

CURRICULUM VITAE: DOUGLAS E. McDOUGALL
ONTARIO INSTITUTE FOR STUDIES IN EDUCATION
UNIVERSITY OF TORONTO

August 16, 2021

A. STATUS

Name: Douglas McDougall

Rank: Professor

Status: Tenured

**Member of
Graduate Faculty:** Full Member

Address: Ontario Institute for Studies in Education of the University of Toronto
Department of Curriculum, Teaching and Learning
252 Bloor Street West
Toronto, Ontario M5S 1V6

B. DEGREES:

Designation: Ed.D.
Institution: Ontario Institute for Studies in Education/University of Toronto
Department: Curriculum, Teaching and Learning
Year: 1997
Title: Mathematics Teachers' Needs in Dynamic Geometric Computer Environments: In Search of Control (Supervisor: Gila Hanna)

Designation: M.Ed.
Institution: Ontario Institute for Studies in Education
Department: Measurement, Evaluation and Computer Applications
Year: 1987

Designation: B.Ed.
Institution: University of Western Ontario
Department: Althouse Faculty of Education
Year: 1980

Designation: B.Math (Hons)
Institution: University of Waterloo
Department: Faculty of Mathematics
Year: 1980

C. EMPLOYMENT HISTORY: (dates, rank/position, department, institution/firm)

Date: July 2013 - present
Rank: Professor of Mathematics Education
Department: Curriculum, Teaching and Learning
Institution: OISE, University of Toronto

Date: July 2015 – June 2019
Rank: Associate Dean, Programs
Institution: OISE, University of Toronto

Date: July 2010 – June 2015
Rank: Chair and Graduate Chair
Department: Curriculum, Teaching and Learning
Institution: OISE, University of Toronto

Date: July 2009 – June 2010
Rank: Director, Centre for Science, Mathematics and Technology Education
Department: Curriculum, Teaching and Learning
Institution: OISE, University of Toronto

Date: January 2005 – December 2007
Rank: Associate Chair, Graduate Studies
Department: Curriculum, Teaching and Learning
Institution: OISE, University of Toronto

Date: July 2002 – June 2013
Rank: Associate Professor
Department: Curriculum, Teaching and Learning
Institution: OISE/University of Toronto

Date: July 2000 – June 2009
Rank: Coordinator, Master of Teaching Program
Department: Curriculum, Teaching and Learning
Institution: OISE, University of Toronto

Date: July 1997 – June 2002
Rank: Assistant Professor
Department: Curriculum, Teaching and Learning
Institution: OISE, University of Toronto

Date: July 1997 – June 2000
Rank: Principal, Mathematics Additional Qualification courses (sessional)
Department: Continuing Education Department
Institution: OISE, University of Toronto

Date: July 1996 – June 1997
Rank: Director of Studies
Department: Grades 3 to 8
Institution: Upper Canada College, Toronto

Date: July 1993 – June 2000
Rank: Instructor, Intermediate Mathematics Additional Qualifications (sessional)
Department: Continuing Education Department
Institution: OISE, University of Toronto

Date: July 1989 – June 1996
Rank: Head of Mathematics
Department: Grades 3 to 8
Institution: Upper Canada College, Toronto

Date: July 1988 – June 1989
Rank: Assistant Head of Mathematics
Department: Mathematics
Institution: Southwood Secondary School, Cambridge, Ontario

Date: July 1987 – June 1988
Rank: Mathematics Consultant
Department: Mathematics Department
Institution: Waterloo County Board of Education, Kitchener, Ontario

Date: July 1980 – June 1987
Rank: Teacher, Assistant Head of Mathematics (1985-1987)
Department: Mathematics Department
Institution: Bluevale Collegiate Institute, Waterloo, Ontario

D. HONOURS: (e.g. F.R.S., F.R.S.C., Governor General’s Award, Honorary Degrees.)

2021 David E. Hunt Award for Excellence in Graduate Education, Ontario Institute for Studies in Education, University of Toronto

2020 JJ Berry Smith Doctoral Supervision Award, School of Graduate Studies, University of Toronto

2020 Mentor of the Year Award, Leaders and Legends, OISE Alumni Association, University of Toronto

2018 – present Visiting Professor, Northeast Normal University, Chungchun, China

2014 - 2019 Honorary Professor, Tianjin Normal University, Tianjin, China

2008 – 2010 Honorary Professor, UNESCO Centre for Rural Education, Beijing Normal University, Beijing, China

2001 Member, Kenner Collegiate and Vocational Institute Alumni Hall of Fame

2000 Honorary Chair, 2000 Anniversary Program, University of Waterloo

2000 Life Membership, Dulce Maria Escalma Catedra, Institutio Pedagogico “Enrique Jose Varona”, Facultad de Ciencias, Havana, Cuba (Faculty of Mathematics and Science)

1999	Impact Math Project nominated by the Ontario Teaching Federation for Industry, Canada's Michael Smith Award for Science Promotion (Science, Technology, English and Math)
1994	Life Membership, Educational Computing Organization of Ontario

E. PUBLICATIONS:

Summary Count

Books/monographs authored	7
Chapters in books	12
Books/Proceedings edited	4
Articles in refereed journals	21
Book Reviews	1
Papers in refereed conference proceedings	51
Technical reports	20
Articles in non-refereed journals	7
Editorials	5
Professional Resources	16
Foreword	1

Books/Monographs Authored (* indicates students and ^ indicates international colleagues)

*Zhu, S., ^Xie, S., McDougall, D., & ^Ma, Y. (Eds). (2020). *Reciprocal Learning for Cross Cultural Mathematics Education: A Partnership Project Between Canada and China*. New York: Springer Palgrave MacMillan.

Martinovic, D., McDougall, D.E. & *Karadag, Z. (Eds.) (2012). *Technology in Mathematics Education: Contemporary Issues*. (pp. 252). Santa Rosa, CA. Informing Science Institute.

McDougall, D., Ross, J.A., & Ben Jaafar, S. (2006). *PRIME Ten Dimensions of Mathematics Education: Research study*. (pp. 32). Toronto: Thomson Nelson.

Small, M., McDougall, D.E., Ross, J.A., & Ben Jaafar, S. (2006). *PRIME Developmental maps: Research study*. (pp. 79). Toronto: Thomson Nelson.

McDougall, D.E. (2004). *School Mathematics Improvement Leadership Handbook*. (pp. 88). Toronto: Thomson Nelson.

^Haylock, D. & McDougall, D.E. (1999). *Mathematics every elementary teacher should know*. (pp. 216). Toronto: Trifolium Books, Fitzhenry & Whiteside.

Chapters in Books

McDougall, D., ^Yunpeng Ma, Y., ^Shu Xie, S., & *Zhu, S. (2020). General and Education Context in Ontario, Canada and Mainland China. In Zhu, S., Xie, S., McDougall, D., & Ma, Y. (Eds), *Reciprocal Learning for Cross Cultural Mathematics Education: A Partnership Project Between Canada and China*. New York: Springer Palgrave MacMillan.

- ^Yunpeng Ma, Y., McDougall, D., & ^Shu Xie, S. (2020). Mathematics Teacher Education in Ontario, Canada and Mainland China. In Zhu, S., Xie, S., McDougall, D., & Ma, Y. (Eds), *Reciprocal Learning for Cross Cultural Mathematics Education: A Partnership Project Between Canada and China*. New York: Springer Palgrave MacMillan.
- ^Yunpeng Ma, Y., ^Shu Xie, S., Wang, Y., & McDougall, D. (2020). Analysis of Students' Systematic Errors and Teaching Strategies for 3-Digit Multiplication. In Zhu, S., Xie, S., McDougall, D., & Ma, Y. (Eds), *Reciprocal Learning for Cross Cultural Mathematics Education: A Partnership Project Between Canada and China*. New York: Springer Palgrave MacMillan.
- McDougall D., & Ferguson S. (2018). Building Capacity in Grade 9 Mathematics: Case Studies from a Collaborative Inquiry Project in Applied Level Mathematics. In Kajander, A., Holm, J., & Chernoff, E. (eds), *Teaching and Learning Secondary School Mathematics*. Advances in Mathematics Education. Springer.
- McDougall, D., Hewitt, J., Montemurro, D., Kosnik, C. & Cuckovic, B. (2017). Graduate teacher education at OISE: Transition to a five-term program. In Petrarca, D., & Kitchen, J. (Eds.), *Initial teacher education in Ontario: The first year of four-semester teacher education programs*. Ottawa, ON: Canadian Association for Teacher Education.
- McDougall, D., *Wang, Z., & ^Wang, G. (2013). Canadian Mathematics Curriculum Standards Review (10-12). In Y, Cao (Ed.), *Thirteen Countries Mathematics Curriculum Standards Review: Secondary school*. Beijing: Beijing Normal University. (in chinese)
- McDougall, D., *Wang, Z., & ^Wang, G. (2012). Canadian Mathematics Curriculum Standards Review (K-9). In Y, Cao (Ed.), *Thirteen Countries Mathematics Curriculum Standards Review: Elementary to Junior high School* (pp. 49-85). Beijing: Beijing Normal University. (in chinese)
- *Radakovic, N. & McDougall, D. (2012). From Static to Dynamic Representations of Probability Concepts. In Martinovic, D., McDougall, D. & Karadag, Z. (Eds), *Technology in Mathematics Education: Contemporary Issues*. Santa Rosa, CA: Informing Science Institute.
- McDougall, D.E. (2011). Strategies for improving mathematics understanding with at-risk Grade 9 students. In T. Sung (Ed.), *Research report on support for underachieved students, ORM 2011-19-2* (pp. 187-198). (Translated into Korean, pp. 199-209). Seoul, Korea: Korea Institute for Curriculum and Evaluation.
- *Karadag, Z., & McDougall, D. (2011). GeoGebra as a cognitive tool: Where cognitive theories and technology meet. In L. Bu & R. Schoen (Eds.), *Model-Centered Learning: Pathways to mathematical understanding using GeoGebra* (pp. 169-181). Rotterdam: Sense Publishers.
- McDougall, D.E. (2009). Teachers supporting teachers in using a ten-dimensions framework for improving elementary mathematics. In C. Rolheiser (Ed.), *Partnerships for professional learning: Literacy & Numeracy initiatives*, OISE, 58-64.
- Ross, J.A. & McDougall, D. E. (2006). Mathematics. In K. Leithwood, P. McAdrie, N. Bascia, & A. Rodrigue, A. (Eds.), *Teaching for deep understanding: Towards the Ontario curriculum that we need* (pp. 33-39). Thousand Oaks, CA: Corwin Publishing.

Books/Proceedings Edited

- McDougall, D.E. & Ross, J.A. (Eds). (2004). Proceedings of the Annual Conference of the North American Chapter of the Psychology of Mathematics Education, 3 volumes, 1659 pp. Toronto: OISE.
- McDougall, D.E. (Ed.). (2002). OISE Papers in Mathematical Education. Imperial Oil Centre for Studies in Science, Mathematics and Technology Education, University of Toronto Press. 110 pp.
- McDougall, D.E. (2002). Mathematics in the 21st Century: An Overview. In McDougall, D.E. (Ed.), OISE Papers in Mathematics Education, 1-3. Toronto: OISE.
- Langford, W., Long, R. & McDougall, D.E. (Eds). (1997). Mathematics education for the 21st century: A Fields-Nortel White Paper. Toronto, Ontario: Field Institute. 23 pp.

Articles in Refereed Journals

- ^Xie, S., ^Huang, J., ^Ma, Y., McDougall, D.E., & *Zhu, S. (accepted). Paths and Obstacles in Cross-cultural Reciprocal Learning between Chinese and Canadian Elementary Mathematics Teachers. *Frontiers in Education in China*.
- McDougall, D. & *Ferreiro-Mazieres, S. (2020). CJSMT: 20 Years Strong. *Canadian Journal for Science, Mathematics, and Technology Education*, 20(4), 784-791.
- *Wang, Z., & McDougall, D.E. (2018). Curriculum Matters: What we teach and what students gain. *International Journal of Science and Mathematics Education*, 20(4), 557-573.
- *Jao, L., & McDougall, D. (2016). Moving beyond the barriers: Supporting meaningful teacher collaboration to improve secondary school mathematics. *Teacher Development*, 20(4), 557-573.
- *Stoilescu, D., McDougall, D., & *Egodawatte, G. (2016). Teachers' views of the challenges of teaching grade 9 applied mathematics in Toronto schools. *Educational Research for Policy and Practice*, 15(2), 83-97.
- ^Wang G., ^Liao, J., ^Huang, Q., *Wang, Z., & McDougall, D. (2015). Research on the Questionnaire of High School Mathematics Learning Strategies. *Journal of Mathematics Education*, 24(5), 25-36.
- Qiu, M. & McDougall, D. (2015). Influence of group configuration on online discourse reading. *Computers & Education*, 87, 151-165.
- *Jao, L. & McDougall, D. (2015). The Collaborative Teacher Inquiry Project: A Purposeful Professional Development Initiative. *Canadian Journal of Education*, 38(1).
- Qiu, M., & McDougall, D. (2013). Foster strengths and circumvent weaknesses: Advantages and disadvantages of online over face-to-face subgroup discourse. *Computers & Education*, 67, 1-11.
- *Radakovic, N. & McDougall, D. (2012). Using dynamic geometry software for teaching conditional probability with area-proportional Venn diagrams. *International Journal of Mathematical Education in Science & Technology*, 43(7), 949-953.
- *Egodawatte, G., McDougall, D.E., & *Stoilescu, D. (2011). The effects of teacher collaboration in Grade 9 Applied Mathematics. *Educational Research for Policy and Practice*, 10(3), 189-209.

- *Stoilescu, D. & McDougall, D. (2011). Gender digital divide and challenges in undergraduate computer science programs. *Canadian Journal of Education*, 34(1), 308-333.
- *Stoilescu, D. & McDougall, D. (2010). Starting to Publish Academic Research as a Doctoral Student. *International Journal of Doctoral Studies*, 5, 79-92.
- *Lee, J. & McDougall, D.E. (2010). Secondary school teachers' conceptions and their teaching practices using graphing calculators. *International Journal of Mathematical Education in Science & Technology*, 41(7), 857-872.
- *Fantilli, R. & McDougall, D.E. (2009). A study of novice teachers: Challenges and supports in the first years. *Teaching and Teacher Education*, 25(6), 825-841.
- Jang, E.E., McDougall, D.E., Herbert, M., Pollon, D., & Russell, P. (2008). Integrative mixed method data analytic strategies in research on school success in challenging circumstances. *Journal of Mixed Methods Research*, 2(3), 221-247.
- *Zhao, N. & McDougall, D.E. (2007). Cultural influence on Chinese students' asynchronous online learning in a Canadian university. *Journal of Distance Education*, 22(2), 59-80.
- Ross, J.A., McDougall, D., Hogaboam-Gray, A. & *LeSage, A. (2003). A survey measuring elementary teachers' implementation of strands-based mathematics teaching. *Journal for Research in Mathematics Education*, 34(4), 344-363.
- McDougall, D.E. (2002). Teacher Training in New Technologies: The case in Greece and Canada. *Diavazo*, 123-128. Translated into Greek.
- Ross, J.A., McDougall, D., & Hogaboam-Gray, A. (2002). Research on reform in mathematics education, 1993-2000. Research on reform in Mathematics Education, 1993-2000. *Alberta Journal of Educational Research*, Vol. XLVIII (2), 122-138.
- Ross, J.A., Hogaboam-Gray, A., McDougall, D., & Bruce, C. (2002). The contribution of technology to the implementation of mathematics education reform: Case studies of grade 1-3 teachers. *Journal of Educational Computing Research*, 26(1), 87-104.
- McDougall, D.E. (2001, May). Distance Education: Examples from Canada, Greece and Cuba. Special research issue. *Contact*, 27(2), 102-108.
- *Kitchen, D. & McDougall, D.E. (1999). Collaborative Learning on the Internet. *Journal of Educational Technology Systems*, 22(3), 245-250.

Book Reviews

- *Stoilescu, D. & McDougall, D. (2009). Book review: Reviewing the Handbook of Technological Pedagogical Content Knowledge (TPCK) for Educators. *Canadian Journal of Learning and Technology*, 35(2). <http://www.cjlt.ca/index.php/cjlt/article/view/526/259>

Papers in Refereed Conference Proceedings

- *Zhu S., McDougall, D., & *Chen, Y. (2016). *Reciprocal learning between Canadian and Chinese Elementary Mathematics Teachers*. Poster presented at 13th International Congress on Mathematical Education. Hamburg, Germany.
- *Zhu S. & McDougall, D. (2016). *Finding the Intersect: Stories of two Changchun-Toronto Reciprocal Learning teacher pairs*. Paper presented at the third annual Envisioning Reciprocal Learning Conference. Chongqing, China.
- *Zhu S. & McDougall, D. (2016). *Advantages and disadvantages of online communication tools in facilitating reciprocal learning between Canadian and Chinese elementary mathematics teachers*. Paper presented at Hawaii International Conference on Education. Honolulu, Hawaii.
- *Kam, M., & McDougall, D. (2015). Mathematics Resources in Grade 8 Classrooms. *Proceedings of the 13th Annual Hawaii International Conference in Education*, Honolulu, Hawaii, USA.
- *Kam, M., & McDougall, D. (2015). Wikispace in a Collaborative Inquiry Project. *Proceedings of the 13th Annual Hawaii International Conference in Education*, Honolulu, Hawaii, USA.
- *Wang, Z. & McDougall, D.E. (2014, May). *Mathematics Curriculum Differences between China and Canada*. Paper presented at the 2014 Beijing Conference “Transforming Canada-China Educational Cooperation: Significant Legacies and Future Challenges”. Beijing: Tsinghua University, China.
- *Kam, M., & McDougall, D. (2014). Improving Teaching and Learning in Grade 8 Mathematics: A Case Study. *Proceedings of the 12th Annual Hawaii International Conference in Education*, Honolulu, Hawaii, USA.
- *Kam, M., McDougall, D.E., *Yan, X.H., *Kwan, K. & *Wang, Z. (2014). Benefits of Using Rich Student Tasks: Grade 8 Teachers' Perspectives. *Proceedings of the Hawaii International Conference on Education*, Honolulu, Hawaii.
- *Wang, Z. & McDougall, D.E. (2014). Improving mathematics teachers' technology, mathematics knowledge, and pedagogical content knowledge for practical teaching. *Proceedings of the Hawaii International Conference on Education*, Honolulu, Hawaii.
- McDougall, D.E. & *Wang, Z. (2013). An investigation into elementary mathematics teachers' knowledge building through collaborative inquiry. In M. Martinez & S. A. Castro (Eds.), *Proceedings of the Thirty-fifth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, Chicago, IL: University of Illinois at Chicago, USA.
- McDougall, D. & *Wang, Z. (2013). An investigation into elementary mathematics teachers' knowledge building through collaborative inquiry. In M. Martinez & S. A. Castro (Eds.), *Proceedings of the Thirty-fifth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, Chicago, IL: University of Illinois at Chicago, USA.
- McDougall, D.E., *Jao, L., *Kwan, K. & *Yan, X.H. (2012). Peer coaching: Improving mathematics teaching in elementary school mathematics. *Proceedings of the Thirty-fourth Annual Meeting, North American Chapter of the Psychology of Mathematics Education*, Kalamazoo, MI.

- *Jao, L. & McDougall, D.E. (2011). Teacher collaboration for the improvement of Grade 9 Applied Mathematics Programs. Proceedings of the Thirty-third Annual Meeting, North American Chapter of the Psychology of Mathematics Education. Reno, NV: University of Nevada.
- *Stoilescu, D. & McDougall, D.E. (2011). Technology, Pedagogy and Content Knowledge (TPACK) for Mathematics Teachers. Proceedings of the Thirty-third Annual Meeting, North American Chapter of the Psychology of Mathematics Education. Reno, NV: University of Nevada.
- *Stoilescu, D., *Egodawatte, G. & McDougall, D.E. (2011). Challenges in Teaching in Applied Mathematics Classes in Urban Schools. Proceedings of the Thirty-third Annual Meeting, North American Chapter of the Psychology of Mathematics Education. Reno, NV: University of Nevada.
- *Jao, L. & McDougall, D.E. (2011). Peer coaching as a model for professional development in the elementary mathematics context: Challenges, Needs and Rewards. Proceedings of the 3rd Paris International Conference on Education on Education, Economy and Society. 339-345. Paris, France.
- *Radakovic, N., *Karadag, Z., McDougall, D., & *Stoilescu, D. (2010). Using technology for teaching and learning probability. In Brosnan, P., Erchick, D. B., & Flevares, L. (Eds.). Proceedings of the 32nd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Columbus, OH: Ohio State University.
- McDougall, D. & *Karadag, Z. (2009). Using technology to support cognitive activities and to extend cognitive abilities: A study of online mathematics learning. *Proceedings of the Thirty-first Annual Meeting, North American Chapter of the Psychology of Mathematics Education, Vol 5*, 1521-1528. Atlanta, GA: Georgia State University.
- *Karadag, Z. & McDougall, D. (2009). Visual explorative approaches to learning mathematics. In S.L. Swars, D. W. Stinson, & S. Lemons-Smith (Eds.), *Proceedings of the 31st annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Vol 5*, 1630-1636. Atlanta, GA: Georgia State University.
- *Karadag, Z. & McDougall, D. (2009). Process-Oriented Assessment in Mathematics Education. In T. Bastiaens et al. (Eds.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education*, 426-429. Chesapeake, VA: AACE.
- *Karadag, Z. & McDougall, D. (2009). Frame Analysis Method: Monitoring Metacognitive Activities. In T. Bastiaens et al. (Eds.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education*, 934-939. Chesapeake, VA: AACE.
- *Karadag, Z. & McDougall, D. (2008). Studying mathematical thinking in an online environment: students' voice. In Figueras, O. & Sepúlveda, A. (Eds.). *Proceedings of the Joint Meeting of the 32nd Conference of the International Group for the Psychology of Mathematics Education*, and the XX North American Chapter Vol. 1, 350. Morelia, Michoacán, Mexico: PME.
- *Karadag, Z. & McDougall, D. (2008). Features of online environment for e-contests in mathematics. *Proceedings of the 11th International Congress on Mathematical Education*. Monterrey, Nuevo Leon, Mexico.
- McDougall, D. & *Karadag, Z. (2008). Tracking students' mathematical thinking online: Frame analysis method. *Proceedings of the 11th International Congress on Mathematical Education*. Monterrey, Nuevo Leon, Mexico.

- *Karadag, Z. & McDougall, D. (2008). E-contests in Mathematics: Technological Challenges versus Technological Innovations. *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications*, 6331-6336. Vienna, Austria.
- McDougall, D.E. & *Fantilli, R.D. (2008). Ten Dimensions for Improving Mathematics Teaching in Elementary Schools: A Canadian Perspective. *Proceedings of the Hawaii International Conference on Education*, Honolulu, Hawaii, 2243-2248.
- *Fantilli, R.D. & McDougall, D.E (2008). An in-progress study of novice teachers: challenges and supports in the first years. *Proceedings of the Hawaii International Conference on Education*, Honolulu, HI, 3387-3418.
- McDougall, D.E. (2007). Framework for implementation of elementary school mathematics. *Proceedings of the Thirty-First Annual Meeting of the Psychology of Mathematics Education*, Seoul, Korea.
- McDougall, D.E. (2007). Stages of developmental of key concepts and skills in elementary mathematics. *Proceedings of the Thirty-first Annual Meeting of the Psychology of Mathematics Education*, Seoul, Korea.
- Jang, E.E., McDougall, D., Herbert, M., Pollon, D., & Russell, P. (2007). Mixed-method research in the study of schools facing challenging circumstances. *Proceedings of the Hawaii International Conference in Education*, Honolulu, Hawaii, 2389-2397.
- McDougall, D.E. & *Fantilli, R.D. (2007). Transition from Pre-service to new teachers: Staying in the profession. *Proceedings of the Hawaii International Conference on Education*, Honolulu, HI, 3765-3782.
- *Fantilli, R.D. & McDougall, D.E (2007). Making the transition to new teacher: The case for mentoring systems. *Proceedings of the Hawaii International Conference on Education*, Honolulu, HI, 1506-1536.
- Pollon, D., Jang, E.E., McDougall, D., Herbert, M., & Russell, P. (2007). Characteristics of non-academic programs that foster social-emotional and behavioural development for students in schools facing challenging circumstances. *Canadian Psychological Association conference*, Ottawa, Canada.
- McDougall, D.E., Jang, E.E. & *Fantilli, R.D. (2007). Improving student achievement in Literacy and Numeracy in Schools facing Challenging Circumstances. *American Educational Research Association*, Chicago, Il.
- McDougall, D.E. (2006). Developmental understanding key concepts and skills in elementary mathematics. *Proceedings of the Hawaii International Conference on Education*, Honolulu, HI, 4405-4406.
- McDougall, D.E. (2006). A workshop on the framework for implementation of elementary school mathematics. *Proceedings of the Hawaii International Conference on Education*, Honolulu, HI, 4402-4404.
- McDougall, D.E. & Ross, J.A. (2006). A mathematics improvement model for elementary schools. *American Educational Research Association*, San Francisco, CA.

- McDougall, D.E. (2006). Developmental understanding of mathematics with elementary school students. *Proceedings of the Twenty-eighth Annual Meeting, North American Chapter of the Psychology of Mathematics Education*, Merida, Mexico. Volume 2, 210-211.
- *Zhao, N. & McDougall, D.E. (2005). Cultural factors affecting Chinese students' participation in asynchronous online learning. *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education*, 2723 – 2728. Norfolk, VA: AACE.
- McDougall, D.E. (2004). Ten dimensions of mathematics education - A framework for improving mathematics. *Proceedings of the Canadian Mathematics Education Study Group Annual Conference*, Quebec City, Quebec.
- Ross, J.A., McDougall, D.E., Bruce, C, Ben Jaafar, S. & *Lee, J. (2004). A Multi-dimensions Approach to Mathematics In-service. *Proceedings of the Annual Meeting, North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA), Vol. 3, 1101-1110.*
- McDougall, D.E. (2001). Examination of a mathematics teacher's exploration in a technology-supported classroom. *Proceedings of the Twenty-third Annual Meeting, North American Chapter of the Psychology of Mathematics Education*, Snowbird, UT.
- McDougall, D.E., Ross, J.A. & *Le Sage, A. (2001). Development of a rubric to measure mathematics teacher reform. *Proceedings of the Twenty-third Annual Meeting, North American Chapter of the Psychology of Mathematics Education*, Snowbird, UT.
- McDougall, D.E. & Chapman, O. (2001). Report of the Working Group on Inservice Mathematics Teacher Education. *Proceedings of the Canadian Mathematics Education Study Group Annual Conference*, Edmonton, Alberta.
- McDougall, D.E. & Roulet, G. (2000). Technology in Mathematics Teacher Education Addressing Subject Image and Technical Competence. *Proceedings of the Conference on Technology in Mathematics Education at the Secondary and Tertiary Levels*. St. Catharines, Ontario.
- McDougall, D. E. (1999). Geometry and Technology Working Group. *Proceedings of the Twenty First Annual Meeting, North American Chapter of the Psychology of Mathematics Education*, Cuernavaca, Mexico.
- McDougall, D. E. & Kajander, A. (1999). Impact Math: Case studies on a Grade 7 and 8 implementation project. *Proceedings of the Twenty First Annual Meeting, North American Chapter of the Psychology of Mathematics Education*, Cuernavaca, Mexico.
- McDougall, D.E. (1998). Impact Math: A Mathematics Reform Project for Ontario Grade 7 and 8 Teachers. *Proceedings of the Canadian Mathematics Education Study Group Annual Conference*, Vancouver, BC.
- McDougall, D.E. (1997). Mathematics Education for the 21st Century: A Fields-Nortel Plan for the Future. *Proceedings of the Third International Conference on Technology in Mathematics Teaching, ICTMT - 3*, Koblenz, Germany.
- McDougall, D.E. (1997). Mathematics teachers' Needs in dynamic geometric computer environments: In search of control. *Proceedings of the Canadian Mathematics Education Study Group Annual Conference*, Thunder Bay, Ontario.

McDougall, D. E. (1996). *Teacher's Learning Needs in a Computer-based Geometric Environment.* *Proceedings of Topic Group 19 (Computer-based interactive learning), 8th International Congress on Mathematical Education*, Seville, Spain.

Technical Reports

- McDougall, D.E., Ferguson, S., *Sahmbi, G. & *Ferreyro-Mazieres, S. (2018). *Collaborative Teacher Inquiry Project: Grade 7, 8 & 9 Mathematics*. (8 pp.). Report for Toronto District School Board. Toronto, Canada: Ontario Institute for Studies in Education.
- McDougall, D.E., Ferguson, S., & *Sahmbi, G. (2017). *Collaborative Teacher Inquiry Project: Grade 7 & 8 Mathematics*. (24 pp.). Report for Toronto District School Board. Toronto, Canada: Ontario Institute for Studies in Education.
- McDougall, D.E., Ferguson, S., *Kam, M., & *Sahmbi, G. (2016). *Collaborative Teacher Inquiry Project: Grade 7 & 8 Mathematics*. (33 pp.). Report for Toronto District School Board. Toronto, Canada: Ontario Institute for Studies in Education.
- McDougall, D., *Bennett, S., Ferguson, S., *Ferreyro Mazieres, S., *Kam, M., & *Kritikos, S. (2015). *Mathematics Improvement Project: Grades 3 to 6*. (62 pp.). Report for Toronto District School Board. Toronto, Canada: Ontario Institute for Studies in Education.
- McDougall, D.E., Ferguson, S., *Kam, M., Ly, R., & *Yan, X.H. (2014). *Collaborative Teacher Inquiry Project: Grade 8 Mathematics*. (31 pp.). Report for Toronto District School Board. Toronto, Canada: Ontario Institute for Studies in Education.
- McDougall, D.E., *Yan, X.H., *Kam, M., *Wang, Z.Y., *Kwan, K & Ferguson, S. (2013). *Collaborative Teacher Inquiry Project: Grade 8 Mathematics*. (109 pp.). Report for Toronto District School Board. Toronto, Canada: Ontario Institute for Studies in Education.
- McDougall, D.E., *Jao, L., *Kwan, K., & *Yan, X.H. (2011). *School and District Improvement in Elementary Mathematics*. (160 pp.). Final report on SSHRC grant.
- McDougall, D.E., *Jao, L., *Maguire, K., *Stoilescu, D. & *Egodawatte, G. (2010). *Collaborative Teacher Inquiry Project: Grade 9 Applied Mathematics*. (110 pp.). Report for Toronto District School Board and Toronto Catholic District School Board. Toronto, Canada: Ontario Institute for Studies in Education.
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F. ABSTRACTS AND/OR PAPERS READ/CONFERENCE PRESENTATIONS

Summary Count

Refereed Conference Presentations	109
Invited Professional Conference Presentations	13
Professional Conference Presentations	19
Workshop Presentations	33
Public Education	6
Invited academic lectures	18
Newsletters	2

REFEREED CONFERENCE PRESENTATIONS

Huang, J. & McDougall, D. (2020). *An investigation of Ontario ESL teachers' strategies, perceptions and assessment for teaching Chinese international students in Ontario public schools*. Paper presented at the Canadian Society for the Study of Education, London, Canada.

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- McDougall, D.E. (2001). Examination of a mathematics teacher's exploration in a technology-supported classroom. *Proceedings of the Twenty-third Annual Meeting, North American Chapter of the Psychology of Mathematics Education*, Snowbird, UT.
- McDougall, D.E., Ross, J.A. & *Le Sage, A. (2001). Development of a rubric to measure mathematics teacher reform. *Proceedings of the Twenty-third Annual Meeting, North American Chapter of the Psychology of Mathematics Education*, Snowbird, UT.
- McDougall, D.E. & Chapman, O. (2001). Report of the Working Group on Inservice Mathematics Teacher Education. *Proceedings of the Canadian Mathematics Education Study Group Annual Conference, Edmonton, Alberta*.
- McDougall, D.E. (2000). *Technology Research Symposia: Distance education – examples from Canada, Cuba, and Greece*. Paper presented at the Teaching English as a Second Language Conference, Toronto, Ontario.
- McDougall, D.E. (1999). *Impact Math: Case Studies on a Grade 7 and 8 Implementation Project*. Poster presented at the Twenty-First Annual Meeting of the North American Chapter for the Psychology of Mathematics Education, Cuernavaca, Mexico.
- McDougall, D.E. (1999). *Mathematics teachers' experiences in computer-based geometric environments*. Paper presented at the 19th Annual Microcomputers in Education Conference, Tempe, AZ.
- McDougall, D.E. (1998). *Impact Math: A mathematics reform project for Ontario Grade 7 and 8 teachers*. Paper presented at the Canadian Mathematics Education Study Group, Vancouver, British Columbia.
- McDougall, D.E. (1998). *Mathematics teachers' experiences in computer-based geometric environments*. Paper presented at the America Educational Research Association (AERA) Conference, San Diego, CA.
- McDougall, D.E. (1997). *Mathematics Education for the 21st Century: A Fields Institute-Nortel Plan for the Future*. Paper presented at the Third International Conference on Technology in Mathematics Teaching, ICTMT – 3, Koblenz, Germany.
- McDougall, D.E. (1997). *Mathematics teachers' Needs in dynamic geometric computer environments: In search of control*. Paper presented at the Canadian Mathematics Education Study Group, Thunder Bay, Ontario.
- McDougall, D.E. (1996). *Teacher's Learning Needs in a Computer-based Geometric Environment*. Paper presented at the 8th International Congress on Mathematical Education (ICME), Sevilla, Spain.

INVITED PROFESSIONAL CONFERENCE PRESENTATIONS

- McDougall, D. E. (2010). *Math Instruction*. Student Success Conference 2010, Toronto Catholic District School Board, Toronto, Ontario
- McDougall, D.E. (2009). *Constructing Knowledge Through Communication in Mathematical Tasks*. Paper presented to Independent Schools of Ontario Mathematics Association, Upper Canada College, Toronto, Ontario.
- McDougall, D. E. (2009). *Improving mathematics education using a Ten Dimensions*. Paper presented at the Student Success Conference 2009, Toronto Catholic District School Board, Toronto, Ontario
- McDougall, D.E. (2008). *Using ten dimensions framework to improve mathematics education*. Paper presented to Independent Schools of Ontario Mathematics Association, Branksome Hall, Toronto, Ontario.
- McDougall, D.E. (2007). *Teacher understanding of mathematics development for ages 6 to 14 year olds*. Paper presented at Conference on Student Errors, Athens, Greece.
- Newton, M., McDougall, D.E., Jang, E.E., Vig, A., & Sanders, N. (2007). *Leadership practices that make a difference*. Paper presented at the Ontario Principals Council conference, Toronto.
- McDougall, D.E. (2006). *Framework for implementation of elementary school mathematics*. Paper presented at the Vancouver Catholics' Education Conference, Vancouver, British Columbia.
- McDougall, D.E. et al. (2006). *Leadership practices that make a difference: Improving student achievement in schools facing challenging circumstances*. Presentation at the Quest Conference, Thornhill, Ontario.
- McDougall, D.E. (2004). *A Continuum of Mathematics Understanding*. Paper presented at the OAME Leadership conference, Mississauga, Ontario.
- McDougall, D.E. (2003). *Principal Leadership in Mathematics Education*. Paper presented at the British Columbia Association of Mathematics Educators, Whistler, BC.
- McDougall, D. E. (2002). *EQAO Mathematics – Understanding the Process and Results*. Paper presented at the KPR Annual School Council Conference, Port Hope, Ontario.
- McDougall, D.E. (2001). *Educational techniques for designing e-courses*. Paper presented at the Institute for International Research, Toronto.
- McDougall, D.E. (2001). *Successfully incorporating educational techniques in designing e-courses for maximum success*. Paper presented at The Latest Issues and Tool in Implementing e-Learning: Capitalizing on Opportunities in Education & Training conference, Toronto, Ontario.

PROFESSIONAL CONFERENCE PRESENTATIONS

- Small, M.A. & McDougall, D.E. (2007). *Using empirically validated developmental continue as an effective professional development tool*. Paper presented at the National Council of Teachers of Education conference, Atlanta, Georgia.

- Gallagher, K., McCready, L., Gaztambide-Fernandez, R., McDougall, D.E., Kuglar, J. et al. (2007). *Inner city innovation: Creating conditions for innovation*. Paper presented at the National Inner City Conference, Toronto.
- McDougall, D.E. (2006). *Ten Dimensions of Mathematics Education*. Paper presented at the Ontario Association of Mathematics Educators (OAME) Conference, London, Ontario.
- McDougall, D.E. (2006). *Implementing the Ten Dimensions of Mathematics Education in Elementary Schools*. Paper presented at the Ontario Association of Mathematics Educators (OAME) Conference, London, Ontario.
- McDougall, D.E. (2005). *Ten Dimensions of Mathematics Education (Keynote)*. Paper presented at the Ontario Association of Mathematics Educators (OAME) Conference, Toronto, Ontario.
- McDougall, D.E. (2005). *Improving mathematics education through the Ten Dimensions*. Paper presented at the Annual Meeting of the National Council for Teachers of Mathematics (NCTM), Orlando, Anaheim, California.
- McDougall, D. E. (2005). *Implementing Mathematics: Change in Your School from Vision to Practice*. Paper presented at the Annual Meeting of the National Council for Teachers of Mathematics (NCTM), Orlando, Anaheim, California.
- McDougall, D.E. (2003). *Implementation of technology: Experiences from Ontario, Greece and Cuba*. Paper presented at the ECOO Conference, Toronto, Ontario.
- McDougall, D. E. (2002). *Teaching mathematics in the Middle School*. Paper presented at the Y4MA Conference, Thornhill, Ontario.
- McDougall, D.E. (2002). *Teacher change: Mathematics reform and renewal*. Paper presented at the Toronto Educators' Association for Mathematics (TEAMS) Conference, Toronto, Ontario.
- McDougall, D.E. (2001). *Teacher change through the use of technology*. Paper presented at the Educational Computing Organization of Ontario (ECOO) Conference, Toronto, Ontario.
- McDougall, D.E. (2001). *Using technology to support the Grade 7 & 8 Mathematics curriculum*. Paper presented at the Educational Computing Organization of Ontario (ECOO) Conference, Toronto, Ontario.
- McDougall, D.E. (2001). *Impact Math - Grade 7 & 8 Mathematics curriculum*. Paper presented at the Ontario Association of Mathematics Educators (OAME) Conference, Scarborough, Ontario.
- Kelly, B.G. & McDougall, D.E. (2001). *Exciting authentic learning activities for your Mathematics classroom*. Paper presented at the Annual Meeting of the National Council for Teachers of Mathematics (NCTM), Orlando, Florida.
- McDougall, D.E. (1999). *Impact Math: Making a difference*. Paper presented at Ontario Association of Mathematics Educators (OAME) conference, Richmond Hill, Ontario.
- McDougall, D.E. (1998). *Mathematics education for the 21st century*. Paper presented at the Ontario Association of Mathematics Educators (OAME) Conference, North Bay, Ontario.

McDougall, D.S. (1997). *Geometer's Sketchpad: Understanding the teacher's role*. Paper presented at the Ontario Association of Mathematics Educators (OAME) Conference, Toronto, Ontario.

McDougall, D.E. (1996). *Teacher's Learning Needs using Geometer's Sketchpad*. Educational Computing Organization of Ontario (OAME) Annual Conference, Toronto.

McDougall, D.E. (1995). *Setting Up an Internet Node in a School*. Educational Computing Organization of Ontario (OAME) Annual Conference, Toronto.

WORKSHOP PRESENTATIONS

McDougall, D.E. (2014). How to prepare a research question. (CTLSA workshop series). OISE, Toronto, Ontario

McDougall, D.E. (2013). How to prepare for academic conferences. (CTLSA workshop series). OISE, Toronto, Ontario

*Bengo, P. & McDougall, D.E. (2013). Teacher emotions and the implementation of mathematics education reform initiatives. Fields Institute, University of Toronto.

McDougall D.E. (2013). Improving Grade 9 Applied level mathematics. Algonquin and Lakeshore Catholic District School Board, Napanee, Ontario.

McDougall, D.E. (2012). Improving elementary mathematics through collaborative inquiry. Grade 8 Collaborative Inquiry Project, Toronto, Ontario.

McDougall, D.E. (2011). Introduction to Ten Dimensions. Learning Consortium, Toronto, Ontario.

McDougall, D.E. (2010). Assessment. Learning Consortium, Toronto, Ontario.

McDougall, D.E. (2010). Improving student achievement in schools facing challenging circumstances. (Research in Schools Workshop - Doc Talk Series). OISE, Toronto, Ontario.

McDougall, D. E. (2009). Mathematical knowledge. Bruce Public School, Toronto, Ontario.

McDougall, D. E. (2008). Assessment in elementary mathematics. Bruce Public School, Toronto, Ontario.

McDougall, D. E. (2008). Problem solving in elementary mathematics. Bruce Public School, Toronto, Ontario.

McDougall, D.E. (2007). The Ten Dimensions for mathematics improvement. Branksome Hall, Toronto, Ontario.

McDougall, D.E. (2007). School improvement in mathematics education. Lady Evelyn School, Ottawa-Carleton District School Board, Ottawa, Ontario.

McDougall, D.E. (2006). Ten Dimensions of Mathematics Education, Fields Mathematics Education Forum, Toronto, Ontario.

- McDougall, D.E. (2006). Mathematics in Canada. Institute for Chinese Secondary School Educators, OISE/UT, Toronto, Ontario.
- McDougall, D.E. (2006). Building a mathematics vision in elementary schools, Calgary Board of Education, Calgary, Alberta.
- McDougall, D. (2005). Mathphobia. Go ENG Girl! Event, Toronto, Ontario.
- McDougall, D.E. (2005). Implementation of Ten Dimensions using Manipulatives. TDSB Retreat of NE2 Principals, Toronto, Ontario.
- McDougall, D.E. (2005). Implementation of Ten Dimensions at the school level. TDSB Retreat of NW3 Principals, Niagara Falls.
- McDougall, D.E. (2005). Implementing Mathematics education in elementary school. York University AQ course, Brookmeade Public School, Mississauga.
- McDougall, D.E. (2004). Concepts in Elementary School Mathematics. Pierre Laporte Middle School.
- McDougall, D.E. (2004). Concepts in Mathematics. Whitney Public School
- McDougall, D.E. (2002). Elementary Preservice Mathematics Conference, OISE, Toronto, Ontario.
- McDougall, D. E. (2002). EQAO Mathematics – Understanding the Process and Results. KPR Annual School Council Conference, Port Hope, Ontario.
- McDougall, D.E. (2001). Taking stock of your future (Senior). Toronto Stock Exchange (one week Institute).
- McDougall, D.E. (2001). Taking stock of your future (Intermediate). Toronto Stock Exchange (one week Institute).
- McDougall, D.E. (2000). Taking stock of your future (Senior). Toronto Stock Exchange (one week Institute).
- McDougall, D.E. (2000). Forum for Teaching & Learning Plan. Holy Trinity School.
- McDougall, D.E. (1999). Using Geometer's Sketchpad in Mathematics. Branksome Hall, Toronto, Ontario.
- McDougall, D.E. (1999). Impact Math: An implementation program for Grades 7 and 8 Mathematics project. Leadership Symposium on Mathematics and Science, Ministry of Education and Training.
- McDougall, D.E. (1998). New approaches for grade 7/8 math teachers. Quality learning for Educators: Summer Institutes. OISE/UT
- McDougall, D.E. (1998). Geometer's Sketchpad. Albert College, Belleville.
- McDougall, D.E. (1997). Geometer's Sketchpad. Independent Schools of Ontario Mathematics Association (ISOMA). Oakville, Ontario.
- McDougall, D.E. (1997). Impact Math Initiative. Ontario Mathematics Co-ordinators' Association, Hamilton, Ontario.

McDougall, D.E. (1997). Geometer's Sketchpad. Independent Schools of Ontario Mathematics Association (ISOMA). Oakville, Ontario.

PUBLIC EDUCATION

- McDougall, D.E. (2012, June). Interview with John Hattie. Presented on OISE website, Toronto, Ontario.
- McDougall, D.E. (2011, September). Back to school Math. Presented on CBC radio, Toronto, Ontario.
- McDougall, D.E. (2011, September). Start to school special. Presented on CP 24, Toronto, Ontario.
- McDougall, D.E. (2007, October). The new math. Presented on TVOntario (Your Voice webcast), Toronto, Ontario.
- McDougall, D.E. (2006, February). Mathematics in Canada. Presented on OMNI News – Mandarin Edition, Toronto, Ontario.
- McDougall, D.E. (2005, June). How do elementary students best learn mathematics? OISE/UT Ask the Expert, Toronto, Ontario.

INVITED ACADEMIC LECTURES

- Northeast Normal University, Changchun, China. (2020). Strategies for Building Successful Reciprocal Learning Relationships.
- Northeast Normal University, Changchun, China. (2020). Influence of Culture on Mathematics Teaching in Canada and China.
- Northeast Normal University, Changchun, China. (2020). Ten Dimensions of Mathematics Education.
- Northeast Normal University, Changchun, China. (2020). Teacher Development in Mathematics in Canada.
- Northeast Normal University, Changchun, China. (2015). School improvement in mathematics education in Canada.
- Northeast Normal University, Changchun, China. (2015). Science, Technology, Engineering and Mathematics Education (with Sijia Cynthia Zhu)
- Northeast Normal University, Changchun, China. (2015). How to write a doctoral dissertation.
- Beijing Normal University, Beijing, China. (2014). Teacher Education in Canada.
- Tianjin Normal University, Tianjin, China. (2014). Mathematics Curriculum in Canada and China.
- Shanghai Normal University, Shanghai, China. (2010). Mathematics education in Canada.
- Northeast Normal University, Changchun, China. (2008). School improvement in mathematics education in Canada.

Beijing Normal University, Beijing. (2008). Implementation of mathematics education in Canadian and Rural schools. Opening of UNESCO Centre on Rural Education.

East China Normal University, Shanghai. (2008). Ten dimensions framework in mathematics education.

Beijing Normal University, Beijing. (2008). Implementation of mathematics education in rural schools.

University of Ottawa. (2008). School improvement in mathematics through leadership.

University of Ottawa. (2007). Leadership and school improvement in mathematics.

Wilfrid Laurier University, Brantford. (2005). (2 sessions). A framework for teaching mathematics in elementary schools.

University of Hawaii at Manoa, Honolulu, Hawaii. (2004). Mathematics research in teacher education through ten dimensions of mathematics

University of Athens, Greece. (2001). Implementation of Technology in Secondary Schools.

University of Athens, Greece. (2000). Implementation of Technology in Secondary Schools.

Institutio Superior “Enrique Jose Varona”, Havana, Cuba. (2000). Mathematics Education in Canada.

York University, Toronto. (1999). Impact Math Project.

NEWSLETTERS

McDougall, D.E. (2010, January). Director’s Message. Newsletter, Centre for Science, Mathematics and Technology Education.

McDougall, D.E. (2009, July). Director’s Message. Newsletter, Centre for Science, Mathematics and Technology Education.

G. SUMMARY OF SUCCESSFUL RESEARCH FUNDING

<u>Year</u>	<u>Source</u>	<u>Title</u>	<u>Amount</u>
External Funding – Granting Councils			
2021-2024	Social Sciences and Humanities Research Council (SSHRC) Principal Investigator: (Doug McDougall)	Creating equitable structures in early secondary school mathematics	\$82 855
2018-2021	Social Sciences and Humanities Research Council (SSHRC) Principal Investigator: (Limin Jao), Co-Investigator (Doug McDougall \$5 000 subgrant)	Designing more effective secondary school mathematics teacher education programs: The influence of content and sequencing for methods courses and practica on preservice teachers’ beliefs	\$72 451

2013-2021	Social Sciences and Humanities Research Council (SSHRC) Principal Investigator: (Shijing Xu, Michael Connelly), Co-investigator (Doug McDougall, \$130 000)	Reciprocal learning in teacher education and school education between Canada and China.	\$3.3 million
2006-2010	Social Sciences and Humanities Research Council (SSHRC) Principal Investigator: (Doug McDougall)	Improving mathematics in school and districts	\$72 865
External Funding – Other			
2017-2018	Toronto District School Board Principal Investigator: (Doug McDougall)	Collaborative Teacher Inquiry Assessment (Grades 7, 8 and 9) Mathematics	\$37 500
2016-2017	Toronto District School Board Principal Investigator: (Doug McDougall)	Collaborative Teacher Inquiry Transition (Grades 7, 8 and 9) Mathematics	\$37 500
2015-2016	Toronto District School Board Principal Investigator: (Doug McDougall)	Collaborative Teacher Inquiry Grade 7 and 8 Mathematics	\$37 500
2014-2015	Toronto District School Board Principal Investigator: (Doug McDougall)	STEM Collaborative Teacher Inquiry Grade 3-6 Mathematics	\$37 500
2013-2014	Toronto District School Board Principal Investigator: (Doug McDougall)	Collaborative Teacher Inquiry Project Grade 8 Mathematics – Phase 2	\$71 300
2012-2013	Toronto District School Board Principal Investigator: (Doug McDougall)	Collaborative Teacher Inquiry Project Grade 8 Mathematics – Phase 1	\$32 800
2009-2012	Learning Consortium Principal Investigator: (Doug McDougall)	Collaborative Teacher Inquiry Project Grade 9 Applied Mathematics	\$20 000
2008	Literacy and Numeracy Secretariat, Ontario Ministry of Education Principal Investigator: (John Ross) (Doug McDougall, Collaborator)	Evaluation of School Effectiveness Framework	\$20 000

2005-2006	Literacy and Numeracy Secretariat, Ontario Ministry of Education Principal Investigator: (Doug McDougall)	Improving student achievement in schools facing challenging circumstances	\$100 000
2002-2004	Nelson Thompson Publishing Principal Co-investigators (Doug McDougall, John Ross)	Mathematics Maps	\$150 000
2001	Learning Partnership Principal Co-Investigators: (Doug McDougall, John Ross)	Evaluation of Math-e-motion Summer Institute	\$15 000
2000-2001	Waterloo C. D. School Board Principal Co-Investigators: (John Ross, Doug McDougall)	Textbooks and Mathematics Teaching Project	\$16 500
1998-2000	Ministry of Education and Training Principal Investigator: (Doug McDougall)	Impact Math implementation strategy for the Ontario Mathematics Curriculum, Grade 7 & 8	\$150 990

Internal Research Funding

2020	SSHRC Small Scale Grant Principal Investigator: (Doug McDougall)	Destreamed Grade 9 Mathematics: Inclusive Teacher Perceptions and Practices	\$2500
2019	SSHRC Small Scale Grant Principal Investigator: (Doug McDougall)	Enhanced Grade 9 Mathematics: Inclusive teacher perceptions and practices	\$2250
2016	SSHRC Small Scale Grant Principal Investigator: (Doug McDougall)	Sustaining Mathematics Success through Grade 7 and 8 Collaborative Teacher Development	\$2500
2015	SSHRC Small Scale Grant Principal Investigator: (Doug McDougall)	Sustaining Mathematics Success through Collaborative Teacher Development	\$2775
2014	SSHRC Small Scale Grant Principal Investigator: (Doug McDougall)	Collaborative Inquiry in Mathematics: Grades 3 to 6	\$2750
2009	SSHRC Small Scale Grant Principal Investigator: (Doug McDougall)	School improvement in mathematics	\$1600

2006	SSHRC Small Scale Grant Principal Investigator: (Doug McDougall)	School improvement in mathematics	\$2000
2000-2001	Ministry of Education Transfer Grant Principal Co-Investigators: (John Ross, Doug McDougall)	Measuring the effects of elementary school reform in mathematics	\$27 000
1999-2001	Department of Curriculum, Teaching and Learning Principal Investigator: (Doug McDougall)	Impact Math: Evaluation of Implementation – Year 2	\$1 266
1999-2002	Centre for Science, Mathematics and Tech Education Principal Investigator: (Doug McDougall)	Children’s Understanding of Mathematical Concepts	\$20 000
1999-2000	Ministry of Education Transfer Grant Principal Co-Investigators: (John Ross, Doug McDougall)	Elementary school reform and higher order reasoning in mathematics	\$26 693
1997-1998	Connaught Fund Principal Investigator: (Doug McDougall)	Investigating Teacher Change through the use of dynamic geometric software	\$10 000

H. SCHOLARLY AND PROFESSIONAL ACHIEVEMENTS/ACTIVITIES: (Consulting, administration in professional societies, editing of journals, membership on grant selection committees, reviewing)

Consulting

- 2009 - 2012 Learning Consortium
Improvement of Grade 9 Applied Mathematics teaching and learning. Working with four school districts on school and district improvement in secondary school mathematics at the Grade 9 level.
- 2000 – 2007 Design and implementation of stages of Mathematics concept development with Thomson Nelson Publishing. Working with twelve school districts and four provinces on school and district improvement in elementary school mathematics.
- 2000 – 2001 Plymouth School District, Detroit, Michigan
Provided advice on school reform in secondary schools in Plymouth School District, particularly on technology

- 1995 – 2000 Canadian Educational Standards Institute (CESI), Toronto
Member of four evaluation teams assessing the standards of independent schools across Canada, each visit was four days in length and required team members to prepare a 50-page report on each school
- 1997 – 1999 Upper Canada College Prep School, Toronto
Provided advice to the Headmaster and Director of Studies, prepared a new timetable, coordinated technology change, provided advice on staffing, curriculum, and implementation of long-range plan

Membership in Professional Societies

Canadian Mathematics Education Study Group (CMESG)
Ontario Association for Mathematics Educators (OAME)
National Council for Teachers of Mathematics (NCTM)
American Educational Research Association (AERA)
Psychology of Mathematics Education – North American Chapter (PME-NA)
American Educational Research Association (AERA) - Computer Applications in Education
SIG
Educational Computing Organization of Ontario (ECOO)

Executive Positions

Member, Steering Committee, Geogebra Institute of Canada (2009 - present)
Chair, Geogebra Institute of Canada Annual Conference (November 2014)
Chair, Geogebra Institute of Canada Annual Conference (June 2011)
Steering Committee, International group for the Psychology of Mathematics Education – North American Chapter (PME-NA) (1998 – 2005)
Program Committee, International group for the Psychology of Mathematics Education - North American Chapter (PME-NA) (1998 – 2007)
Past Chair, International Group for the Psychology of Mathematics Education – North American Chapter (PME-NA), (2004-2005)
Chair, Annual Conference, International Group for the Psychology of Mathematics Education – North American Chapter (PME-NA), (2003-2004)
Chair, International Group for the Psychology of Mathematics Education – North American Chapter (PME-NA), (2003 – 2004)
Chair, AERA SIG-Computer Applications in Education (1999 - 2001)
Vice-Chair and Program Chair, AERA SIG-Computer Applications in Education (1998 – 1999)
Program Co-chair, Fields Institute - Nortel Mathematics Conference, Toronto (1997)
Past President, Independent Schools of Ontario Mathematics Association (ISOMA) (1995 – 1997)
President, Independent Schools of Ontario Mathematics Association (ISOMA) (1993 – 1995)
President, Educational Computing Organization of Ontario (ECOO) (1991 – 1992)
First Vice President, Educational Computing Organization of Ontario (ECOO) (1990 – 1991)
Chairperson, Annual Conference, Educational Computing Organization of Ontario (ECOO) (1990)
Chairman, Gauss (Grade 7&8), Canadian Mathematics Competition Committee, Waterloo Mathematics Foundation, University of Waterloo (1989 – 2000)

Editorial Positions

- Editor-in-Chief, Canadian Journal of Science, Mathematics and Technology Education (2019 – present)
- Member of the Editorial Board of the Journal of Mathematics Education, China (2011-present)
- Member of the Editorial Board of the Canadian Journal of Science, Mathematics and Technology Education (2000 – 2008)
- Editor, OISE Papers in Mathematics Education, Imperial Oil Centre for Studies in Science, Mathematics and Technology Education (2001 – 2003)
- Member of the NCTM Teacher Advisory panel on the Mathematics Teacher journal (2001 – 2003)
- Editor, Fields-Nortel Conference on Mathematics Education for the 21st Century Conference Proceedings (1997)

Reviewing (Academic)

- Review for manuscripts for *Teaching and Teacher Education* (2012 – present)
- Reviewer for proposals for the Psychology of Mathematics Education – North America Conference (1998 – present)
- Reviewer for manuscripts for *Journal of Educational Psychology* (2005, 2006(2), 2007 - present)
- Review for proposals for American Educational Research Association (AERA) (2002 – present)
- Reviewer for papers/abstracts for International Conference on Education, Training and Informatics (ICETI) Conference (2010)
- Reviewer for proposals for Future e-Learning Conference (2009)
- Reviewer for Literacy and Numeracy applications, OISE Dean's Office (2007)
- Reviewer for manuscript for *Canadian Journal of Science, Mathematics and Technology Education* (2000, 2003, 2004, 2006, 2009, 2013, 2018-present).
- Reviewer of manuscript for the *Journal of Educational Computing Research* (1999 – 2005)
- Reviewer for manuscript for *Journal of Mathematical Behaviour* (2005, 2006)
- Reviewer for SSHRC Grant proposal (2004)
- Reviewer for manuscript for *National Council of Teachers of Mathematics* (2004)
- Reviewer for manuscript for *Canadian Journal of Education* (2000 – 2004)
- Reviewer for book called *Computers as tutors: Solving the crisis in education* (Faben, Inc., 1999)
- Reviewer of manuscripts for the *Journal of Research in Mathematics Education* (1999 – 2004)

Reviewing (Professional)

- Reviewer for *Growing into Teaching* (2011)
- Reviewer for proposal for *Mathematics for Teachers: Understanding Models for Classroom Leading, Grades 4 to 9* (2010)
- Reviewer for book called *Making Mathematics Meaningful to Canadian Students: K-8* (2007)
- Reviewer for book called *Learning and Teaching Mathematics, K-8* (2007)
- Reviewer for a book called *Type II Uses of technology in Education: Internet Applications* (2005)
- Reviewer for a book called *Teachers engaged in research: Inquiry into mathematics practice Grades 6 – 8*, (2005)
- Reviewer for book called *Active learning in the digital age classroom* (Trifolium, 2001)
- Reviewer for book called *Making a difference for students: An idea book* (Learning Consortium, 1999)

Reviewer of book called *Teaching mathematics to low achievers* (Trifolium, 1998)

Personal Professional Development Activities

Courses taken in Spanish language, Mandarin language, web design, distance education concepts, and over 100 conferences as a presenter and participant in the past ten years (130 career)

2000 – 2009 Master of Teaching Program, co-Program Head and Instructor
Part of an integrated team of faculty members to teach a graduate program with teacher certification

1997 – 2000 Preservice Elementary North Option,
Part of an integrated team of faculty members, team-taught courses, portfolio assessments, supervised student candidates in schools. Co-ordinator 1999-2000

I. TEACHING

Graduate Courses:

2019	CTL 5040H: Fall: Mathematics Education: Theory and Practice
2014	CTL 1798H: Fall: Mathematics Education: Theory and Practice
2009	CTL 1202H Fall: Mathematics in Elementary Schools
2007	CTL 1202H Fall: Mathematics in Elementary Schools
2007	CTL 1202H Winter: Mathematics in Elementary Schools
2005	CTL 1202H Winter: Mathematics in Elementary Schools
2003	CTL 1202H Winter: Mathematics in Elementary Schools
2001	CTL 1202H Fall: Mathematics in Elementary Schools
2000	CTL 1202H Intersession: Mathematics in Elementary Schools
2000	CTL 1606H Winter: Computers in the Curriculum (online)
1999	CTL 1606H Summer: Computers in the Curriculum
1999	CTL 1606H Winter: Computers in the Curriculum (online)
1998	CTL 1606H Summer: Computers in the Curriculum
1997	EDT 1519H Fall: Educational Applications of Computer-Mediated Communication (online)
1997	EDT 1515H Summer: Computers in the Curriculum (online)

Master of Teaching Courses:

2009-2010	CTL 7002H: Curriculum and Teaching (Mathematics) – 2 sections
2008-2009	CTL 7002H: Curriculum and Teaching (Mathematics) – 2 sections
2008-2009	CTL 7010H: Issues in Numeracy and Literacy
2005-2006	CTL 7005Y: Internship in Schools
2004-2005	CTL 7005Y: Internship in Schools
2002-2003	CTL 7000Y: Curriculum and Teaching (Mathematics) – 2 sections
2001-2002	CTL 7000Y: Curriculum and Teaching (Mathematics)
2001-2002	CTL 7003H: Conceptual Basis for Methods of Teaching
2000-2001	CTL 7000Y: Curriculum and Teaching
2000-2001	CTL 7003H: Conceptual Basis for Methods of Teaching
2000-2001	CTL 1797H: Practicum in Curriculum: Master's Level

Pre-service Courses:

2000-2001	EDU 1221: Mathematics Intermediate
1997-2000	EDU 1420: Primary/Junior (Mathematics)
1997-2000	EDU 1450: Junior/Intermediate (Mathematics)

J. PRACTICUM AND GRADUATE SUPERVISION

Graduate Supervision Summary (career numbers – master/doctoral; completed/in progress):

Completed:

50	Doctoral thesis, supervisor
3	Doctoral thesis, co-supervisor
37	Doctoral thesis, member
29	Doctoral examination committee member
23	Masters thesis, M.A., supervisor
6	Masters thesis, M.A, member
38	Masters Research Papers, M.Ed., supervisor
55	Masters Research Papers, M.T., supervisor
5	External Examiner, Ph.D.

In Progress:

15	Doctoral students, Supervisor
3	Master theses, M.A., Supervisor

GRADUATE SUPERVISION COMPLETED (indicate student's name and project/thesis title):

Doctoral Supervisor

Pamela Brittain (Ph.D.). Addressing Math Content Knowledge and Math Anxiety in a Teacher Education Program. Department of Curriculum, Teaching and Learning, 2021.

Josephine Seddon (Ph.D.). Project-Based Learning: A Case Study of Early Data Analytics Learning in Undergraduate Mathematics. Department of Curriculum, Teaching and Learning, 2021.

Andrew Tkachenko. (Ph.D.). Investigating Secondary School Teachers' Understandings of and Approaches to STEM Integration. Department of Curriculum, Teaching and Learning, 2021.

Gurpreet Sahmbi. (Ph.D.). A Tale of Two Universities: Investigating Factors Affecting the Secondary to tertiary Transition into Calculus for Students in STEM Programs. Department of Curriculum, Teaching and Learning, 2020.

Meng Xiao. (Ed.D.). Student Engagement: Chinese International Student Experiences in Canadian Graduate Schools. Department of Social Justice Education, 2020.

Eiman Zeini. (Ph.D.). Examining the Effectiveness of Lesson Study on Teachers' Practice in Mathematics within a Secondary School Environment. Department of Curriculum, Teaching and Learning, 2019.

- Ildiko Murrayne Biro (Ph.D.). Teacher Collaboration for Mandated Accreditation: A Case Study of Evaluating the International Baccalaureate Diploma Program. Department of Curriculum, Teaching and Learning, 2019.
- Jemille Chu Morrison (Ph.D.). Empowering Children Through a Global Education Reading Program. Department of Curriculum, Teaching and Learning, 2019.
- Julie Middleton (Ph.D.). The Role of Instructional Coaching for Teacher Learning in Elementary Mathematics: A Multi-Case Study. Department of Curriculum, Teaching and Learning, 2018.
- Stephanie Sadownik (Ph.D.). Under Construction: Developing Mathematical Processes and Discourse Through Dialogue in Computer Supported Collaborative Learning Environments. Department of Curriculum, Teaching and Learning, 2018.
- Vanessa Farren (Ph.D.). Experiencing the Activity of Teaching “at-Risk” College Mathematics Students: Perspectives of Two College Teachers. Department of Curriculum, Teaching and Learning, 2018.
- Daniel Lumsden (Ph.D.). Flipping the secondary mathematics classroom: Teachers’ perceptions on the use of video instruction. Department of Curriculum, Teaching and Learning, 2018.
- Robert Walters (Ph.D.). Investigating the combined impact of cognitively guided instruction and backwards design mode in mathematics on teachers of Grade 3 students. Department of Curriculum, Teaching and Learning, 2018.
- Sijia (Cynthia) Zhu (Ph.D.). Reciprocal learning partnerships between elementary mathematics teachers: A partnership between Canada and China. Department of Curriculum, Teaching and Learning, 2018.
- Ying Chen (Ph.D.). Teacher experience and teacher identity: A case study of three math teachers learning to teach in a Canada-China Reciprocal Learning Project. Department of Curriculum, Teaching and Learning, 2018.
- Martha Younger (Ph.D.). Spatial skills activities in the middle school mathematics teachers’ toolkit: The impact of spatial skill activities on mathematical thinking. Department of Curriculum, Teaching and Learning, 2017.
- Asal Aslemand (Ph.D.). Undergraduate social sciences students’ attitudes towards statistics. Department of Curriculum, Teaching and Learning, 2017.
- Genie Kim (Ph.D.). Inquiry-based learning: A case study of an experienced elementary mathematics teacher in action. Department of Curriculum, Teaching and Learning, 2017.
- Mimi Kam (Ph.D.). Fostering students’ mathematics communication: A grade 3 teacher’s perception and practices. Department of Curriculum, Teaching and Learning, 2017.
- Xiao Heng (Kitty) Yan (Ph.D.). Key ideas in proof in undergraduate mathematics classrooms. Department of Curriculum, Teaching and Learning, 2017.
- Yuko Kawashima (Ph.D.). Performing the other and becoming different: Affects of youth and schooling in Japan. Department of Curriculum, Teaching and Learning, 2016.

- Zhaoyun (Helen) Wang (Ph.D.). Investigating mathematics teachers' knowledge for teaching and their learning trajectories. Department of Curriculum, Teaching and Learning, 2016.
- Kerry Kwan (Ph.D.). Reciprocal Partnership: An intervention to enhance mathematics self-efficacy and achievement of first and second semester college students. Department of Curriculum, Teaching and Learning, 2016.
- Cecilia Kutas Chisu (Ph.D.). The role of Oral communication in accessing and assessing mathematical understanding: Case studies of primary school teachers' perceptions of teaching mathematics and teaching literacy. Department of Curriculum, Teaching and Learning, 2016.
- Vince MacDonald (Ph.D.). Collaborative inquiry in secondary school mathematics communications in the use of feedback. Department of Curriculum, Teaching and Learning, 2015.
- Joanna Sheppard (Ph.D.). Personal and social responsibility through games play: Utilizing the teaching games for understanding teaching model. Department of Curriculum, Teaching and Learning, 2014.
- Alexander Antropov (Ph.D.). Secondary school mathematics teacher candidates' research pedagogical and content knowledge. Department of Curriculum, Teaching and Learning, 2014.
- Nenad Radakovic (Ph.D.). Fostering high school students' risk literacy through mathematics instruction. Department of Curriculum, Teaching and Learning, 2013.
- Corina Georgescu (Ph.D.). Teachers' use of technology in secondary school mathematics education. Department of Curriculum, Teaching and Learning, 2013.
- Limin Jao (Ph.D.). Keeping students in school: Engaging teaching practices in Grade 9 Applied Mathematics. Department of Curriculum, Teaching and Learning, 2013.
- Carrie Annable (Ph.D.). The effects of creating a math talk learning community. Department of Curriculum, Teaching and Learning, 2013.
- Priscilla Bengo (Ph.D.). Mathematics coaching to improve teaching practice: The experiences of mathematics teachers and coaches. Department of Curriculum, Teaching and Learning, 2012.
- Catharine Tozer (Ph.D.). Teacher and early childhood education team teaching in full-day, every-day kindergarten. Department of Curriculum, Teaching and Learning, 2012.
- Shannon Larsen (Ph.D.). Perceptions of elementary mathematics coaching. Department of Curriculum, Teaching and Learning, 2012.
- Pauline Fu (Ph.D.). Investigating a college computer course delivered in both online and face-to-face classes. Department of Curriculum, Teaching and Learning, 2012.
- Gunawardena Egodawatte (Ph.D.). Secondary School Students Misconceptions in Algebra. Department of Curriculum, Teaching and Learning, 2011.
- Dorian Stoilescu (Ph.D.). Technological Pedagogical Content Knowledge: Secondary School Mathematics Teachers' Use of Technology. Department of Curriculum, Teaching and Learning, 2010.

- Nick Scarfo (Ph.D.). *Touching the Future: Educators and the Law*. Department of Curriculum, Teaching and Learning, 2010.
- Jamie Pyper (Ph.D.). *Preservice mathematics teacher efficacy: Its nature and contributing factors of the preservice program*. Department of Curriculum, Teaching and Learning, 2009.
- Zekeriya Karadag (Ph.D.). *Mathematical thinking in technology supported environments*. Department of Curriculum, Teaching and Learning, 2009.
- Robert Fantilli (Ph.D.). *A Study of novice teachers in Ontario: Challenges and supports in the first years*. Department of Curriculum, Teaching and Learning, 2009.
- Shanti McLelland (Ph.D.). *Secondary school teachers' understanding about teaching and learning of wealth management*. Department of Curriculum, Teaching and Learning, 2008.
- Shelley Stephenson (Ph.D.). *Integration of Technology into a Landscape Architecture Graduate Program: A Case Study*. Department of Curriculum, Teaching and Learning, 2007.
- Peter McCarthy (Ph.D.). *The role of mental mathematics and estimation in elementary school*. Department of Curriculum, Teaching and Learning, 2007.
- Jane Lee (Ph.D.). *The role of technology in secondary school mathematics curriculum*. Department of Curriculum, Teaching and Learning, 2007.
- Alex Kuskis (Ph.D.). *Facilitator, instructional design and community in asynchronous online courses*. Department of Curriculum, Teaching and Learning, 2006.
- Anne LeSage (Ph.D.). *Constructing mathematics practices: Two stories of teacher change and curriculum reform*. Department of Curriculum, Teaching and Learning, 2005.
- Bob Mroz (Ed.D.). *How elementary school principals assist teachers in implementing computer technology in mathematics*. Department of Curriculum, Teaching and Learning, 2004.
- Rupertia Minott-Bent (Ph.D.). *Action research in computer education and the implications on pre-service teacher development*. Department of Curriculum, Teaching and Learning, 2003.
- Pier Junor (Ph.D.). *Preservice secondary school mathematics teachers exploring the integration of computer technology in their instructional practices: A Caribbean perspective*. Department of Curriculum, Teaching and Learning, 2003.

Doctoral Co-supervisor:

- Linda Alford (Ph.D.). *The effects of online and wireless environments on the human sensorium*. Department of Curriculum, Teaching and Learning, 2009.
- Jane Lewis (Ph.D.). *Perceived learning needs of post secondary faculty of institutions moving towards online course delivery*. Department of Curriculum, Teaching and Learning, 2001.
- Valerie Nielson (Ed.D.). *Integration of information technology into the elementary school curriculum: focus on computer contact teachers*. Department of Curriculum, Teaching and Learning, 2000.

M.A. Supervisor:

- Claudia Mandekic. (M.A.). BallMatics Program - Basketball Court as a Middle-School Math Classroom: A Mixed Methods Study. Department of Curriculum, Teaching and Learning, 2020.
- Chelsie Leger. (M.A.). Supporting English Language Learners in Secondary School Mathematics. Department of Curriculum, Teaching and Learning, 2020.
- Sarah Bennett (M.A.). Benefits and challenges of teacher professional learning in a mathematics intervention study in the early years (JK-Grade 2). Department of Curriculum, Teaching and Learning, 2016.
- Ferreyro-Mazieres, Sofia. (M.A.). Elementary school teachers' attitudes towards teaching mathematics and their professional learning goals. Department of Curriculum, Teaching and Learning, 2015.
- Kritikos, Soula (M.A.). Using technology to support individual student needs in Grade 3 to 6 mathematics. Department of Curriculum, Teaching and Learning, 2015.
- Sandra Zietara (M.A.). Secondary to post-secondary mathematics: Factors perceived by students as inhibitors and enablers to their success. Department of Curriculum, Teaching and Learning, 2015.
- Stephanie McKean (M.A.). The effects of Student-Centred Learning on students' self-efficacy in college level classrooms. Department of Curriculum, Teaching and Learning, 2014.
- Simone Laughton (M.A.). Accessibility of tests in online learning environments in higher education: Perspectives and practices of U.K. expert practitioners. Department of Curriculum, Teaching and Learning, 2013.
- Fatima Remtulla (M.A.). Constructing and Assessing Individualized Secondary Mathematics Knowledge: A Case Study of Three Teachers using Laptop Computers. Department of Curriculum, Teaching and Learning, 2012.
- Brenda McLoughlin (M.A.). Teachers writing about math: Exploring inquiry in an online community. Department of Curriculum, Teaching and Learning, 2012.
- Laura De Simone (M.A.). Effective leadership development programming for youth: The student perspective. Department of Curriculum, Teaching and Learning, 2012.
- Laura Christian (M.A.). Programs of Choice: Successes and Challenges. Department of Curriculum, Teaching and Learning, 2010.
- Limin Jao (M.A.). Constructing mathematical knowledge using multiple representations: A case study of a Grade One teacher. Department of Curriculum, Teaching and Learning, 2009.
- Nenad Radakovic (M.A.). Elementary School Students' Understanding of Randomness. Department of Curriculum, Teaching and Learning, 2009.
- Debbie Richards (M.A.). Factors affecting students' interest in mathematics at the elementary level. Department of Curriculum, Teaching and Learning, 2006.

- Diane Scarff (M.A.). Seeing face to face: A teacher looks at gifted adolescent boys and their relationship with school. Department of Curriculum, Teaching and Learning, 2006.
- Josie Carnevale (M.A.). The impact of self-assessment on Mathematics teachers' beliefs and reform practices. Department of Curriculum, Teaching and Learning, 2005.
- Todd Malarczuk (M.A.). Exploring student attitudes towards an instructional strategy based on a Japanese model of Mathematics Education. Department of Curriculum, Teaching and Learning, 2005.
- Nicole Van Woudenberg (M.A.). Supporting elementary teachers with professional development to integrate technology into their teaching practice. Department of Curriculum, Teaching and Learning, 2005.
- Naxin Zhao (M.A.). Students' participation in asynchronous educational computer conferencing. Department of Curriculum, Teaching and Learning, 2005.
- Cathy Cockburn (M.A.). Two Experienced Teachers' Perceptions of the International Baccalaureate Mathematics Program. Department of Curriculum, Teaching and Learning, 2003.
- Jane Lee (M.A.). Investigating factors that influence teacher change in the context of the Impact Math project. Department of Curriculum, Teaching and Learning, 2001.
- Pertia Minott-Bent (M.A.). Action research in science education and the implications on teacher professional development: a case study of computer teachers' concerns. Department of Curriculum, Teaching and Learning, 1999.

M.Ed. Major Research Paper Supervisor:

- Jacqueline Sohn (M.Ed.). Parent-teacher communication in mathematics education: An assessment of socio-economic impediments. Department of Theory and Policy Studies, 2009.
- Melanie Rubens (M.Ed.). e-Portfolios: Authentic Assessment for Virtual Learning. Department of Curriculum, Teaching and Learning, 2009.
- George Bartzis (M.Ed.). Student attitudes toward physical activity programs: A case study of the success and results of government institutions. Department of Curriculum, Teaching and Learning, 2007.
- Effie Eliopoulos (M.Ed.). The best teaching practices in mathematics to increase problem-solving skills for junior age students with mathematical disabilities. Department of Curriculum, Teaching and Learning, 2006
- Genny Yang (M.Ed.). Which weighs heavier: Ideal or Reality? Comparison of China and Cuba's Higher Education development and challenges. Department of Curriculum, Teaching and Learning, 2006.
- Jane Marshall (M.Ed.). How do different instructional strategies promote and support a counting-on solution? Department of Curriculum, Teaching and Learning, 2006.

- Alfredo Chow (M.Ed.). The challenges of helping online students at the Graduate Level. Department of Curriculum, Teaching and Learning, 2005.
- John Thomas (M.Ed.). From technology to electronic age: flow learning using computers in the classroom. Department of Curriculum, Teaching and Learning, 2004.
- Mary Kelly (M.Ed.). Teacher's barriers and strategies for effective implementation. Department of Curriculum, Teaching and Learning, 2004.
- Jennifer Torney (M.Ed.). Implementation of a Group Journal Writing Process in Two Grade Five Classrooms. Department of Curriculum, Teaching and Learning, 2003.
- Dwight Cockburn (M.Ed.). A Case Study of the Effects of Student Efficacy on Mathematics Achievement in the Junior Grades. Department of Curriculum, Teaching and Learning, 2003.
- Lynn Strangway (M.Ed.). Possible influences of the EQAO Grade 3 mathematics assessment on Grade 3 teachers' mathematical instructional and assessment practices. Department of Curriculum, Teaching and Learning, 2003.
- Bingie Deng (M.Ed.). Study of the roles of online instructors. Department of Curriculum, Teaching and Learning, 2003.
- Angelica Trevino (M.Ed.). A critical review of recent research on the graphing calculator in High School mathematics. Department of Curriculum, Teaching and Learning, 2003.
- Elana Shapiro (M.Ed.). Leveled mathematics in Grade Three. Department of Curriculum, Teaching and Learning, 2003.
- Laura O'Coin (M.Ed.). Alternative mathematics assessment methods improve teaching strategies and enhance student learning opportunities. Department of Curriculum, Teaching and Learning, 2003.
- Angela Di Giovanni (M.Ed.). Effectiveness of SuccessMaker software in developing math skills of students who are achieving below Ontario Provincial Standards. Department of Curriculum, Teaching and Learning, 2003.
- Steve Griffen (M.Ed.). Using visual techniques in Mathematics to identify cognitive barriers and errors in articulation. Department of Curriculum, Teaching and Learning, 2003.
- Scott Chin (M.Ed.). Issues of information technology staff development practices and policies in elementary schools. Department of Curriculum, Teaching and Learning, 2003.
- Paul Fiorini (M.Ed.). Exploring the dynamics of cooperative learning through mathematics. Department of Curriculum, Teaching and Learning, 2001.
- Edith Louie (M.Ed.). How does the graphing calculator support the mathematical learning of grade nine students? Department of Curriculum, Teaching and Learning, 2001.
- Mary-Francis Crete (M.Ed.). How does the use of journal writing in mathematics promote conceptual growth in grade seven French immersion students? Department of Curriculum, Teaching and Learning, 2001.

- G. Janet Jager (M.Ed.). Communication in mathematics. Department of Curriculum, Teaching and Learning, 2001.
- Mary Jane Pilgrim (M.Ed.). An investigation into instructional communication technology and the issue of WebCT faculty support. Department of Curriculum, Teaching and Learning, 2001.
- Trevor Poechman (M.Ed.). Computers in the curriculum: The call for improved professional development. Department of Curriculum, Teaching and Learning, 2001.
- Louise Murphy (M.Ed.). CMC in professional development for teachers. Department of Curriculum, Teaching and Learning, 2001.
- Karen Laing (M.Ed.). Will the University of the Arctic meet the needs of the North? Department of Curriculum, Teaching and Learning, 2000.
- Jinah Kim (M.Ed.). Electronic portfolio assessment: a case study. Department of Curriculum, Teaching and Learning, 2000.
- Fred Picher (M.Ed.). The efficacy of computer-based instruction programs as viable teaching/learning tools. Department of Curriculum, Teaching and Learning, 2000.
- Chris Sylvia-Prefontaine (M.Ed.). Reading for life: an investigation into the relationship between Ontario licensed computer-assisted reading software and literacy. Department of Curriculum, Teaching and Learning, 2000.
- Judy MacLellan (M.Ed.). Conceptual change and mathematics reform: closing the gap between rhetoric and practice through teacher leadership. Department of Curriculum, Teaching and Learning, 2000.
- David Lawton (M.Ed.). The role of selected constructivist design principles in enhancing student commitment in a problem based learning project. Department of Curriculum, Teaching and Learning, 2000.
- Karen Allin (M.Ed.). Visuals: Who do they best aid, and when are non-complementary visuals a hindrance? Department of Curriculum, Teaching and Learning, 2000.
- Mary Reger (M.Ed.). Internet in global education: A case study. Department of Curriculum, Teaching and Learning, 2000.
- Corater Chang (M.Ed.). Beyond 2000: the use of computer technology in the new Ontario secondary curriculum. Department of Curriculum, Teaching and Learning, 2000.
- Hector Vecchione (M.Ed.). pedagogical techniques for computer mediated second language teaching. Department of Curriculum, Teaching and Learning, 1998.
- Heather Speers (M.Ed.). Writing as effective assessment in elementary school mathematics. Department of Curriculum, Teaching and Learning, 1998.
- Sharon Silver (M.Ed.). Computer applications in secondary school science. Department of Curriculum, Teaching and Learning, 1998.

Master of Teaching Supervision

56 Master of Teaching Research Papers supervised

External Examiner

Christopher Charles (Ph.D.). Comparing the effects of Investigation and Exemplification on secondary school student's conceptual understanding and achievement of mathematics: A mixed-methods approach. University of Alberta, 2020.

Marc Husband (Ph.D.). Novice Teachers' Understanding of Elementary Mathematics. York University, 2019.

Jennifer Holm (Ph.D.). Improving mathematics teaching through professional learning groups. Lakehead University, 2013.

Jerome Proulx (Ph.D.). (Enlarging) secondary-level mathematics teachers' mathematical knowledge: An investigation of professional development. University of Alberta, 2007.

Julie Long (M.Ed.). Measurement growth with elementary school students. School of Graduate Studies, University of New Brunswick, 2004.

PRACTICUM SUPERVISIONS

School visits: (1997-2005, 2008-2009), 8 – 15 students per year

Supervision includes: Email contact, on-site observations of teacher candidates, debrief of observation, preparation of goals, lesson planning assistance, meetings with associate teachers, teacher candidates and principals, providing additional resources and advice where needed, and assistance to other teacher candidates in the program needing additional support.

GRADUATE ASSISTANTS SUPERVISION

2020-2021	Two Graduate Assistants Three Research Assistants
2019-2020	Two Graduate Assistants Two Research Assistants
2018-2019	Two Graduate Assistants Three Research Assistants
2017-2018	Three Graduate Assistants One Research Assistant
2016-2017	Four Graduate Assistants
2015-2016	Four Graduate Assistants
2014-2015	Four Graduate Assistants
2013-2014	Four Graduate Assistants

2012-2013	Three Graduate Assistants
2011-2012	Three Graduate Assistants
2010-2011	Three Graduate Assistants
2009-2010	Four Graduate Assistants Two Research Assistants
2008-2009	Four Graduate Assistants One Research Assistant
2007-2008	Six Graduate Assistants
2006-2007	Two Graduate Assistants
2005-2006	Two Graduate Assistants
2004-2005	One Graduate Assistant
2001-2002	One Teacher Education Program Assistant (TEPA)
1999-2000	One Teacher Education Program Assistant (TEPA)
1998-1999	One Graduate Assistant

K. SERVICE: (Official administrative positions, chairing or membership on committees)

Department:

- Chair, Appeals Committee, 2019-2020
- Member, Promotion Committee, 2019-2020
- Member, Awards Committee, 2019-2020
- Chair and Graduate Chair, 2010 - 2015
- Chair, Tenure Committees, 2010 - 2015 (seven faculty)
- Chair, Promotion Committee, 2010 - 2015 (three faculty)
- Chair, Transitional Council, 2011-2012
- Member, Promotion Committee, 2009-2011
- Member of the CTL Council (2001 – 2015)
- Member, Program Advisory Committee (2004 – 2009, 2010 - 2015)
- Member, CJSMTJ Journal Advisory Committee (2006 – 2010)
- Associate Chair, Graduate Studies (Jan 2005 – Dec 2007)
- Member, Chair's Advisory Team (2005 – 2007)
- Chair, Program Advisory Committee (2005 – 2007)
- Member, PRT Committee (2005 – 2015)
- Member, Mathematics Lecture Search Committee (2004, 2005, 2006)
- Chair, CTL Council (2002-2003)
- Member of the Program Committee of the Curriculum Program (1999-2000)
- Member of the CTL Mathematics Search Committee (1999-2006)

- Member of the CTL Search Committee for Teacher Education (three positions) (1999-2000)
- Member of the CTL Steering Committee (1999-2001)
- Member of the Comprehensive Exam Committee (1997-1999)

Program

- Coordinator, Master of Teaching program (2000-2009)
- Chair, Secondary Implementation team (2008-2009)
- Member, MT Admission committee (2000 – 2010)
- Member, C & P Program (2018 – present)
- Member, CSTD Program (2005 – 2018)
- Member, Curriculum Program (1997-2005)

Centre for Science, Mathematics and Technology Education:

- Director (2009 – 2010)
- Member, Centre for Science, Mathematics and Technology Education (2002 – present)
- Acting Director (January to June, 2003)
- Member of the Travel Policy Sub-committee (1999 – 2004)
- Member of the Technology Committee (1999 – 2002)
- Member of the Speaker Series Sub-committee (1999 – 2004)

Faculty:

- Member, two Search Committees, LHAE (2020 - 2021)
- Member, Search Committee, LHAE (2019 - 2020)
- Chair, Programs Discussion Group (2016 – 2019)
- Chair, Administrative Systems Group (2016 – 2019)
- Chair, Student Experience Committee (2015 – 2019)
- Chair, Recruitment Committee (2015 – 2019)
- Member, Jackman Institute for Child Study Committee (2015 – 2019)
- Member, Deans and Associate Deans (2015 – 2019)
- Member, Deans, Chairs and Academic Directors (2010 – 2019)
- Chair, Search Committee, Elementary Science Education (2014-2015)
- Chair, Search Committee, Language and Literacies Education (2013-2014)
- Chair, Search Committee, Diversity Studies in Education (2012-2013)
- Chair, Search Committee, Language, Literacy and Curriculum in Aboriginal Education (2012-2013)
- Chair, Search Committee, Elementary Science Lecturer (2012)
- Member, Economics Search Committee (2010-2011)
- Member, CTL Chair Search Committee (2009-2010)
- Chair, Graduate Education Subcommittee (2008-2010)
- Member, Faculty Council Executive Committee (2008-2010)
- Member, Graduate Education Subcommittee, Faculty Council (2006-2010)
- Member, Initial Teacher Education Subcommittee, Faculty Council (2008-2009)
- Member, Initial Teacher Education Subcommittee (2008-2009)
- Member, Graduate Advisory Committee, Dean's Office (2006-2009)
- Member, Student Funding Task Force (2005-2006)

- Member, Initial Teacher Education Accreditation Committee (2004-2005)
- Member, Faculty Council (1997 – 2006, 2010 - present)
- Member, Director of Continuing Education Search Committee (2004)
- Member of the Pre-service Working Group (2001 – 2004)
- Coordinator of Elementary Pre-service North Option (1999-2000)
- Member of the ICS Mathematics Search Committee (1999-2001)
- Member of the Working Group on Technology and Education (2000-2001)
- Staff Liaison for the Dean's Review Committee (May, 1999)
- Co-chair of the Inter-departmental Committee on Guidelines for the Evaluation of Teaching (1998-2000)

University:

- Member, Governing Council (2018 – present)
- Vice Chair, Academic Board (2019 – present)
- Member, Agenda Committee, Academic Board (2019 – present)
- Member, Academic Appeals Committee (2019 – present)
- Member, Working Group on Governance Oversight of Capital Projects (2019 – present)
- Member, Planning and Budget Committee (2018 – 2019)
- Member, University Affairs Board (2018 – 2019)
- Member, Graduate Education Council (2015 – 2019)
- Member, Working Committee on Part-Time Faculty (2016 – present)
- Member, Working Committee on Writing Instructors (2015 – 2016)
- Member, SGS Supervision Guidelines Working Group
- Member, University Bargaining Committee, CUPE 3902 Unit 3 (2012-2013, 2014-2015, 2017-2018)
- Member, University Bargaining Committee, CUPE 3907 (2011-2012, 2015-2016, 2018-2019)
- Chair, Academic Policy and Programs Committee, Academic Board (2012 – 2014)
- Vice Chair, Academic Policy and Programs Committee, Academic Board (2006 – 2012)
- Member, Academic Board (2005-2014)
- Acting Chair, Academic Policy and Programs Committee, Academic Board (Fall 2008)
- Member, Academic Policy and Programs Agenda Committee, Academic Board (2006 – 2014)
- Member, Academic Policy and Programs Committee, Academic Board (2005 – 2014)
- Member, Academic Appeals Committee (2009 – 2011)
- Member, Planning and Budget Committee, Academic Board (ex-officio) (2010 – 2011)
- Chair, UTS-OISE Academic Activities Committee (2006 – 2013)
- Member, SSHRC Awards Committee, SGS (2006 – 2008)
- Member, Undergraduate Medical Education Program Evaluation Committee (2004- 2006)
- Member, School of Graduate Studies, Division II Executive (2005 – 2006)
- Member of the John J. Del Grande Scholarship Committee, Samuel Beatty Fund, UT (2001-2006)

- Member of the Hiring Committee for the Curriculum Coordinator position for the University of Toronto Schools (UTS) (1999-2000)

Tenure Committees (University of Toronto)

- Chair, seven tenure committees in CTL
- Member of 15 Tenure Committees as SGS representative

Educational Community:

- Editor-in-Chief, Canadian Journal for Science, Mathematics and Technology Education (2019 – present)
- Member, Toronto District School Board Applied Mathematics Committee (2012-2013)
- Holy Trinity School (1998-2006)
 - Board of Governors (2000-2006)
 - Chair, Education Committee (2003-2005)
 - Education Committee (1998-2006)
- Upper Canada College (1997 – 2000)
 - Member of the Technology Advisory Group
 - Member of the Heads of Department Group
 - Presenter on School Change, timetable, integration
 - Member of the Timetable Committee
 - Member of the Interview team for Primary Coordinator
- Member of Making a Difference for Students Committee, The Learning Consortium (1999-2000)

Wider Community:

- Chair, Audit Committee Executive, Council of Ontario Universities Quality Council (2021 – present)
- Member, Audit Committee Executive, Council of Ontario Universities Quality Council (2019 – 2021)
- Member, Audit Committee, Council of Ontario Universities Quality Council (2016 – present)
- External Examiner, Covenant Canadian Reformed Teachers College (2020)
- External Examiner, Tyndale University (2019)
- External Examiner, Ontario College of Art and Design (OCAD) University (Quality Council Audit) (2019)
- External Examiner, Ontario Tech University (Quality Council Audit) (2019)
- External Examiner, McMaster University (Quality Council Audit) (2018)
- External Examiner, University of Waterloo (Quality Council Audit) (2018)
- External Examiner, Trent University (Quality Council Audit) (2017)
- External Examiner, Niagara University (2016)
- External Examiner, Nipissing University (2011)
- Assessor for Promotion to Associate Professor, Wayne State University (2010)
- Assessor for Promotion to Associate Professor, Nipissing University (2005)
- Assessor for Promotion to Full Professor, University of the Punjab, Lahore, Pakistan (2002 – 2005)

- Member, Toronto District School Board Early Numeracy Project Committee (2004 – 2006)
- Member of the Board of Governors of Holy Trinity School (2000 – 2007)

Other:

- Chair, Geogebra Institute of Canada Annual conference (2010-2011; 2014-2015)
- Treasurer, Geogebra Institute of Canada (2010 – present)