

Professor Vince Geiger

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Work history

Position	Organisation	Years
Professor of Mathematics Education	Institute for Learning Sciences and Teacher Education, Australian Catholic University (ACU)	2018-present
Professor of Mathematics Education and Research Fellow	Institute for Learning Sciences and Teacher Education, Australian Catholic University (ACU)	2017
Associate Professor and Research Fellow	Learning Sciences Institute Australia (ACU)	2015-2016
Deputy Head of School (Research)	School of Education, ACU (Brisbane Campus)	2012-2014
Senior Lecturer	School of Education, ACU (Brisbane Campus)	2010 - 2012
Senior Lecturer; Secondary Programs Coordinator and Professional Experience Coordinator	School of Education, ACU (Brisbane Campus)	2007 - 2010
Lecturer	School of Education, ACU (Brisbane Campus)	2005 - 2009
Mathematics Coordinator	Hillbrook Anglican School, Brisbane	1991 - 2005
Teacher of Mathematics	St Peter Claver College, Ipswich	1988 - 1990
Secondary Teacher of Mathematics and Science	St Joseph's CBC, Gregory Terrace, Brisbane	1983 - 1986

Education

Qualifications	Organisation	Completed
Doctor of Philosophy	The University of Queensland	2009
Master of Educational Studies	The University of Queensland	1993
Bachelor of Educational Studies	The University of Queensland	1985
Diploma of Education	The University of Queensland	1982
Bachelor of Science	Griffith University	1979

Fields of educational expertise

- Mathematics education
- Enabling effective numeracy practice across the curriculum
- The role of technology in mathematics education
- Teaching and learning mathematical modelling
- Effective practices in STEM teaching and learning
- Leadership in STEM
- Teacher professional learning

Expertise in qualitative, quantitative and mixed research design methodologies

- Design-based research
- Thematic analysis
- Grounded theory approaches to analysis
- Mixed methods approaches

Research supervision fields

- Critical mathematical thinking
- The role of technology in mathematics education
- Indigenous students' mathematics learning
- Church planting

HDR supervisions

Completions

Doctor of Philosophy

Peta Spencer (2018). How teaching representations and/or resources (virtual, concrete and symbolic) of mathematical concepts influence Indigenous students' learning ACU, Co-supervisor

Jodie Miller (2014). Young Indigenous students' experiences in mathematics: An exploration in students' ability to generalize. ACU, Co-supervisor

Master of Education (Research)

Colin Stoodley (2013). Church planting in Australia: How training and coaching affects the leadership of church planting in Australia. ACU, Principal supervisor

Examinations

Doctor of Philosophy

Claudia Orellana (2016). Investigating the use of CAS calculators by senior secondary mathematics students. Monash University

Doctor of Mathematics Education

Ian Allan Thomson (2012). A case study of the use of technology in secondary mathematics with reference to the dimensions of learning framework. Curtin University.

Master of Education (Research)

Elizabeth Sansome (2016). Building teachers' pedagogy practices in reasoning, to improve students' dispositions towards mathematics. Queensland University of Technology

Fiona Phillips (2010). Teachers' perceptions of using ICT for teaching and learning mathematics. University of Tasmania.

Funded research

Competitive grants

Year	Grants	Funding
2018-2020	Department of Education and Training (Federal): Beswick, K., Fraser, S., & Geiger, V.; Principals as STEM Leaders.	AUD 2,600,000
2017-2019	ARC Discovery: Geiger, V., Stillman, G., Brown, J., Galbraith, P., & Niss, M.; Using mathematics to solve real world problems: The role of enablers.	AUD 446,000
2017-2018	Australian Universities-German DAAD Joint Research Cooperation Scheme: Geiger, V., Miller, J., Wells, J., Bruder, R., & Roder, U.; Designing challenging online mathematical tasks (DCOMT): Strengthening mathematical knowledge in pre-service teacher education.	AUD 50,000
2015-2017	ARC DECRA: Geiger, V.; Designing and implementing cross-curricular numeracy tasks for effective teaching and learning.	AUD 361,876

Year	Grants	Funding
2015-2016	Office of the Chief Scientist: Callingham, R., Beswick, K., Goos, M., Geiger, V. et al.; Building an evidence base for national best practice in mathematics education.	AUD 542,260
2013-2016	DIICSRTE-OLT: Mulligan, J., Geiger, V. et al.; Opening real science: Authentic mathematics and science learning for Australia.	AUD 2,300,000
2012-2014	ARC Discovery: Geiger, V., Goos, M., Dole, S., Forgasz, H.; Enhancing numeracy learning and teaching across the curriculum.	AUD 210,000

Research consultancies

Year	Research	Funding
2017-2023	Organisation for Economic Co-operation and Development (OECD): Tout, D., Geiger, V., Maguire, T., Hoogland, K., Demonty, I., & Diaz-Palomar, J.: PIAAC 2 nd cycle numeracy expert group.	AUD 19,000
2016	Organisation for Economic Co-operation and Development (OECD): Tout, D., Geiger, V., Maguire, T., Hoogland, K., Coben, D., & Ginsburg, L.; Review of the Programme of International Assessment of Adult Competencies (PIAAC) numeracy assessment framework.	AUD 21,000
2014-2015	Queensland College of Teachers: Goos, M., Bennison, A., & Geiger, V.; Numeracy teaching across the curriculum in Queensland: Resources for teachers.	AUD 40,000
2014-2015	Brisbane Catholic Education: Geiger, V., Gleeson, J., & Effenev, G.; Education for sustainability in BCE schools: An investigation of policy and practice.	AUD 9,000
2012	Brisbane Catholic Education: Goos, M., Dole, S., & Geiger, V.; Sustaining numeracy curriculum leadership: A whole school approach.	AUD 89,000
2012	ACU/Brisbane Catholic Education – Industry Research Incentive Scheme: Lamb, J., Geiger, V., & Branson, C.; Models of leading curriculum reform in numeracy.	QUD 10,000
2010-2011	Brisbane Catholic Education: Goos, M., Dole, S., & Geiger, V.; Leading numeracy learning.	AUD 108,000
2010-2012	Australian Association of Mathematics Teachers: Geiger, V., & Goos, M.; Make it count: Numeracy, mathematics and Indigenous learners	AUD 34,000
2009	Department of Education and Children’s Services (South Australia): Goos, M., Dole, S., & Geiger, V.; Numeracy in the learning areas (middle years).	AUD 60,000
2006-2007	Texas Instruments: Geiger, V., & Goos, M.; Modelling the future with mathematics and technology.	AUD 13,000

Other funded research

Year	Research	Funding
2010-2012	Australian Catholic University: Geiger V., Mulholland, J., Lamb, J., Kennedy, J., Thomas, L., & Howell, J.; McAuley research support team.	AUD 30,000
2011	Australian Catholic University: Stillman, G., Clarkson, P., Geiger, V., Faragher, R., Brown, J.; Research interest group: Mathematical modeling.	AUD 5,000
2009	Australia Catholic University Mathematics and Literacy Flagship: Lamb, J., & Geiger, V.; NAPLAN research initiative: Teaching and learning decimal fractions.	AUD 6,000
2006-2007	Australia Catholic University Mathematics and Literacy Flagship: Geiger, V., Faragher, R., & Goos, M.; Mathematical modelling in CAS Clothing: Exploring the power of computer algebra systems in a mathematical modelling context.	AUD 20,000

Publications

Edited Books

Geiger, V., McKinlay, J., & O'Brien, G. (1999). *The sub-AToMIC project: Subsequent applications to mathematics incorporating calculators*. Brisbane: Queensland Association of Mathematics Teachers.

Geiger, V., McKinlay, J., & O'Brien, G. (1997). *The AToMIC project: Applications to mathematics incorporating calculators*. Brisbane: Queensland Association of Mathematics Teachers

Books

Goos, M., Geiger, V., Dole, S., Forgasz, H., & Bennison, A. (2019). *Numeracy across the curriculum: Research-based strategies for enhancing teaching and learning*. Crows Nest, NSW: Allen & Unwin.

Goos, M., Vale, C., Stillman, G., Makar, K., Herbert, S., & Geiger, V. (2017). *Teaching secondary school mathematics: Research and practice for 21st century* (2nd edition). Crows Nest, NSW: Allen & Unwin.

Geiger, V. (1998). *Turbo charging the TI-80*. Adelaide: Australian Association of Mathematics Teachers.

Book chapters

Benison, A., & Geiger, V. (accepted August 2020). Numeracy across the curriculum as a model of integrating mathematics and science. In J. Anderson and Y. Li (Eds.), *Integrated approaches to STEM education: An international perspective*. Springer

Geiger, V., Galbraith, P., & Niss, M. (accepted Aug 2020). Designing and implementing mathematical modelling tasks. In F. Leung, G. A. Stillman, G. Kaiser and K. L. Wong (Eds.), *Mathematical modelling education in East and West* (ICTMA series, vol. 19). Springer.

Geiger, V., Yasukawa, K., Bennison, A., Fielding-Wells, J., & Sawatzki, C. (2020). Facets of numeracy: Teaching, learning and practices. In J. Way, J. Anderson, J. Bobis, H. McMaster, K. Cartwright, & C. Attard (Eds.), *Research in mathematics education in Australasia: 2016-2019* (pp. 59-89). Singapore: Springer. doi.org/10.1007/978-981-15-4269-5_4

Frejd, P., & Geiger, V. (2017). Exploring the notion of mathematical literacy in curricula documents. In G. Stillman, G. Kaiser, & W. Blum (Eds.), *Mathematical modelling and applications* (International perspectives on the teaching and learning of mathematical modelling series, pp. 255-263). Cham: Springer. doi.org/10.1007/978-3-319-62968-1_22

Geiger, V. (2017). Designing for mathematical applications and modelling tasks in technology rich environments. In A. Leung & A. Baccaglini-Frank (Eds.), *Digital technologies in designing mathematics education tasks* (Mathematics education in the digital era, vol. 8, pp. 285-301). Dordrecht: Springer. doi.org/10.1007/978-3-319-43423-0_14

Geiger, V., Årlebäck, J. B., & Frejd, P. (2016). Interpreting curricula to find opportunities for modeling: Case studies from Australia and Sweden. In C. R. Hirsch & A. R. McDuffie (Eds.), *Mathematical modeling and modeling mathematics* (Annual perspectives in mathematics education series, pp. 207-215). Reston, VA: National Council of Teachers of Mathematics.

Geiger, V., Calder, N., Tan, H., Loong, E., Miller, J., & Larkin, K. (2016). Transformations of teaching and learning through digital technologies. In K. Makar, S. Dole, J. Visnovska, M., Goos, A. Bennison, & K. Fry (Eds.), *Research in mathematics education in Australasia 2012-2015* (pp. 255-280). Singapore: Springer. doi.org/10.1007/978-981-10-1419-2_13

Leung, A., & Bolite-Fran, J., with Arzarello, F., Bokhove, C., Boon, P., Buchbinder, O., Chan, Y., Clark- Wilson, A., Drijvers, P., Geiger, V., Healy, L., Joubert, M., Mackrell, K., Mamolo, A., Or, A., Robotti, E., Soury-Lavergne, S., Thomas, M., Wozniak, F., Yerushalmy, M., and additional contributions from Doorman, M., Hassan, S., Fernandes, A., Lin, C., Maschietto, M., Redmond, T., Tacoma, S., Timotheus, J., Whiteley, W., & Zaslavsky, O. (2016). Designing mathematics tasks: The role of tools. In A. Watson & M. Ohtani (Eds.), *Task design in mathematics education* (New ICMI study series, pp. 191-225). Switzerland: Springer. doi.org/10.1007/978-3-319-09629-2_6

Geiger, V. (2015). Mathematical modelling in Australia. In N. H. Lee & D. Ng (Eds.), *Mathematical modelling: From theory to practice* (Series of mathematics education, vol. 8, pp. 73-82). Singapore: World Scientific. doi.org/10.1142/9789814546928_0005

Geiger, V. & Frejd, P. (2015). A reflection on mathematical modelling and applications as a field of research: Theoretical orientation and diversity. In G. A. Stillman, W. Blum, & M. S. Biembengut (Eds.), *Mathematical modelling in educational research and practice* (International perspectives on the teaching and learning of mathematical modelling series, pp. 161-171). Dordrecht: Springer. doi.org/10.1007/978-3-319-18272-8_12

Stillman, G., Brown, J. P., & Geiger, V. (2015). Facilitating mathematisation in modelling by beginning modellers in secondary school. In G. A. Stillman, W. Blum, & M. S. Biembengut (Eds.), *Mathematical modelling in educational research and practice* (International perspectives on the teaching and learning of mathematical modelling series, pp. 93-104). Dordrecht: Springer. doi.org/10.1007/978-3-319-18272-8_7

Geiger, V. (2014). The role of social aspects of teaching and learning in transforming mathematical activity: Tools, tasks, individuals and learning communities. In S. Rezat, M. Hattermann, & A. Peter- Koop (Eds.), *Transformation - A fundamental idea of mathematics education* (pp. 203-222). New York, NY: Springer. doi.org/10.1007/978-1-4614-3489-4_11

- Geiger, V., Goos, M., & Dole, S. (2014). Curriculum intent, teacher professional development and student learning in numeracy. In Y. Li & G. Lappan (Eds.), *Mathematics curriculum in school education* (Advances in mathematics education series, pp. 473-492). Dordrecht: Springer. doi.org/10.1007/978-94-007-7560-2_22
- Goos, M., Geiger, V., & Dole, S. (2014). Transforming professional practice in numeracy teaching. In Y. Li, E. Silver, & S. Li (Eds.), *Transforming mathematics instruction* (Advances in mathematics education series, pp. 81-102). New York: Springer. doi.org/10.1007/978-3-319-04993-9_6
- Geiger, V. (2013). Mathematical applications, modelling and technology as windows into industry based mathematical practice. In A. Damlamian, J. F. Rodrigues, & R. Straesser (Eds.), *Educational interfaces between mathematics and industry* (New ICMI study series, vol. 16, pp. 271-278). Cham: Springer. doi.org/10.1007/978-3-319-02270-3_27
- Geiger, V. (2013). Strässer's didactic tetrahedron as a basis for theorising mathematical modelling activity within social contexts. In G. A. Stillman, G. Kaiser, W. Blum, & J. P. Brown (Eds.), *Teaching mathematical modelling: Connecting to research and practice* (International perspectives on the teaching and learning of mathematical modelling series, pp. 107-116). Dordrecht: Springer. doi.org/10.1007/978-94-007-6540-5_9
- Geiger, V. (2013). Teacher professional development on mathematical modelling: Initial perspectives from Singapore. In G. A. Stillman, G. Kaiser, W. Blum, & J. P. Brown (Eds.), *Teaching mathematical modelling: Connecting to research and practice* (International perspectives on the teaching and learning of mathematical modelling series, pp. 437-442). Dordrecht: Springer. doi.org/10.1007/978-94-007-6540-5_37
- Geiger, V., Goos, M. & Dole, S. (2013). Taking advantage of incidental school events to engage with the applications of mathematics: The case of surviving the reconstruction. In G. A. Stillman, G. Kaiser, W. Blum, & J. P. Brown (Eds.), *Teaching mathematical modelling: Connecting to research and practice* (International perspectives on the teaching and learning of mathematical modelling series, pp. 175-184). Dordrecht: Springer. doi.org/10.1007/978-94-007-6540-5_15
- Stillman, G. A., Brown, J. P., Faragher, R., Geiger, V., & Galbraith, P. (2013). The role of textbooks in developing a socio-critical perspective on mathematical modelling in secondary classrooms. In G. A. Stillman, G. Kaiser, W. Blum, & J. P. Brown (Eds.), *Teaching mathematical modelling: Connecting to research and practice* (International perspectives on the teaching and learning of mathematical modelling series, pp. 361-371). Dordrecht: Springer. doi.org/10.1007/978-94-007-6540-5_30
- Geiger, V., Forgasz, H., Tan, H., & Calder, N. (2012). Technology in mathematics education. In B. Perry, T. Lowrie, T. Logan, A. MacDonald, & J. Greenlees (Eds.), *Research in mathematics education in Australasia 2008-2011* (pp. 111-141). Rotterdam: Sense Publishers. doi.org/10.1007/978-94-6091-970-1_7
- Lamb, J., & Geiger, V. (2012). Teaching experiments and professional learning. In N. M. Steel (Ed.), *Encyclopedia of the sciences of learning* (pp. 3276-3277). Boston, MA: Springer. doi.org/10.1007/978-1-4419-1428-6_1017
- Geiger, V. (2011). Factors affecting teachers' adoption of innovative practices with technology and mathematical modelling. In G. Kaiser, W. Blum, R. Borromeo Ferri, & G. Stillman (Eds.), *Trends in the teaching and learning of mathematical modelling* (International perspectives on the teaching and learning of mathematical modelling series, pp. 305-314). Dordrecht: Springer. doi.org/10.1007/978-94-007-0910-2_31
- Beatty, R., & Geiger, V. (2009). Technology, communication and collaboration: Re-thinking communities of inquiry, learning and practice. In C. Hoyles & J. B. Lagrange (Eds.), *Mathematics education and technology: Rethinking the terrain* (New ICMI study series, vol. 13, pp. 251-284). New York: Springer. doi.org/10.1007/978-1-4419-0146-0_11
- Galbraith, P., Goos, M. E. Renshaw, P. L., & Geiger, V. (2003). Technology-enriched classrooms: Some implications for teaching applications and modelling. In Q. X. Ye, W. Blum, S. K. Houston, and Q. Y. Jiang (Eds.), *Mathematical modelling in education and culture* (ICTMA series, vol. 10, pp. 111-125). Chichester: Horwood Publishing. doi.org/10.1533/9780857099556.3.111
- Geiger, V., Galbraith, P., Renshaw, P., & Goos, M. (2003). Choosing and using technology for secondary mathematical modelling tasks: Choosing the right peg for the right hole. In Q. X. Ye, W. Blum, S. K. Houston, and Q. Y. Jiang (Eds.), *Mathematical modelling in education and culture* (ICTMA series, vol. 10, pp. 126-140). Chichester: Horwood Publishing. doi.org/10.1533/9780857099556.3.126

Articles

- Beswick, K., Fraser, S and Geiger, V. (under review). Leading STEM initiatives in schools: A systematic literature review. *Educational Research Review*.
- Geiger, V., Galbraith, P., Niss, M., & Delzoppo, C. (under review). Developing a task design and implementation framework for fostering mathematical modelling competency. *Educational Studies in Mathematics*.
- Bennison, A., Goos, M., & Geiger, V. (2020). Utilising a research-informed instructional design approach to develop an online resource to support teacher professional learning on embedding numeracy across the curriculum. *ZDM Mathematics Education*.

- doi.org/10.1007/s11858-020-01140-2
Likourezos, V., Beswick, K., Geiger, V., & Fraser, S. (2020). How principals can make a difference in STEM education. *Australian Educational Leader*, 42(2), 33-36.
- Geiger, V. (2019). Using mathematics as evidence supporting critical reasoning and enquiry in primary science classrooms. *ZDM Mathematics Education*, 51(7), 929-940.
doi.org/10.1007/s11858-019-01068-2
- Maass, K., Geiger, V., Ariza, M.R., & Goos, M. (2019). The role of mathematics in interdisciplinary STEM education. *ZDM Mathematics Education*, 51(7), 869-884.
doi.org/10.1007/s11858-019-01100-5
- Geiger, V., Margolinas, C., & Straesser, R. (2018). Le défi de la publication en contexte anglophone de didactiens des mathématiques dont la langue Dominante n'est pas l'anglais. *Recherches en Didactique des Mathématiques*, 38(1), 15-42.
- Geiger, V., Mulligan, J., Date-Huxtable, L., Ahlip, R., Jones, D. H., May, E. J., Rylands, L., & Wright, I. (2018). An interdisciplinary approach to designing online learning: Fostering pre-service mathematics teachers' capabilities in mathematical modelling. *ZDM Mathematics Education*, 50(1-2), 217-232. doi.org/10.1007/s11858-018-0920-x
- Geiger, V., Stillman, G., Brown, J., Galbraith, P., & Niss, M. (2018). Using mathematics to solve real world problems: The role of enablers. *Mathematics Education Research Journal*, 30(1), 7-19.
doi.org/10.1007/s13394-017-0217-3
- Shahaeian, A., Wang, C., Tucker-Drob, E., Geiger, V., Bus, A. G., & Harrison, L. J. (2018). Early shared reading, socioeconomic status, and children's cognitive and school competencies: Six years of longitudinal evidence. *Scientific Studies of reading*, 22(6), 485-502. doi.org/10.1080/10888438.2018.1482901
- Bilgin, A. A. B., Date-Huxtable, E., Coady, C., Geiger, V., Cavanagh, M., Mulligan, J., & Petocz, P. (2017). Opening real science: Evaluation of an online module on statistical literacy for pre- service primary teachers. *Statistics Education Research Journal*, 16(1), 120-138.
- Geiger, V., Anderson, J., & Hurrel, D. (2017). A case study of effective practice in mathematics teaching and learning informed by Valsiner's zone theory. *Mathematics Education Research Journal*, 29(2), 143-161.
doi.org/10.1007/s13394-017-0191-9
- Geiger, V., Margolinas, C., & Straesser, R. (2017). On the challenges of multilingualism in mathematics education research. *For the Learning of Mathematics*, 37(2), 16-18.
- Geiger, V., Muir, T., & Lamb, J. (2016). Video stimulated recall as a catalyst for teacher professional learning. *Journal of Mathematics Teacher Education*, 19, 457-475.
doi.org/10.1007/s10857-015-9306-y
- Muir, T., & Geiger, V. (2016). The affordances of using a flipped classroom approach in the teaching of mathematics: A case study of a grade 10 mathematics class. *Mathematics Education Research Journal*, 28(1), 149-171. doi.org/10.1007/s13394-015-0165-8
- Geiger, V., Forgasz, H., & Goos, M. (2015). A critical orientation to numeracy across the curriculum. *ZDM Mathematics Education*, 47(4), 611-624. doi.org/10.1007/s11858-014-0648-1
- Geiger, V., Goos, M., & Dole, S. (2015). The role of digital technologies in numeracy teaching and learning. *International Journal of Science and Mathematics Education*, 13(5), 1115-1137.
doi.org/10.1007/s10763-014-9530-4
- Geiger, V., Goos, M., & Forgasz, H. (2015). A rich interpretation of numeracy for the 21st Century: A survey of the state of the field. *ZDM Mathematics Education*, 47(4), 531-548. doi.org/10.1007/s11858-015-0708-1
- Geiger, V., & Straesser, R. (2015). The challenge of publication for English non-dominant-language authors in mathematics education. *For the Learning of Mathematics*, 35(3), 35-41.
- Cooper, C., Dole, S., Geiger, V. & Goos, M. (2012). Numeracy in society and environment. *Australian Mathematics Teacher*, 68(1), 16-20.
- Gibbs, M., Goos, M., Geiger, V., & Dole, S. (2012). Numeracy in secondary school mathematics. *Australian Mathematics Teacher*, 68(1), 29-35.
- Goos, M., Dole, S., & Geiger, V. (2012). Numeracy across the curriculum. *Australian Mathematics Teacher*, 68(1), 3-7.
- Goos, M., & Geiger, V. (2012). Connecting social perspectives on mathematics teacher education in online environments. *ZDM Mathematics Education*, 44(6), 705-715.
doi.org/10.1007/s11858-012-0441-y
- Goos, M., Geiger, V., & Dole, S. (2012). Auditing the numeracy demands of the middle years' curriculum. *PNA*, 6(4), 147-158.
- Peters, C., Geiger, V., Goos, M., & Dole, S. (2012). Numeracy in health and physical education. *The Australian Mathematics Teacher*, 68(1), 21-27.
- Willis, K., Geiger, V., Goos, M., & Dole, S. (2012). Numeracy for what's in the news and building an expressway. *The Australian Mathematics Teacher*, 68(1), 9-15.
- Goos, M., Dole, S., & Geiger, V. (2011). Improving numeracy education in rural schools: A professional development approach. *Mathematics Education Research Journal*, 23(2), 129- 148.
doi.org/10.1007/s13394-011-0008-1
- Gadanidis, G., & Geiger, V. (2010). A social perspective on technology enhanced mathematical

- learning: From collaboration to performance. *ZDM Mathematics Education*, 42(1), 91-104. doi.org/10.1007/s11858-009-0213-5
- Geiger, V., Faragher, R., & Goos, M. (2010). CAS-enabled technologies as ‘agents provocateurs’ in teaching and learning mathematical modelling in secondary school classrooms. *Mathematics Education Research Journal*, 22(2), 48-68. doi.org/10.1007/BF03217565
- Goos, M., & Geiger, V. (2010). Theoretical perspectives on mathematics teacher change. *Journal of Mathematics Teacher Education*, 13(6), 499-507. doi.org/10.1007/s10857-010-9166-4
- Goos, M., & Geiger, V. (2006). In search of practical wisdom: A conversation between researcher and teacher. *For the Learning of Mathematics*, 26(2), 33-35.
- Goos, M., Galbraith, P., Renshaw, P., & Geiger, V. (2003). Perspectives on technology mediated learning in secondary school mathematics classrooms. *Journal of Mathematical Behavior*, 22(1), 73-89. [doi.org/10.1016/S0732-3123\(03\)00005-1](https://doi.org/10.1016/S0732-3123(03)00005-1)
- Goos, M., Galbraith, P., Renshaw, P. & Geiger, V. (2000). Re-shaping teacher and student roles in technology enriched classrooms. *Mathematics Education Research Journal*, 12(3), 303-320. doi.org/10.1007/BF03217091
- Geiger, V., & Galbraith, P (1998). Developing a diagnostic framework for evaluating student approaches to applied mathematics problems. *International Journal of Mathematical Education in Science and Technology*, 29(4), 533-559. doi.org/10.1080/0020739980290406
- Geiger, V. (1997). What about little brother? Texas instruments' other new graphing calculator the TI-83. *Australian Senior Mathematics Journal*, 11(1), 37-47.

Reports

- Geiger, V., Gleeson, J., & Effenev, G. (2016). *Education for sustainability in BCE schools: An investigation of policy and practice*. Unpublished project report – sponsored by Brisbane Catholic Education.
- Goos, M., Geiger, V., & Bennison, A. (2015). *Numeracy teaching across the curriculum in Queensland: Resources for teachers*. Final report. Brisbane: The University of Queensland.
- Geiger, V., & Goos, M. (2013). *Make it count: Numeracy, mathematics and Indigenous learners*. Unpublished project report – sponsored by the Australian Association of Mathematics Teachers.
- Goos, M., Geiger, V., & Dole, S. (2012). *Sustaining numeracy curriculum leadership: A whole school approach*. Unpublished project report – sponsored by Brisbane Catholic Education.
- Lamb, J., Geiger, V., Branson, J., & Jorgensen, R. (2012). *Models of leading curriculum reform in numeracy*. Unpublished project report – sponsored by the Brisbane Catholic Education and Australian Catholic University.
- Goos, M., Geiger, V., & Dole, S. (2010). *Numeracy in the learning areas*. Unpublished project report – sponsored by the South Australian Department of Education and Children’s Services.

Scholarly contributions

Editorial roles

Role	Publication	Dates
Guest Editor	ZDM Mathematics Education (Mathematics and STEM Education)	2018-2019
Associate Editor	Mathematics Education Research Journal	2013-2018
Editor	Conference proceedings for the 38th annual conference of the Mathematics Education Research Group of Australasia	2015
Guest Editor	ZDM Mathematics Education (Numeracy)	2014-2015

Editorial board memberships

- International Journal of Science and Mathematics Education, 2019-present.

Invited reviewer

- Educational Studies in Mathematics
- Journal of Mathematics Teacher Education
- Mathematical Thinking and Learning
- International Journal of Science and Mathematics Education
- ZDM – The International Journal on Mathematics Education
- Mathematics Education Research Journal
- Mathematics Teacher Education and Development

Fellowships

- Discovery Early Career Award (2015-2017). Australian Research Council – Designing and implementing cross-curricular numeracy tasks for effective teaching and learning.

Awards

- Giovani Prodi Guest Professorship (2018-2019). Wurzburg University, Germany.
- Mathematics Education Research Group of Australasia Research Award (2017). Significant recent contribution to mathematics education research.
- Research Excellence Award (2015). Australian Catholic University Faculty of Education and Arts.
- ALTC Citation (2009). Project: WebCT as a pedagogical resource and communicative tool for use in the professional experience program.
- Practical Implications Award (1995). Mathematics Education Research Group of Australasia.

Memberships

- Mathematics Education Research Group of Australasia.
- Australian Association of Mathematics Teachers.
- Queensland Association of Mathematics Teachers.

Service internal

Leadership

- Research Director – STEM in Education: Design and Growth Across the Disciplines (2019 - present)
- Deputy Director – ACU Mathematics Teaching and Learning Research Centre (2012-2013)
- Assistant/Deputy Head of School (Research) – School of Education, Australian Catholic University (Brisbane Campus) (2012-2013)
- Secondary Programs Coordinator and Professional Experience Coordinator (DipEd, MTeach, BT/BA) – Australian Catholic University (Brisbane Campus) (2007-2010)
- Secondary Professional Experience Coordinator – Graduate Diploma of Education, Master of Teaching, Bachelor of Teaching/Bachelor of Arts (2007-2010)

Service external

Local

- Member – Mathematics Learning Area Reference Group at the Queensland Studies Authority (2010- 2014)
- Member – Queensland College of Teachers program assessment committee (2009-2011)
- Chair - State assessment review panel for Mathematics B (2006)
- Member of the State assessment review panel for Mathematics B (1994-2006)
- Mathematics Subject Advisory Committee of the Board of Senior Secondary School Studies (1994-2006)
- Chair of the Management Committee for the QAMT/DEET National Professional Development Project on Student Performance Standards (1994-1996)
- President – Queensland Association of Mathematics Teachers (1994-1995)
- Vice-President Publications – Queensland Association of Mathematics Teachers (1992-1993)

National

- Panel Member – ARC Expert panel for ERA assessment (2013 – present)
- Secretary – Mathematics Education Research Group of Australasia (2009-2012)
- Chair – National Education Forum (2001-2002)
- President – Australian Association of Mathematics Teachers (2000-2001)
- Member – Advisory Committee of the Australian College of Educators for the development of a statement on professional teaching standards (2000)

International

- Member of the organizing team for the Mathematical Literacy Topic Study Group at the International Conference on Mathematics Education. (2018-2020)
- Member of the organizing team for the Mathematical Literacy Topic Study Group at the International Conference on Mathematics Education (2013-2016)

Other

- Judging panel – Practical Implications Award (for best paper by a researcher related to practical application of research to the classroom) for the Mathematics Education Research Group of Australasia (2017)
- Member – Organizing committee for the 38th annual conference of the Mathematics Education Research Group of Australasia (2014-2015)
- Member – Organizing committee for the International Conference of Teaching of Mathematics and Applications (2010-2011)
- Organizing committee member – 31st annual conference of the Mathematics Education Research Group of Australasia (2006-2008)
- Judging panel – Early Careers Award for the Mathematics Education Research Group of Australasia (2006)
- Judging panel – Practical Implications Award (for best paper by a researcher related to practical application of research to the classroom) for the Mathematics Education Research Group of Australasia (2003)