BSIG—special purposes) • manuscript preparation | \$1500. |

(b) external grants

*Applications Under Review**Obtained*

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|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 2020 | <ul style="list-style-type: none"> • <i>Environmental and Sustainability in Teacher Education</i> • The Symons Trust Fund for Canadian Studies. • Standing Committee administration, conference planning and hosting. • (PI) Elliott, P. (C) Inwood, H., (C) Karrow, D. | \$3500.00 |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|

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| 2017 | <ul style="list-style-type: none"> • <i>Developing Environmental Education in Canadian Faculties of Education</i> • Toronto Dominion Bank Friend of the Environment Fund. • (PI) Inwood, H., (C) Elliott, P., (C) DiGiuseppe, M., & (C) Karrow, D. | \$10,000. |
| 2016 | <ul style="list-style-type: none"> • The Symons Trust Fund for Canadian Studies • manuscript copy-editing • (PI) Elliott, P., (C) Inwood, I., (C) DiGiuseppe, M., (C) Karrow, D. | \$1500. |
| 2015 | <ul style="list-style-type: none"> • <i>Developing Environmental Education in Canadian Faculties of Education</i> • Toronto Dominion Bank Friends of the Environment Fund. • (PI) Elliott, P, (Co-PI) Inwood, H., (C) DiGiuseppe, M., (C) Karrow, D. | \$25,000. |
| 2010 | <ul style="list-style-type: none"> • <i>Exploring Environmental Literacy Practices in Schools: Implications for Educational Policy and Practice</i> • Social Sciences and Humanities Research Council of Canada • (PI) Fazio, X., & (Co-PI) Karrow, D. | \$20,000. |

Not Obtained

- 2020 • *Teacher Environmental and Sustainability Education Consortium* \$200,000.
 • Social Sciences and Humanities Research Council Canada—Partnership Development Grant (SSHRC-PDG)
 • **Karrow, D.** (Applicant and Project Director), (Brock University--partner), Dr. Paul Elliott (co-applicant, academic) (Trent University--partner), Dr. Patrick Howard, (co-applicant, academic) (Cape Breton University—partner), Dr. Robert Vanwynsberghe, (co-applicant, academic) (University of British Columbia—partner), Adam Young (Chair, Canadian Network for Environmental Education and Communication--co-applicant and partner), Dr. David Zandvliet (co-applicant, academic) (Simon Fraser University), Dr. Maurice DiGiuseppe, (collaborator, academic) (Ontario Tech University), Dr. Xavier Fazio (collaborator, academic) (Brock University), Dr. Yovita Gwekwerere (collaborator, academic), Dr. Charles A. Hopkins (UNESCO Chair, Reorienting Teacher Education Towards Sustainability--collaborator, Dr. Hilary Inwood (collaborator, academic) (Ontario Institute for Studies in Education of the University of Toronto), Dr. Janet McVittie (collaborator, academic) (University of Saskatchewan—partner) and Dr. Lucie Sauvé (collaborator, academic) (Université du Québec à Montréal,)
- 2019 • *Creating and Sustaining a Research Community of Environmental and Sustainability Education in Teacher Teacher (ESE-TE): On Building a Stakeholder-focused Community of Research and Practice for Canadian ESE-TE* \$72,000.
 • Banting Postdoctoral Fellowship
 • Sperling, E. (applicant); **Karrow, D.** (supervisor)
- 2019 • *Open-air Centre for Design Thinking* \$3,087,083.
 • Canadian Foundation for Innovation—Innovation Fund
 • Harwood, D. (Team Leader A); **Karrow, D.** (Team Leader B)
- 2018 • *Developing Resources in Teacher Education for Climate Change* \$39,000.
 • Royal Bank of Canada
 • Inwood, H., (PI), Sperling, E. (Co-PI), DiGiuseppe, M. (C), Elliott, P. (C), **Karrow, D.** (C).

- 2018 • *Environmental and Sustainability Teacher Education Research Network* \$195,000.
 • Social Sciences and Humanities Research Council Canada—Partnership Development Grant (SSHRC-PDG)
 • **Karrow, D.** (Applicant and Project Director), Howard, P. (co-applicant), Gwekwerere, Y. (co-applicant), Vanwynsberghe, R. (co-applicant), Sauv , L. (collaborator), Miller, D. (collaborator), DiGiuseppe, M. (collaborator), Elliott, P. (collaborator), Inwood, H. (collaborator), Hopkins, C. (collaborator), Swartzberg, P. (collaborator)
- 2015 • *Developing Environmental Education in Canadian Faculties of Education* \$26,700.
 • Social Sciences and Humanities Research Council of Canada Connection Grant
 • (PI) Elliott, P., & (Co-PIs) **Karrow, D.** & DiGiuseppe, M.
- 2014 • *Promoting Intellectual Engagement in Science Classrooms: Connecting School Science to Local Communities*
 • Social Sciences and Humanities Research Council of Canada, Insight Grant Proposal
 • (PI) Fazio, X., (C) **Karrow, D.**
- 2013 • *Promoting Intellectual Engagement in Science Classrooms: Connecting School Science To Local Communities*
 • Social Sciences and Humanities Research Council of Canada, Insight Grant Proposal
 • (PI) Fazio, X., (C) **Karrow, D.**
- 2012 • *Promoting Intellectual Engagement in Science Classrooms: Connecting School Science to Local Communities*
 • Social Sciences and Humanities Research Council of Canada, Insight Grant Proposal (ranked 4A)
 • (PI) Fazio, X., (C) **Karrow, D.**
- 2008 • *Exploring Environmental Literacy in Schools: Implications for Education Policy and Practice* \$115,000.
 • Social Sciences and Humanities Research Council of Canada
 • (PI) Fazio, X., & (Co-PI) **Karrow, D.**

(c) Consulting and contracts

- 2025 • Canadian Scholars \$250.
 • review of book proposal: *Attention as resistance: Reimagining learning for a connected world.*
 • **Karrow, D.**

- 2022 • Canadian Scholars \$250.
• review of *Successful outdoor learning: Key factors for outdoor curriculum and instruction*

- 2017 • Environmental Sustainability Research Centre (ESRC), \$1165.
transdisciplinary unit, Brock University, St. Catharines, ON.
• e-Campus Ontario curriculum development stipend.

- 2012 • Pearson Canada \$250.
• review of book proposal: *When we teach science: Becoming an elementary science teacher.*
• **Karrow, D.**

- 2008 • Ministry of Education Ontario Grades 1-8: \$250.
Science and Technology
• **Karrow, D.**
• curriculum fact checker

- 2007 • A Collaborative Research Proposal for the \$11,000.
Ecological Monitoring and Assessment Network: EMAN, Brock University Faculty of Education, and the Hamilton Wentworth District School Board
• **(PI) Karrow, D., & (Co-PI) Fazio, X.**
• see note provided by Environment Canada

E. Teaching and Learning Activities

1. *Courses Taught* Teacher Education = Graduate =

Year	Courses Taught (x) = # of sections taught (OL) = overload	# Students
2024-25	<i>EDBE 8P27 Junior-Intermediate Elementary Science (2)</i>	55
	<i>EDUC 5P20 The History and Philosophy of Education</i>	17
	<i>EDUC 5P92 Introduction to Educational Research</i>	20
2023-24	<i>EDBE 8P37 Primary-Junior Elementary Science (3)</i>	65
	<i>ECE 3P51 Early Childhood Education for Environmental and Sustainability (1) (20 pts. OL)</i>	60
	<i>EDUC 7P69 Socio-Cultural-Political Contexts of Education</i>	3
2022-23	<i>EDBE 8P37 Primary-Junior Elementary Science (2)</i>	50
	<i>EDBE 8P27 Junior-Intermediate Elementary Science (2)</i>	47

2021-22	<i>EDBE 8P37 Primary-Junior Elementary Science (3)</i> <i>EDBE 8P27 Junior-Intermediate Elementary Science (1)</i>	110
	<i>EDUC 5P92 Introduction to Educational Research (20 Pts. OL)</i>	19
	<i>EDUC 5P54 Designing Curriculum to Develop Thinking Abilities (20 Pts. OL).</i>	18
2020-21	<i>EDBE 8P37 Primary-Junior Elementary Science (4)</i>	120
	<i>EDUC 5P92 Introduction to Educational Research (1) (20 Pts. OL)</i>	6
2019-20	<i>EDBE 8P37 Primary-Junior Elementary Science (3)</i>	75
	<i>EDUC 8Y27 Junior-Intermediate Science (1)</i>	25
2018-19	Sabbatical Leave	
2017-18	<i>EDBE 8P37 Primary-Junior Elementary Science (2)</i>	40
	<i>EDUC 8Y15 Outdoor/Environmental Education (1) (10 Pts. OL)</i>	18
	<i>EDUC 7P69 Research Proposal Colloquium (2)</i>	19
2016-17	<i>EDBE 8P37 Primary-Junior Elementary Science (2)</i>	46
	<i>EDBE 8Y43 Primary-Junior-Intermediate Teaching, Learning, and Research (3) (10 Pts. OL)</i>	86
	<i>EDUC 5P44 Curriculum Design, Implementation, and Evaluation</i>	13
2015-16	<i>EDBE 8P37 Primary-Junior Elementary Science (2)</i>	45
	<i>EDUC 7P69 Research Proposal Colloquium</i>	7
2014-15	<i>EDUC 8Y27 Junior-Intermediate Science Methods (3)</i>	88
	<i>EDUC 8Y37 Primary-Junior Science Methods (3)</i>	104
	<i>EDUC 7P69 Research Proposal Colloquium</i>	10
2013-14	<i>EDUC 8Y27 Junior-Intermediate Science Methods (2)</i>	70
	<i>EDUC 8Y37 Primary-Junior Science Methods (2)</i>	60
	<i>EDUC 5Q97 Culminating Seminar (20 Pts. OL)</i>	10
	<i>EDUC 5P54 Designing Curriculum to Develop Thinking Skills</i>	9
2012-13	<i>EDUC 8Y27 Junior-Intermediate Science Methods (3)</i>	75
	<i>EDUC 8Y37 Primary-Junior Science Methods (2)</i>	62
	<i>EDUC 5P92 Introduction to Education Research Methods</i>	5
2011-12	Sabbatical Leave	
2010-11	<i>EDUC 8Y27 Junior-Intermediate Science Methods (3)</i>	75

	<i>EDUC 8Y37 Primary-Junior Science Methods (4)</i>	132
	<i>EDUC 5P44 Curriculum Design, Implementation, and Evaluation (20 Pts. OL)</i>	18
	<i>EDUC 5P92 Introduction to Education Research Methods (20 Pts. OL)</i>	16
2009-10	<i>EDUC 8Y27 Junior-Intermediate Science Methods (2)</i>	54
	<i>EDUC 8Y15 Outdoor/Environmental Education (10 Pts. OL)</i>	10
	<i>EDUC 8D09 Principles/Practices for Professional Certification</i>	32
	<i>EDUC 7P69 Research Proposal Colloquium</i>	7
2008-09	<i>EDUC 8Y27 Junior-Intermediate Science Methods (2)</i>	44
	<i>EDUC 5P92 Introduction to Education Research Methods</i>	6
	<i>EDUC 8D09 Principles/Practices for Professional Certification</i>	33
2007-08	<i>EDUC 8Y27 Junior-Intermediate Science Methods (3)</i>	55
	<i>EDUC 8Y15 Outdoor/Environmental Education</i>	9
	<i>EDUC 8D09 Principles/Practices for Professional Certification</i>	30
2006-07	<i>EDUC 8Y27 Junior-Intermediate Science Methods (3)</i>	63
	<i>EDUC 8Y15 Outdoor/Environmental Education</i>	9
	<i>EDUC 8D09 Principles/Practices for Professional Certification</i>	24
2005-06	<i>EDUC 8Y27 Junior-Intermediate Science Methods (5)</i>	130
	<i>EDUC 8Y15 Outdoor/Environmental Education</i>	6
	<i>EDUC 8D09 Principles/Practices for Professional Certification</i>	24

2. Graduate and undergraduate student supervision:

Pathways: thesis = (T); major research paper = (MRP)

Student Name	Research Topic	Start	Complete	Status	Supervision
Master of Education (M.Ed.)					
John Gadoua (MEd)	(T) Second Career Males and Preservice Teacher Preparation	2006	December 2008	PT	Committee member
Debra Schrader (MEd)	(MRP) Place-based Learning in Undergraduate Education	2008	August 2009	FT	Supervisor
Laura Perri (MEd)	(T) Exploring Capacity Building in Ontario Hygiene Educators during National Curriculum Reform	2010	October 2015	PT	Committee member
Allison Dow	(T) Exploring the Current	2014	July 2015	FT	Committee

(MEd)	State of Grades 4-8 Science Education in Ontario				member
Rachel Brodie (MEd)	(T) Examples of Secondary School Teachers, Students, and Administrators in One Exemplary <i>Ecoschool</i>	2015	April 2017	FT	Committee member
Melissa Fernandes (MEd)	(MRP) Sojourning for Best Practice: Enriching and Transforming Teaching Pedagogy Through International Service Learning	2016	June 2016	PT	Second Reader
Bo Daniels (MEd)	(T) E-learning and the Classroom	2016	September 2017	FT	Committee member
David Kendell (MEd)	(T) Surveillance Capitalism, Education and Self-Identity	2019	October 2020	FT	Committee member
Emily Krushelnycky	Socio-scientific Issues in Science Education	2023	October 2025	FT	Committee member
Maddie Sturgeon	Critical Consumerism	2024	In-progress	FT	Supervisor
Doctor of Philosophy (Ph.D.)					
Gail Lafleur (PhD)	(T) Cultural Intelligence for Peace	2004	December 2013	PT	Committee member
Boguslawa Gatarek (PhD)	(T) Animals Are Us: Applying the Common In-Group Identity Model to Humane Education	2010	April 2018	FT	Committee member
Tracey Gurbin (PhD)	(T) Technology Education	2014	December, 2019	FT	Committee member
Holly Tsun-Haggarty (PhD)	(T) Comparing Arts-based Methodologies	2016	March 2021	FT	Committee member
Fouada Hazema (PhD)	(T) From Generalist to Specialist: Transforming Teachers to Improve Elementary Science Instruction Through Inquiry	2015	March 2022	PT	Committee member
Aman Toor (PhD)	(T) Intermediate Mathematics Teachers' Experiences of Teachable Moments	2015	April 2025	FT	Committee member
Will Burton	Reconstruction Site: Excavating and Elevating Place-Based Education in Winnipeg K-12 Teacher	2024	In-progress	FT	Committee member

	Practice				
Marleine Gelineau	Critical and Queer Pedagogies and Student Engagement	2024	In-progress	FT	Committee member

3. Contributions to seminars and colloquia relevant to teaching and learning

(a) Within Brock University

Karrow, D., & Kool, R. (October, 2021). *Research in ESE-teacher Education*. Panel discussant for Foundations of Education (1F95) (two sections), Department of Educational Studies, Brock University, St. Catharines, ON.

Karrow, D. (December 8, 2020). *A Doctrine of Mystery: New Materialities and Education Theory*. Posthumanism and Education Roundtable. Posthuman Research Institute (PRI), Brock University, St. Catharines, ON.

Karrow, D. (November, 2010). *Imagination as a Higher Order Thinking Capacity*. EDUC P401, Undergraduate course lecture. Graduate/Undergraduate Department of the Faculty of Education, Brock University. St. Catharines, ON.

Karrow, D. (November, 2009). *Thinking and Learning from a Phenomenological Perspective*. EDUC 8P30 Graduate course lecture. Graduate/Undergraduate Department of the Faculty of Education, Brock University, St. Catharines, ON.

Karrow, D. (September, 2009). *Conceptions of Place and Place-based Education: Exploring the Terrain*. Poster presented to the Faculty Board of the Faculty of Education, Brock University, St. Catharines, ON.

Karrow, D., Fazio, X., Daniels, C. & Andrachuk, H. (January, 2009). *Rewards and Challenges of Complex Research Partnerships: Piloting NatureWatch within an Elementary School*. Presentation to the Research Colloquium, of the Faculty of Education, Brock University. St. Catharines, ON.

Karrow, D., & Fazio, X. (January, 2008). *Environmental Education at a Crossroads: Engaging Children with Nature through NatureWatch*. Presentation to the Faculty Board, of the Faculty of Education, Brock University, St. Catharines, ON.

Karrow, D. (November, 2007). *Environmental Education as Transformative Education EDUC 5P01: Innovative Curriculum*, Graduate Course Graduate/Undergraduate Department, Faculty of Education, Brock University, St. Catharines, ON.

Karrow, D. (September/November, 2007). *Integrating Science with Physical Education EDUC 8Y36*, Pre-service Methods Course Faculty of Education, Brock University, Hamilton, ON.

Karrow, D. (November, 2007). *Place and Being: Metaphysics beyond Technicity EDUC 5P35: Adult Teaching and Learning* Graduate/Undergraduate Department, Faculty of Education, Brock University, Hamilton, November 2007.

Karrow, D. (November, 2007). *Place and Being: Metaphysics beyond Technicity EDUC 5P27: Introduction to Integrated Studies* and *EDUC 5P36: Critical Perspectives on Adult Education*, Graduate Courses Graduate/Undergraduate Department, Faculty of Education, Brock University, Sheridan/Oakville Campus, Burlington, ON.

(b) Outside Brock

Karrow, D. (October 23, 2025). *Classrooms to Communities (C2C): Weaving Relationships, Growing Networks*. Panelist for the C2C Education Network, Vancouver, BC.

Karrow, D. (January, 2007). *The Poetics of Ritual*. AEC 1275H Graduate Course Lecture, The Ontario Institute for Studies in Education of the University of Toronto, ON.

Karrow, D. (February, 2004). *The Nature of Science and Science Education*. Science Education Seminar University of Toronto at Mississauga, Toronto, ON.

Karrow, D. (February, 2004). *Place-based Science Education: The Keystone Science School* Science Education Seminar University of Toronto at Mississauga, Toronto, ON.

4. Recognition of Teaching Excellence, including Awards (e.g., a Faculty Teaching Award or the OCUFA award)

1999 Teaching for Excellence

Presented by the Bluewater District School Board, Chesley, ON.

5. Other Contributions Devoted to Pedagogical Interest, including innovative methods in teaching and other contributions to the teaching activities of the University (Publications or Activities previously listed in Section D may be cross listed here and identified with an asterisk.)

(a). Course and Curriculum Development

• *MPED 5P63 - Transformative Education for Sustainability*. Graduate Program, Department of Educational Studies, Faculty of Education, Brock University, 2024.

- *MPED 5P62 - Ecological Educational Leadership*. Graduate Program, Department of Educational Studies, Faculty of Education, Brock University, 2024.
- *MPED 5P60 - Educational Leadership for Sustainability*. Graduate Program, Department of Educational Studies, Faculty of Education, Brock University, 2024.
- *EDUC 3P30: Environmental and Sustainability Education*. Undergraduate Program, Department of Educational Studies, Faculty of Education, Brock University, 2021.
- e-Campus Ontario Open Content Project *Environmental Sustainability in Practice: Education Module*, Environmental Sustainability Research Centre (ESRC) transdisciplinary research unit, Brock University, 2017.
- *EDBE 8P37 Primary-Junior Science Education*, Department of Teacher Education, Faculty of Education, Brock University, 2015.
- *EDBE 8Y43 Teaching, Research, and Educational Inquiry*, Department of Teacher Education, Faculty of Education, Brock University, 2015.
- *EDUC 7P69 Research Proposal Colloquium*, Graduate/Undergraduate Department, Faculty of Education, Brock University, 2015.
- *EDUC 5P54 Curriculum Design to Develop Thinking Abilities*, Graduate/Undergraduate, Department, Faculty of Education, Brock University, 2014.
- *EDUC 5Q97 Culminating Seminar*, Graduate/Undergraduate Department, Faculty of Education, Brock University, 2014.
- *EDUC 8Y37 Elementary Science Education: Primary-Junior*, Department of Teacher Education, Faculty of Education, Brock University, 2014.
- *EDUC 8Y27 Elementary Science Education: Junior-Intermediate*, Department of Teacher Education, Faculty of Education, Brock University, 2014.
- *EDUC 5P44 Curriculum Design, Implementation and Evaluation*, Graduate/Undergraduate Department, Faculty of Education, Brock University, 2011.
- *EDUC 8Y37 Primary-Junior Science Methods*, Department of Teacher Education, Faculty of Education, Brock University, 2010-11.
- *EDUC 8D09 Principles and Practices for Professional Certification (P/J/I)*, Department of Teacher Education, Faculty of Education, Brock University, 2010.
- *EDUC 7P69 Research Proposal Colloquium*, Joint Ph.D. Program, Faculty of Education, Brock University, 2010 and 2011

- *EDUC 5P92 Introduction to Research Methods*, Graduate/Undergraduate Department, Faculty of Education, Brock University, 2008
- *EDUC 8Y15 Outdoor/Environmental Education*, Department of Teacher Education, Faculty of Education, Brock University, 2005-present.
- *EDUC 8Y27 Junior-Intermediate Science Methods*, Department of Teacher Education, Faculty of Education, Brock University, 2004-present.
- *Science Education Seminar*, Astronomy Department, Faculty of Science, University of Toronto, Mississauga, 2003.

(b) Publications

- * **Karrow, D.** (April, 2009). *Engaging the pre-theoretical through place-based education: A foundation for environmental/science education*. Paper presented at the National Association for Research in Science Teaching (NARST), Garden Grove, CA.
- * **Karrow, D., & Fazio, X.** (May, 2008). Ministry of Education Forum *Preparing Ontario's Teachers for the Challenge Ahead: Environmental Education Success Stories from Brock University*. Ministry of Education Forum, OISE/University of Toronto, ON.
- * **Karrow, D.** (April, 2007). Metaphysics and Physis: An alternate disposition for the teaching and learning relationship in science education. *Proceedings of the National Association for Research in Science Teaching (NARST)*, New Orleans, LA, 1124-1158.
- * **Karrow, D. & Kentel, J. A.** (May, 2007). *Re-conceptualizing teacher education through the nuance of mystery and the body*. Paper presented at the meeting of the Canadian Association of Teacher Education (CATE) of the Canadian Society of Studies in Education (CSSE), Saskatoon, SK.
- * **Karrow, D. & Kentel, J. A.** (July, 2005). Educated myopia: Permeating the boundaries of the pre-service teacher-training model [Abstract]. *Proceedings of the Imaginative Education Research Group (IERG) Conference*, Available from: http://www3.educ.sfu.ca/conferences/ierg2005/papers/062-Karrow_Kentel.pdf. Vancouver, BC.

(c) Student Research Assistantship Training

Graduate Mentorship Program

- Maddie Sturgeon, Fall 2025-Winter 2026
- Matthew Trafford, Fall 2024-Winter 2025-Spring 2025
- Robert Blom, Fall 2024-Winter 2025
- Emily Krushelnycky, Fall 2024-Winter 2025.
- Emily Krushelnycky, Summer 2023, Fall 2024-Winter 2025.
- Ali Maretzski, Summer 2023.

Graduate Assistantships and/or Teaching Assistantships

- Emily Krushelnycky, Winter 2023, Winter 2024
- Robert Blom, Winter 2024
- Robert Blom, Winter 2023
- Ryan Kasperowitch, Winter 2022
- Ryan Kasperowitch, Winter 2021
- Susan Docherty-Skippen, Fall/Winter 2020-2021
- Susan Docherty-Skippen, Summer 2020
- Susan Docherty-Skippen, Winter 2019
- Susan Docherty-Skippen, Winter 2018
- Susan Docherty-Skippen, Fall 2017
- Susan Docherty-Skippen, Winter 2017
- Tyler Marr, Winter 2015
- Tyler Marr, Fall 2014
- Claire Dusto, Spring 2012
- Vanessa Sperduti, Winter 2012

- Kathryn Lang 2010-2011
- James Borland 2009-2010
- Deb Schrader 2008-2009
- Linda Thomas 2007-2009
- Terri Payk 2006-2007

(d) Visiting International Scholar Mentorship

- Michelle da Silva Silveira, Professor, Instituto Federal do Rio Grande do Norte. Rio Grande do Norte, Brazil. February-December 2022- 2023.

6. *Written comments of colleagues who have observed the candidate's teaching first-hand and at the invitation of the candidate.*
7. *Written comments provided by colleagues regarding the candidate's reputation in the area of teaching and learning among peers and the basis for that reputation.*
8. *Written comments of students about the candidate's teaching.*
9. *Additional material relevant to teaching and learning collected by the candidate on their own initiative (e.g., a teaching portfolio).*
10. *Supervision of student practica and/or internships where specific professional credentials are required of the supervisor to allow students to obtain certification or licensure.*

Year	# of Students/Co hort Group	Number of Students Counseled/Supervised During Practica		
		Block 1	Block 2a	Block 2b
2004-05	25	10	10	10
2005-06	27	5	6	6
2006-07	28	5	9	6
2007-08	30	12	9	9
2008-09	32	9	12	0
2009-10	32	8	8	8

F. University and Community Service

1. *Within Brock University*

(a). Committee Responsibilities

- Member of the core editorial review committee for *Brock Education Journal*.
- Participating member of the Faculty of Education Tenure and Promotion Committee, of the Brock University Faculty Association (BUFA), 2022-present
- Co-chair of the Elementary Science Instructional Team, Department of Teacher Education, Faculty of Education, 2013-present.
- Steering committee member of the Joint PhD Program Committee, Department of Educational Studies, Faculty of Education, 2024-present.
- Participating member of the Joint PhD Program Committee, Department of Educational Studies, Faculty of Education, 2015-present.
- Steering committee member of the Graduate Program Committee, Department of Educational Studies, Faculty of Education, 2019-present.
- Participating faculty member of the Graduate Program Committee, Department of Educational Studies, Faculty of Education, 2019-present.
- Participating faculty member of the Teacher Education Program Committee, Department of Educational Studies, Faculty of Education, 2019-present.
- Participating faculty member of the Department of Educational Studies, 2019 present.
- Steering committee member of the Joint PhD Program Committee, Department of Educational Studies, Faculty of Education, 2015-2022
- Participating faculty member on the Environmental Sustainability Research Centre (ESRC), 2016-2019.
-- participant of the ESRC Networking Session, November 2016.
- Committee member of the Faculty of Education Planning and Priorities Committee, 2015-2018.
- Chair of the Ad Hoc Committee on Enhancing Environmental Education in the Department of Teacher Education, 2015-2017.
- Committee member of the Faculty of Education Restructuring Committee, Faculty Board, 2015-2017.

- Committee member of the Bermuda Teacher Certification Committee, Department of Teacher Education, 2015-2016.
- Committee member of the Department of Teacher Education Ad Hoc Admission's Review Committee, 2015-2017.
- Chair of the Graduate Program in Teacher Education (GPTE) Committee, Department of Teacher Education, 2012-2014.
- Committee member of the Faculty of Education Tenure and Promotion Committee, Faculty of Education, 2012-2014
- Chair of the Graduate Program in Teacher Education (GPTE) Committee, Department of Teacher Education, 2011-2012.
- Committee member of the Science Instructional Team, Department of Teacher Education, Faculty of Education, 2012-2013.
- Faculty of Education representative to establish a university-wide interdisciplinary institute for research and teaching on the environment at Brock University, 2011-2012.
- Committee member of the Graduate Program in Teacher Education (GPTE) Committee, 2010-2011.
- Chair of Research and Development Committee, Faculty of Education, Brock University, 2010-2011.
- Department of Teacher Education Committee full time member, Faculty of Education, Brock University, 2010-2011.
- Faculty Advisors' Committee member, Faculty of Education, Brock University, 2004-2010.
- Instructional Team Leaders' Committee member, Faculty of Education, Brock University, 2009-2010.
- Chair of Elementary Science Instructional Team, Teacher Education Department, Faculty of Education, 2010-2011.
- Cohort Generic Course Outline Subcommittee member, Faculty of Education, Brock University, 2010.
- Joint Ph.D Implementation Committee member, Faculty of Education, Brock University, 2009-2012

- Chair/Initiator of the Scholarly Learning Community—Project (SLC-P) *The Research Unit for Global Education* (RUGE), 2007-2009.
- Research and Development Committee member, Faculty of Education, 2005-2011.
- Research Colloquium Committee, Teacher Education Department representative, Faculty of Education, 2007-2010.
- Teacher Education Department Awards Committee member, Faculty of Education, 2007-2010.
- Chair of the Committee on Re-imagining the Faculty of Education (formerly, Option 6b) of the Faculty of Education, Brock University, 2008.
- Graduate Fellowship Committee, Teacher Education Department representative, Faculty of Education, 2007.
- Chair of Environmental Education Ad Hoc Committee, Teacher Education Department, Faculty of Education, Brock University, 2007-2009.
- Chair of Science Instructional Team, Teacher Education Department, Faculty of Education, 2005-2008.
- Chair/Initiator of the Scholarly Learning Community—Initiation (SLC-I) *Environmental Education*, 2005-2006.

(b). Participation in Professional Development Activities

- participate in Brock University hosted session with *Academics Without Borders*, March 16, 2025.
- participant in the Brock University workshop: *Faculty Members' Experience Mentoring and Supervising Graduate Students*. October, 2020.
- participant in North American Association for Environmental Education webinar: *Mainstreaming Environmental and Sustainability Education in Teacher Education*. May 16, 2019.
- participant in SSHRC—PDG application workshop. June 18, 2018.
- participant in SSHRC—PDG application workshop. July 19, 2019.

2. Outside Brock University

(a). Guest Lecturer

Karrow, D. (December, 2011). *Reclaiming Mystery: A Predisposition to Socio-Ecological Consciousness*. Department of Theory and Policy Studies, Faculty of Education, The Ontario Institute for Studies in Education of the University of Toronto (OISE/UT).

Karrow, D. (June, 2009). *The Climate Project (TCP)*
Egremont Community School, Holstein, ON.

Karrow, D. (May, 2009). *The Climate Project (TCP)*
Lester B. Pearson Secondary School, Burlington, ON.

(b) Keynote Addresses

Karrow, D. (February, 1999). *Environmental Education and The Keystone Science School*, Bluewater District School Board, Chesley, Ontario

Karrow, D. (March, 1999). *Environmental Education and The Keystone Science School*, Grey Association for Better Planning, Markdale, ON.

3. Counseling Students

One unique aspect of the Department of Teacher Education is its Cohort model (formerly referred to as *Counseling Group*). Although the name has changed the model retains its operating premise. In addition to instructional responsibilities faculty act as *counselors* throughout the eight-month certification process. From time to time, candidates present with various exceptionalities i.e., depression, anxiety, drug abuse, learning disabilities, or are involved in incidents of harassment (one candidate was involved in two incidents of sexual harassment within a school). Since my appointment I have had to work extensively with ten teacher candidates presenting with any one or more of these exceptionalities. They require extensive support and guidance prior to, during, and following a referral to an appropriate body, i.e., Student Services.

4. Other Scholarly and Professional Academic Activity

(a). Memberships in Scholarly/Professional Societies/Associations

- *Canadian Association for Teacher Education*, to be executive board member, 2025.
- *Heidegger Circle of The Society for Phenomenological and Existential Philosophy (SPES)*, general member, 2024-

- *EECOM Standing Committee on Environmental Sustainability Education in Teacher Education*, general board member, 2022-present.
- *Canadian Network of Environmental Education and Communication* (EECOM), general member, 2008-present.
- *Standing Committee of the Canadian Network of Environmental Education and Communication* (EECOM) *on Environmental Sustainability Education in Teacher Education*, co-chair, 2017-2021.
- *Research Symposium for EECOM's annual conference*, York University, conference chair, 2018-2021.
- *Canadian Association for Teacher Education* (CATE), general member and guest editor.
- *Canadian Association for Curriculum Studies* (CACS), general member, and guest editor of the *Journal of the Canadian Association for Curriculum Studies*.
- *Science Education Research Group* (SERG), general member.
- *American Education Research Association* (AERA), general member of the Environmental/Ecological Education SIG and Division B: Curriculum Studies.
- *North American Association for Environmental Education* (NAAEE), general member.
- *Canadian Society for Studies in Education* (CSSE), general member.
- *The Society for Existential and Phenomenological Theory and Culture* (EPTC), general member, conference commentators.

(b) Scholarly Contributions to Associations

- Chair of the symposium session, *Consequential Teacher Environmental and Sustainability Education Research: From the Margins to Mainstream "Truth"*. Symposium presented at the American Educational Research Association (AERA). May 5 (virtual), 2023, Chicago, IL.
- Chair of the symposium session, *Environmental and Sustainability Education in Teacher Education: Canadian Perspectives*. Symposium presented for the SIG—Science Education Research Group (SERG), of the Canadian Association for Teacher Education (CATE), the Canadian Society for the Study of Education (CSSE). May 31, 2021, London, ON.

- Chair of the symposium session, *Is Another Mathematics Possible? Mathematics and the Living World*. American Educational Research Association (AERA), April 2019, Toronto, ON.
- Committee member, *National Roundtable 2016: Sustainability and Environmental Education in Canadian Faculties of Education*. June 2016, Trent University, Oshawa, ON.
- Chair of the session *Consumerism*. The Canadian Association of Foundations in Education (CAFÉ), May 2012, Waterloo, ON.
- Chair of the session *Environmental Education Research and De-colonizing Indigenizing, Empowering and De-territorializing*, Ecological and Environmental Special Interest Group, a SIG of the American Educational Research Association (AERA), April 2009, San Diego, CA.
- Discussant for the session *Science Teacher Education*, Science Education Research Group (SERG), A SIG of the Canadian Association for Curriculum Studies (CACS) of the Canadian Society for Studies in Education (CSSE), May 2008, Vancouver, BC.