

List of Larkin Research Outputs - By Research Area

As indicated in my application, I deliver mathematics education courses based on contemporary best practice and informed by my current research. My research is recognised nationally and internationally (53 peer-reviewed publications) and 264 citations (As at June 2017). I draw upon my work in Mathematics pedagogy (22 publications); Higher education pedagogy (14 publications); Digital Technologies (13 publications) and the 1st year university experience (4 publications).

Mathematics Pedagogy

1. Jorgensen, R. & **Larkin, K.** (2017). Analysing the relationships between students and mathematics: A tale of two paradigms. *Mathematics Education Research Journal*, 29, p. 113–130. doi: 10.1007/s13394-016-0183-1
2. N. Calder, **K. Larkin** & N. Sinclair (Eds.) (in press 2017). *Using mobile technologies in the teaching and learning of mathematics. Mathematics Education in the Digital Era*. Springer
3. **Larkin, K.** & Milford, T. (in press 2017). Mathematics Apps - Stormy With The Weather Clearing: Using Cluster Analysis To Enhance App Use In Mathematics Classrooms. In N. Calder, **K. Larkin** & N. Sinclair (Eds.), *Using mobile technologies in the teaching and learning of mathematics. Mathematics Education in the Digital Era*. Springer
4. **Larkin, K.** & Milford, T. (in press 2017). Using Cluster Analysis To Enhance Student Learning When Using Geometry Mathematics Apps. In S. Ladel & C. Vale (Eds.), *International Committee for Mathematics Instruction*. Springer
5. **Larkin, K.** (2016). Geometry and iPads in primary schools: Does their usefulness extend beyond tracing an oblong? In P. Moyer-Packenham (Ed.), *International Perspectives on Teaching and Learning Mathematics with Virtual Manipulatives. Mathematics Education in the Digital Era 7*. p. 247-274. Retrieved from http://link.springer.com/chapter/10.1007%2F978-3-319-32718-1_11
6. **Larkin, K.** & Calder, N. (2016). Mathematics education and mobile technologies - *Special Issue of Mathematics Education Research Journal*, 28(1), p. 1-7. doi: 10.1007/s13394-015-0167-6
7. Mathematics Education and Mobile Technologies (2016). In **K. Larkin** & N. Calder (Eds). *Special Issue of the Mathematics Education and Research Journal* 28(1), <http://link.springer.com/journal/13394/28/1/page/1>
8. **Larkin, K.** (2016). Mathematics Education and manipulatives - Which, when, how. *Australian Primary Mathematics Classroom*, 21(1), p. 12-17.
9. **Larkin, K.** (2016). Finding quality geometry apps: Not as simple as $A^2 + B^2 = C^2$. *Australian Primary Mathematics Classroom*, 21(2), p. 22-26.
10. **Larkin, K.**, & Jorgensen, R. (2016). 'I Hate Maths: Why Do We Need to Do Maths?' Using iPad Video Diaries to Investigate Attitudes and Emotions Towards

- Mathematics in Year 3 and Year 6 Students. *International Journal of Science and Mathematics Education*, 14(5), p. 925-944. doi: 10.1007/s10763-015-9621-x
11. Geiger, V. Calder, N. Loong, E. Miller, J. Tan, H. & **Larkin, K.** (2016). Transformations of Teaching and Learning Through Digital Technologies. In Makar, K. et al. (Eds.), *Research in Mathematics Education in Australasia 2012-2015*, p. 255-288. Springer Press.
<http://www.springer.com/gp/book/9789811014178>
 12. **Larkin, K.** & Milford, T. (2016). Enhancing Student Learning Using Geometry Apps: Utilising The Homogeneity And Heterogeneity Of Clusters Of Apps. *13th International Congress on Mathematical Education*. Hamburg.
 13. Milford, T. & **Larkin, K.** (2016). Cluster Analysis: A novel methodological approach for determining quality in Geometry Apps. *13th International Congress on Mathematical Education*, Hamburg.
 14. **Larkin, K.**, Grootenboer, P. & Lack, P. (2016). Staff Development: The Missing Ingredient in teaching Geometry to Year 3 Students. *Opening up Mathematics Education Research (Proceedings of the 39th Annual Conference of the Mathematics Education Research Group of Australasia)*, Adelaide.
 15. Jorgensen, R., Lamb, J. & **Larkin, K.** (2016). Middle Leadership: Critical Variables in Building and Implementing Digital Reforms in Primary Mathematics Education. *Opening up Mathematics Education Research (Proceedings of the 39th Annual Conference of the Mathematics Education Research Group of Australasia)*, Adelaide.
 16. **Larkin, K.** (2015). "An App! An App! My Kingdom for An App": An 18-Month Quest to Determine Whether Apps Support Mathematical Knowledge Building. In T. Lowrie & R. Jorgensen (Eds.), *Digital Games and Mathematics Learning: Potential, Promises and Pitfalls*. p. 251-276. Springer, Netherlands.
 17. **Larkin, K.** (2015). The Search for Fidelity in Geometry Apps: An Exercise in Futility? In M. Marshman, V. Geiger & A. Bennison (Eds.), *Mathematics Education in the Margins. (Proceedings of the 38th Annual Conference of the Mathematics Education Research Group of Australasia)*, Sunshine Coast.
 18. **Larkin, K.** & Jorgensen, R. (2015). Using iPad digital diaries to investigate attitudes towards mathematics. Beswick, K., Muir, T., & Wells, J. (Eds.) (2015). *Proceedings of the 39th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 3) pp. 177-184. Hobart.
 19. Jorgensen, R. & **Larkin, K.** (2015). Differentiated Success: Combining Theories to Explain Learning. In M. Marshman, V. Geiger & A. Bennison (Eds.) *Mathematics Education in the Margins. (Proceedings of the 38th Annual Conference of the Mathematics Education Research Group of Australasia)*, Sunshine Coast.
 20. **Larkin, K.** & Jorgensen, R. (2014). Using video diaries to record student attitudes and emotions towards mathematics in Year 3 and Year 6 students. In (Eds.), *Curriculum in Focus: Research guided practice. (Proceedings of the 37th Annual Conference of the Mathematics Education Research Group of Australasia)*, Sydney.
 21. **Larkin, K.** (2014). iPad Apps that promote mathematical knowledge? Yes, they

- exist! *Australian Primary Mathematics Classroom*, 19(2), p. 28-32.
22. **Larkin, K.** (2013). Mathematics Education. Is there an App for that? In V. Steinle, L. Ball & C. Bordini (Eds.), *Mathematics education: Yesterday, today and tomorrow (Proceedings of the 36th annual conference of the Mathematics Education Research Group of Australasia)*, Melbourne.

Higher Education Pedagogy

1. **Larkin, K.** (2017). Student engagement in the context of blended learning in mathematics education courses: challenges and implications. In L. Rowan and P. Grootenboer (eds.), *Student Engagement and Educational Rapport in Higher Education Contexts*, Springer Press.
2. **Larkin, K.** (2017). The use of online videos to support mathematics education for undergraduate, pre service educators: How much "face" should I show? In Geok Bee The & Siew Chee Choy (Eds.), *Empowering 21st Century Learners Through Holistic and Enterprising Learning - Selected Papers from Tunku Abdul Rahman University College International Conference 2016*. Springer Press.
3. **Larkin, K.** (2016). Course Redesign to Improve Pre-service Teacher Engagement and Confidence to Teach Mathematics: A Case Study in Three Parts. *International Journal of Mathematics Teaching and Learning (IJMTL)*. Retrieved from <http://www.cimt.org.uk/ijmtl/index.php/IJMTL/article/view/7>
4. **Larkin, K.** (2016). The use of online videos to support mathematics education for undergraduate, pre service educators: How much "face" should I show? *4th International Conference on Learning and Teaching "Empowering 21st Century Learners Through Holistic and Enterprising Learning"*, Kuala Lumpur.
5. Grootenboer, P. & **Larkin, K.** (2016). Critical perspectives of affect in mathematics education and mathematical identities. *4th International Conference on Learning and Teaching "Empowering 21st Century Learners Through Holistic and Enterprising Learning"*. Kuala Lumpur.
6. **Larkin, K.** & Jamieson-Proctor, R. (2015). Using Transactional Distance Theory to redesign an Online Mathematics Education Course for Pre-Service Primary Teachers. *Mathematics Teacher Education and Development*, 17(1), p. 44-61.
7. **Larkin, K.**, Kawka, M., Noble, D., Van Rensburg, H., & Brodie, L., and Danaher, P. (2015) Empowering Educators: Promoting Enabling Teaching and Learning in Research and Practice. In K. Larkin, M. Kawka, P. Danaher, K. Noble, H. Van Rensburg & L. Brodie (Eds.), *Empowering Educators: Proven Principles and Successful Strategies*. Palgrave Publishing. UK.
8. **Larkin, K.**, Kawka, M., Noble, D., Van Rensburg, H., & Brodie, L., and Danaher, P. (2015). *Empowering Educators: Proven Principles and Successful Strategies*. Palgrave Publishing. UK.
9. **Larkin, K.** (2014). **BEST PAPER AWARD**. Restructuring a pre-service teacher mathematics education course to develop Mathematics Content Knowledge (MCK) and Mathematics Pedagogical Content Knowledge (MPCK). *STEM 2014: STEM Education and our Planet: Making Connections Across Contexts*,

- Vancouver.
10. **Larkin, K.** & Jamieson-Proctor, R. (2013). Transactional Distance Theory (TDT): An Approach to Enhancing Knowledge and Reducing Anxiety of Pre-Service Teachers Studying a Mathematics Education Course Online. In V. Steinle, L. Ball & C. Bardini (Eds.), *Mathematics Education: Yesterday, Today and Tomorrow. (Proceedings of the 36th annual conference of the Mathematics Education Research Group of Australasia)*, Melbourne.
 11. Kawka, M., **Larkin, K.**, & Danaher, P. (2012). Creating Flickr Photo-Narratives with First-Year Teacher Education Students: The Possibilities and Pitfalls of Designing Emergent Learning Tasks. *Australian Journal of Teacher Education*, 37(11).
 12. **Larkin, K.** Jamieson-Proctor, R. & Finger, G. (2012). TPACK and pre-service teacher Mathematics education: Defining a signature pedagogy for Mathematics education using ICT and based on the metaphor 'Mathematics is a Language'. *Computers in the Schools - Special Issue: Technology and Signature Pedagogies*.
 13. **Larkin, K.** (2009). Apprentice, collaborator, colleague, competitor: Negotiating the trajectory(ies) of a doctoral student. In B. Garrick, S. Poed, and J. Skinner (Eds.), *Educational Planet Shapers: Researching, Hypothesising, Dreaming the Future*, (p. 51-66). Brisbane. Post Pressed.

Digital Technologies in Education

1. Martyn, J., **Larkin, K.**, Sander, T., Yuginovich, T., & Jamieson-Proctor, R. (2013). Distance and devices — Potential barriers to use of wireless handheld devices. *Nurse Education Today* 34(3), p. 457- 461.
2. Jamieson-Proctor, R. **Larkin, K.** (2012). Transforming learning using iPods and Web 2.0 tools. *2012 Australian Computers in Education Conference: ITs Time: Information Technology in Schools Time (ACEC 2012)*, Perth.
3. Jamieson-Proctor, R., **Larkin, K.**, Albion, P., Redmond, P., Fasso, W. (2012). Distance learning at times and places chosen by the learner: Adapting resources and learner behaviours for working with mobile digital devices. *2012 Australian Computers in Education Conference: ITs Time: Information Technology in Schools Time (ACEC 2012)*, Perth.
4. Albion, P., Jamieson-Proctor, R., Redmond, P., **Larkin, K.**, & Maxwell, A. (2012), Going mobile: each small change requires another. *ASCILITE 2012: 29th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education: Future Challenges, Sustainable Futures*, Wellington.
5. **Larkin, K.** (2011). You Use! I Use! We Use! Questioning the orthodoxy of one-to-one computing in primary schools. *Journal of Research on Technology in Education*, 44(2), p. 101-120.
6. **Larkin, K.** & Finger, G. (2011). Informing one-to-one computing in primary schools: Student use of netbooks. *Australasian Journal of Educational Technology*, 27(3), p. 514-530.
7. **Larkin, K.** & Finger, G. (2011). Netbook computers as an appropriate solution for

- one-to-one computer use in primary schools. *Australian Educational Computing*, 26(1), 27-34.
8. **Larkin, K.**, Finger, G. & Thompson, R. (2010). Student health and welfare in networked school communities. In M. Lee and G. Finger (Eds.), *Developing Networked School Communities: A Guide to Realising the Vision* (pp. 277-288) Camberwell, Victoria: ACER Press.
 9. **Larkin, K.** & Finger, G. (2010). Investigating student netbook usage using Activity Theory. Paper presented at the *Australian Computers in Education (ACEC) Conference Digital Diversity*, Melbourne.
 10. **Larkin, K.** (2008). Multiple ways of becoming: Journeying the RHD programs within a university. A symposium presentation paper presented at *AARE 2008 International Education Research Conference*. Brisbane. .
 11. **Larkin, K.** (2008). Negotiating the trajectory(ies) of an RHD journey; Rethinking the Activity Systems / Individual Agency dichotomy. Paper presented at the *Educational Planet Shapers; Researching, Hypothesising and Dreaming the Future Conference*, Gold Coast.
 12. **Larkin, K.** (2007). Using wireless-enabled Personal Digital Assistants (PDA) to access information and create communication patterns: Constructing and transforming knowledge in a year seven classroom. In R. Brown, G. Finger, and C. Rushton (Eds.), *Educational Research: Who Needs It?* Proceedings from the inaugural, 2006 Research Higher Degree Conference held at the School of Education and Professional Studies, Gold Coast.
 13. **Larkin, K.** (2006). Using wireless-enabled Personal Digital Assistants (PDA) to access information and create communication patterns: Constructing and transforming knowledge in a year seven classroom. Paper presented at the *Educational Research: Who Needs It? Conference*. Gold Coast.

First Year Experience

1. Rowan, L., Bigum, C., & **Larkin, K.** (2016). Where to now for research into the first year experience at university? Reassembling the first year experience. *International Journal of Actor-network Theory and Technological Innovation*, 8(2), 1-17. doi:10.4018/IJANTTI.2016040101
2. **Larkin, K.**, Rowan, L., Garrick, B. & Beavis, C. (2016) Student Perspectives on First Year Experience Initiatives Designed for Pre-service Teachers in their First Weeks of University Study. *Journal of University Teaching & Learning Practice*, 13(1), 1-14. Available from <http://ro.uow.edu.au/jutlp/vol13/iss1/7>
3. Kawka, M. & **Larkin, K.** (2011). Wrestling and wrangling with a worrisome wiki: An account of pedagogical change in the use of a Web 2.0 technology in a first year education course. Themed edition of *Studies in Learning, Education, Innovation and Development (SLEID)*, 8(1), 38-48.
4. Kawka, M., **Larkin, K.** & Danaher, P. (2011) Emergent learning and interactive media artworks: Parameters of interaction for novice groups. *The International Review of Research in Open and Distance Learning (IRRODL)*, 12(7), 40-55

Research Projects, Reports and Media

Research Projects

2017-2019. *Early Learning STEM Australia project*. Department of Education and Training. Canberra. **\$5.9 million**

2014-2016. *StepUp! Transforming mathematics and science pre-service secondary teacher education in Queensland*. Office for Learning and Teaching (OLT) **\$3.2 million**

2013 – 2015. *What works and why? Understanding successful technology enabled learning within institutional contexts*. Office for Learning and Teaching OLT **\$220 000**

2015 – 2016. *Building Rapport-ability through Collegial Conversations: Action Research for Teaching Development*. Griffith Grants for Learning and Teaching. **\$9964.60**

2013 – 2015. *Opting In - Opting Out: A study of student attitudes to Mathematics in middle primary school*. Griffith University – Arts, Education and Law. **\$13 000**

2013 – 2015. *Mathematics in Transition Project*. Griffith Institute for Educational Research. **\$5 000**

Reports

Selwyn, N., Henderson, M., Finger, G., **Larkin, K.**, Smart, V., and Chao, S. (2016). *What works and Why? Understanding successful technology enabled learning within institutional contexts (Part A)*. Canberra, ACT: Australian Government Office for Learning and Teaching.

Selwyn, N., Henderson, M., Finger, G., **Larkin, K.**, Smart, V., and Chao, S. (2016). *What works and Why? Understanding successful technology enabled learning within institutional contexts (Part B)*. Canberra, ACT: Australian Government Office for Learning and Teaching.

Jamieson-Proctor, R., Albion, P., & **Larkin, K.** (2013). Distance learning at times and places chosen by the learner: Adapting resources and learner behaviours for working with mobile digital devices. *dehub Innovation in distance education*. University of New England, NSW.

Jamieson-Proctor, R. & **Larkin, K.** (2012). *Distance learning at times and places chosen by the learner: Adapting resources and learner behaviours for working with mobile digital devices*. Executive Summary.

Social Media

Larkin, K. (2016). The Conversation (Australia) December 1, 2016. What to say if your child asks, 'what's the point of maths?' <https://theconversation.com/what-to-say-if-your-child-asks-whats-the-point-of-maths-69628>

Larkin, K. (2016). ABC News - December 1, 2016. What to say if your child asks, 'what's the point of maths?' <http://www.abc.net.au/news/2016-12-01/what-to-say-if-your-child-asks-whats-the-point-of-maths/8084494>

Larkin, K. (2017). The Conversation (France) - Feb 2, 2017. Que dire aux enfants qui se demandent à quoi servent les maths <https://theconversation.com/que-dire-aux-enfants-qui-se-demandent-a-quoi-servent-les-maths-71386>