
Thomas J. Delahunty, B.Tech(Ed), PG Dip Psych., PhD, CPsychol.

Email: Thomas.delahunty@mu.ie

Education & qualifications

March 2020

Chartered Psychologist – British Psychological Society

January 2018 – August 2021: University of Derby

Master of Science (MSc) in Psychology (Distinction/1st class honours)

September 2011 - June 2014: University of Limerick

Doctor of Philosophy (Ph.D)

Topic Area: Education/Educational psychology

Investigating Conceptualisation and the Approach Taken to Solving Convergent Problems:

Implications for Instructional Task Design [available at <https://ulir.ul.ie/handle/10344/8711>]

- Project designed and implemented a novel research method involving EEG technology to investigate students' cognitive approaches to mathematical problem solving
- Supervisors: Dr. Niall Seery & Dr. Raymond Lynch

September 2007 – June 2011: University of Limerick

Honours Bachelor Degree in Education (STEM) with qualified teacher status at second level (1st class honours)

Academic positions and experience

January 2022 –

Assistant Professor in Science & Mathematics education, Maynooth University

- Course director for years 1 and 2 of the BSc. Education
- Lecture on EDD and PhD programmes

February 2021 – December 2021

Acting Programme Director and Lecturer in Educational psychology, School of Education, University of Birmingham

- Acting programme director of the BSc. Psychology in Education Undergraduate Programme

- Managing admissions processes and accreditation application with the BPS
- Lecturer on the BSc. in Psychology in Education in the areas of cognitive, developmental psychology and social psychology of learning and education, and research methods (quantitative & qualitative)
- Supervise a number of undergraduate dissertations on the BA in Education programme
- Supervise a masters student from the M.Ed programme
- Contribute as an active member of course teams for team teaching and the preparation of online learning content as well as in assessments and moderation of grades
- Actively contributed as part of course team for recent BPS accreditation

October 2020 – December 2021

Visiting Lecturer, School of Education, University College Cork

- Part-time lecturing duties include supervising PhD students
- I am also leading the development of an ERC consolidator proposal due for submission later this year
 - Project will be a multi-year investigation of the relationships between bilingualism and cognition with particular focus on mathematical learning in children in the mathematics curriculum at primary school level

January 2019 – January 2021

Visiting Research Professor in STEM Education, University of Nebraska-Lincoln

- Co-PI on NSF funded collaborative research project investigating individual differences in cognitive representational abstraction in chemistry education
- Consulted and collaborated on developmental initiatives in discipline based education research (DBER)
- Wrote and led implementation of an introductory engineering education spatial skills enhancement programme for freshman engineering students. This programme was designed to address some of the issues in spatial skills development among traditionally underperforming STEM students

October 2018 – October 2020 *[post not renewed due to COVID debt incurred by UCC]*

Lecturer in Education, School of Education, University College Cork

Lecturer on Following Programmes & Modules:

- Professional Master of Education (PME)
 - **Led on ED6341** PME Collaborative Seminar (Collaborative practice for sustainable professional practice in teaching)
 - **ED6359** Professional Research Paper (PME Thesis)
- MA in Applied Psychology (Guidance Counselling)

- **Led on ED6213** Educational Disadvantage and Multiculturalism: Learning and identity
- **Led on ED6214** Inclusion and Learning for Students with Special Educational Needs
- Master of Education (M.Ed)
 - **Led on ED6035** M.Ed Dissertations
 - **Led on Research Support Seminars** – Seminar Topics; Generating Research Questions and Hypotheses, Qualitative Data Analysis, and Quantitative Data Analysis and Statistics
 - **Led on ED6066** STEM Education: Problem Solving and Instructional Design (Self-designed individual differences module focusing on the psychology of task design and PBL)
- BA in Early Years and Childhood Studies
 - **ED2005** Early Years and Childhood Policy: Planning and Practice – Lectures on Teacher Identity, Gender Stereotyping and Social Influence in STEM
- Cohort PhD Programme – lectured on research methods (quantitative) and formulating research ideas/projects

Taught programme research supervision

- **PME Theses**
 - 8 Completed in AY19/20
 - 10 Completed in AY18/19
 - This work requires me to supervise a number of minor research theses across a several topic areas. Indicative areas that I have supervised successfully supervised to completion are inter alia: Second language development, ICT use and interaction, STEM, educational psychology, motivation, self-efficacy studies, problem based learning, active learning and assessment.

Contribution to the School of Education

- Member of the Research and Innovation Committee
- Member of the Research Ethics Committee
- Lead member of the Undergraduate Working Group
 - Contributed towards UG programme redesign for accreditation with Teaching Council
- **Led on the successful design and development of new masters** offering in *Learning Sciences* in partnership with School of Applied Psychology, Digital Arts and Humanities, School of Computer Science and Information Technology and Centre for Digital Education
- **Led on development of new undergraduate programme** offering in mathematics and computer science teacher education
- **Founder of the inaugural STEM education research group within the School of Education and Chair**
- **Led School's Digital and Research Communication Strategy Committee**

January 2016 – October 2018

National Science Foundation Postdoctoral Research Fellow in Educational Psychology & STEM, Centre for Brain, Biology & Behaviour, Department of Psychology, & Department of Electrical and Computer Engineering, College of Engineering, University of Nebraska-Lincoln

- Postdoctoral Research Fellow, **CO-PI and Project Manager/Leader**
- Project Title: Collaborative Research: Spatial Visualization Skills and Engineering Problem Solving, https://www.nsf.gov/awardsearch/showAward?AWD_ID=1535307
- **Co-wrote** project which was based on my own doctoral studies and involved an interdisciplinary application of EEG and cognitive psychological methodologies to investigate the role of spatial cognition as a key skill in STEM(engineering) problem solving.
- Research Duties incl.: Design of methodological protocols, planning of data collection procedures, statistical analysis of data, production of literature reviews, dissemination of project progress in international journal publications, presentation of findings at key conferences
- Administration and **leadership incl.:** Day to day **management of project activities**, monitoring of individuals' progress, **assignment and supervision of duties**, **mentoring** research students, review and feedback of work, production of ethical applications, **liaising with institutional review board on project activities**, scheduling and recording of regular meetings with project personnel, investigation and application of further funding opportunities, participant recruitment, networking, **leading annual reporting process**, presentation of project progress to NSF review board

September 2014 – May 2016

Lecturer in STEM Education, University of Limerick

- Lecturer and module leader on Professional Masters in Education Programme
 - Areas Taught: Education, Subject Pedagogy (e.g. Problem/Project based learning, design education, foundational educational theory, research methods and writing skills, presentation skills)
 - Administration: Design and delivery of modules, supervision and mentoring of teaching assistant staff, scheduling and design of assessment procedures, reporting of final student grades
- Research Studies Supervisor at Undergraduate and Postgraduate Levels
 - Final Year Project Topics: Assessment of Student Competencies, Curriculum Development, Problem Solving and Reasoning, PBL, Spatial Cognitive Development, Learning Science, ICT Learning in Classroom Contexts, Technology Enhanced Learning
 - Supervised Masters Student (PME) to Completion, Mr. John McGuinness
- Teaching Practice Placement Supervisor/Tutor
 - Tutored 2nd Year, 4th Year and PME students on school placement across several subjects
 - Visited students on placement in various second level schools in Ireland and engaged with students' principal and cooperating teacher

- Provided support to individual on placement through written feedback of lesson plans and reflections and critical discussion following observations
- Awarded final grades for placement experience in conjunction with fellow tutors
- **Contributed to the technology education programmes accreditation process with the Teaching Council in 2014 as a member of the working group**

August 2011 – June 2014

Teaching Assistant in STEM education, University of Limerick

- Areas Taught: Engineering design graphics, subject pedagogy, process technology, technology education, history, philosophy and psychology of learning.
- Administration Duties including planning of module content, assessment procedures, record keeping, reporting of student progress to module lecturers, acting as first point of contact to students, supporting academic module leaders administration.

Pre-2011

Second-level teaching experience

- September-December 2010 (Final year placement): Secondary school teacher at Coláiste Choilm, Ballincollig, Cork (Cork ETB)
 - Subjects: Leaving Certificate Engineering, Leaving Certificate Technology, Junior Certificate Technical Graphics, Junior Certificate Mathematics
- February-May 2009 (placement): Secondary School Teacher, Cobh Community College, Cobh, Co. Cork

Research

- ORCID: <https://orcid.org/0000-0002-7365-8757>
- [Google Scholar Profile](#) (h-index = 7)
- [ResearchGate Profile](#)

Summary of interest

The core areas that comprise my research expertise and interests are in STEM education both in initial teacher education and, primary and secondary school contexts. I have published widely across multiple topics and particularly in mathematics education and curriculum in STEM education. I lead the RAISE research group with other colleagues in mathematics and science education and we are currently engaged in multiple projects and publications. My research leverages theory and method from psychology and particularly educational psychology in areas such as the science of learning & reasoning, individual differences related to these applications, and quantitative research methods and open science practices, in education. I am particularly motivated by my interests on the intersection between issues of individual and social identity and the relationship to educational performance/practice. While I have a commitment to enhancing opportunities in STEM education, I

also apply these interests to other contexts in education. Additionally, I am interested in advancing research methodologies, particularly in quantitative and applied cognitive approaches.

Specific applications & interests (associated example publications in parentheses):

- Individual differences in problem solving and reasoning (e.g. Delahunty et al., 2019, 2018); how undergraduate students' academic identity and life histories impacted their ability to access, manipulate and combine cognitive representations in mathematical problem solving (e.g. Delahunty 2014, 2019; Delahunty et al., 2020, 2019, 2015); advancing a new theoretical model of problem conceptualisation (e.g. Delahunty, in press, Delahunty et al., 2020)
- Research methods in education (e.g. Delahunty et al., 2012); development of a novel methodology combining the use of electroencephalography with qualitative data (e.g. Delahunty et al., 2018); combination of the biological and sociohistorical data frames to observe how academic and personal identity (e.g. past school experiences, confidence, self-esteem, interests, trauma, anxiety among others) influence current cognitive processing and performance (e.g. Delahunty, in press). Forthcoming book on research methods with Routledge (February 2022)
- Inclusivity and inequality in STEM education; exploring the locus of implicit gender stereotypes among pre-service teachers (e.g. Delahunty et al., in review); challenges to individual identity as a result of external policy factors (e.g. Delahunty et al., 2021); underrepresented minorities in university STEM education (forthcoming area).

Publications

Published/Accepted Journal Articles (Peer Reviewed)

1. Delahunty, T., Prendergast, M. and Ní Ríordáin, M. (2021) "Teachers' perspectives on achieving an integrated curricular model of Primary STEM education in Ireland: Authentic or utopian ideology?", *Frontiers in Education*, 6:666608. doi: <https://doi.org/10.3389/feduc.2021.666608>
2. **Delahunty, T.** and Kimbell, R. (2021) "(Re)Framing a Philosophical and Epistemological Framework for Teaching and Learning within STEM Education: Emerging pedagogies for complexity, *British Educational Research Journal*, [in press, early view available at: <https://doi.org/10.1002/berj.3706>]
3. **Delahunty, T.**, Seery, N. and Lynch, R. (2020) "Exploring Problem Conceptualization and Performance in STEM Problem Solving Contexts", *Instructional Science*, 48(4), 395-425. <https://doi.org/10.1007/s11251-020-09515-4>
4. **Delahunty, T.**, Seery, N., Dunbar, R., & Ryan, M. (2020). An exploration of the variables contributing to graphical education students' CAD modelling capability, *International Journal of Technology and Design Education*, 30, 389-411, <https://doi.org/10.1007/s10798-019-09503-x>

5. Seery, N., Buckley, J., **Delahunty, T.**, & Canty, D. (2018). Integrating learners into the assessment process using adaptive comparative judgement with an ipsative approach to identifying competence based gains relative to student ability levels. *International Journal of Technology and Design Education*, 29, 701-715, <https://doi.org/10.1007/s10798-018-9468-x>
6. **Delahunty, T.**, Perez, L.C., Rivera-Reyes, P., Psota, E. & Molfese, D. (2018). The relationship between spatial ability and electrical circuits problem solving in an engineering degree program, *Cognitive Processing*, 19 (Suppl 1).
7. **Delahunty, T.**, Pérez, L.C, and Rivera-Reyes, P. (2018) "Exploring the role of spatial skill in electrical circuits problem solving", *Engineering Design Graphics Journal*, 82(2), 31-35.
8. **Delahunty, T.**, Seery, N. and Lynch, R. (2018) "Exploring the Use of Electroencephalography to Gather Objective Evidence of Cognitive Processing During Problem Solving", *Journal of Science Education and Technology*, 27(2), 114-130, <https://doi.org/10.1007/s10956-017-9712-2>
9. **Delahunty, T.**, Seery, N., Lynch, R. and Lane, D. (2013) 'Investigating student teacher's approach to solving applied analytical graphical problems', *Engineering Design Graphics Journal*, 77(1), 6-22.
10. **Delahunty, T.**, Seery, N. and Lynch, R. (2012) 'An Evaluation of the Assessment of Graphical Education at Junior Cycle in the Irish System', *Design and Technology Education: An International Journal*, 17(2), 9-20.

Published/Accepted Book Chapters

1. **Delahunty, T.** (2019). Enhancing the Teaching of Problem-Solving in Technology Education. In P. Williams & D. Barlex (Eds.), *Explorations in Technology Education Research: Contemporary Issues in Technology Education*. Singapore: Springer. https://doi.org/10.1007/978-981-13-3010-0_10
2. **Delahunty, T. (in press)**. Neurocognitive and physiological measurement of STEM learning processes, in *International Encyclopaedia of Education 4th Edition*. Elsevier
3. **Delahunty, T. (in press)**. The learning sciences as a mindset for STEM education research. In **Delahunty, T. & Ní Ríordáin, M. (eds.)**, *Perspectives in contemporary STEM education research: Research methodology and design*. Routledge.

Books/Monographs

1. **Delahunty, T. & Ní Ríordáin, M. (Eds)** (*In press*). "Perspectives in Contemporary STEM Education Research: Research Methodology & Design", Routledge

Published/Accepted Conference Papers/Abstracts (Peer reviewed)

1. Duffy, G., Sorby, S., Rivera-Reyes, P., **Delahunty, T.**, Pérez, L. C. and Ravishankar, J. (2018) 'The Link Between Spatial Skills and Engineering Problem-Solving ', in Nikolic, S. and Lee, M. J. W., eds., IEEE TALE 2018, Wollongong, NSW, Australia, 4-7 December
2. Rivera-Reyes, P., Pérez, L.C, and **Delahunty, T.** (2018) "Assessing the Demand of Problems in an Undergraduate Electrical Engineering Curricula, IEEE Frontiers in Education Annual Conference, San José, California, October 3-6
3. **Delahunty, T.**, Pérez, L.C, Rivera-Reyes, P., Molfese, D.L and Psota, E. (2018) "Investigating the relationship between spatial ability and electrical circuits problem solving in an engineering degree program" in The International Conference on Spatial Cognition, Rome, September 10-14
4. Seery, N., Sadowski, M.A., Sorby, S.A and **Delahunty, T.** (2018) "Adaptive Comparative Judgement as an Alternative to the Delphi Method for Establishing a Concept Inventory for Graphics" in 72nd EDGD Mid-Year Conference, Jamaica, January 4-6
5. **Delahunty, T.**, Pérez, L.C, and Rivera-Reyes, P. (2018) "Exploring the role of spatial skill in electrical circuits problem solving" in 72nd EDGD Mid-Year Conference, Jamaica, January 4-6
6. Seery, N., **Delahunty, T.**, Canty, D. and Buckley, J. (2017) 'Illustrating Educational Development through Ipsative Performance in Design Based Education ', in PATT 2017, Philadelphia, July 10-14.
7. **Delahunty, T.**, Sorby, S., Seery, N. and Pérez, L. (2016) 'Spatial Skills and Success in Engineering Education: A Case for Investigating Etiological Underpinnings', in 70th Engineering Design Graphics Division Annual Mid-Year Conference Daytona Beach, Florida, January 24-26.
8. **Delahunty, T.**, Seery, N. and Lynch, R. (2015) '*Spatial Skills and Success in Problem Solving within Engineering Education*' in REES 2015, Dublin
9. Seery, N., Buckley, J. and **Delahunty, T.** (2015) '*An Analysis of Identified Cognitive Factors Pertinent to the Development of Spatial Skills within Engineering Education*' in REES 2015, Dublin
10. Seery, N. and **Delahunty, T.** (2015) '*Cognitive load as a key element of instructional design and its implications for Initial Technology Teacher Education*' in 29th PATT Conference, Marseille, France, April 7-10.
11. **Delahunty, T.**, Seery, N., Lynch, R. (2014) '*Considering cognitive load as a key element in instructional design for developing graphical capability*' in ASEE Annual Conference and Exposition, Indianapolis, Indiana, June 15-18.

12. **Delahunty, T.**, Seery, N., Lynch, R. (2013) '*Conceptualisation in Visuospatial Reasoning Tasks: A Research Direction*', in Engineering Design Graphics Division 68th Mid Year Conference, Worcester, Massachusetts, October 20-22
13. Seery, N. and **Delahunty, T.** (2013) '*Capturing Graphical Capability Through Ipsative Enquiry Using Adaptive Comparative Judgement*' in Engineering Design Graphics Division 68th Mid Year Conference, Worcester, Massachusetts, October 20-22
14. **Delahunty, T.**, Seery, N., Lynch, R. and Lane, D. (2013) '*An exploratory study of students' approaches to generating, maintaining and communicating visual-mental images*', in ASEE Annual Conference and Exposition, Atlanta, Georgia, June 23-26
15. **Delahunty, T.**, Seery, N. and Lynch, R. (2012) '*Examining Neuronal Function during the Completion of Established Graphical Tasks*', in Engineering Design Graphics Division 67th Mid Year Conference, Limerick, Ireland, 22-25
16. **Delahunty, T.**, Seery, N. and Lynch, R. (2012) '*The growing necessity for graphical competency*', in PATT 26, Stockholm, June 26-30

Edited Conference Volumes

1. Supple, B. & **Delahunty, T.** (eds) (2019) *Learning Connections 2019 Conference*, Cork, Ireland: University College Cork
2. **Delahunty, T.**, Kelly, D. & Mcinnis, J.(Eds). (2019) *73rd Engineering Design Graphics Division (ASEE), Mid-Year Conference: The visualizing instinct in contemporary education*, Berkeley, CA, USA: University of California Berkeley.

Journal Papers in Review/Pre-prints

1. **Delahunty, T.**, Ní Ríordáin, M. & Prendergast, P. "An investigation of STEM interest, mathematics beliefs and gender stereotypes among pre-service early childhood educators", <https://doi.org/10.31234/osf.io/wt96m>
2. Costa, J., Cahill, K., **Delahunty, T.**, Hall, K., Prendergast, M. et al. "A critical discussion of secondary school terminal examinations during the COVID-19 pandemic: Ireland's Leaving Certificate" [*Submitted to Irish Educational Studies*]

Manuscripts in Preparation

1. **Delahunty, T.** "A Theoretical Analysis and Framework for Problem Conceptualization and Representation Research: Implications for Research in Educational Psychology"
2. **Delahunty, T.** & Roebuck, H. "Internal representational preferences and manipulation self-concept as a mediating variables in spatial reasoning performance"

3. Murray, L., & **Delahunty, T.** "Chess for the masses, not for the masters": An ethnographic study on the effect of chess participation in promoting a culture of inclusivity for students with special educational needs in primary schools
4. **Delahunty, T.** & Ní Shuilleabhán, A. "Mathematics teaching self-efficacy and interest as predictors of positive attitudes to lesson study engagement".

Postgraduate Research Supervision

- **Current PhD students**
 - Catriona Curtin – *Perceptions of Digital Learning within Higher Education Institutions* (**Successfully Defended** in June 2021)
- **Past PhD students**
 - Ian Mulcahy (2020) – *Using a Mind, Brain, Education Intervention as a Catalyst for Promoting Reflective Practice*
- **Former Masters Students**
 - Lillian Waters: *A investigation of post-primary mathematics teachers' perceptions of lesson study as a sustainable model of CPD* (Completed 2020)
 - Barry Speight: *An exploration of the value and effect of a pre-apprenticeship curriculum as an alternative to established Leaving Certificate models* (Completed 2020)
 - Liam Murray - *The biopsychosocial value of after-school chess participation for primary school students emotional and cognitive development* (Completed 2020)
 - Ann-Marie Collins - *The effect of public perceptions on primary teachers' commitment to the teaching profession* (Completed 2019)
 - Conor Owens – *The Influence of LCA Participation on Students' Learning Identity* (Completed 2019)

Journal Refereeing (Publons profile: <https://publons.com/researcher/1311925/thomas-delahunty/>)

- Reviewer for International Journal of Technology and Design Education, Springer
- Reviewer for Studies in Higher Education, Taylor and Francis
- Reviewer for Irish Educational Studies
- Reviewer for Educational Psychology Review, Springer
- Reviewer for International Journal of Research and Method in Education, Taylor and Francis
- Reviewer for Technology, Pedagogy and Education, Taylor and Francis

Funding

Successful bids

2019; CACSSS Conference Support Funding
Award: €700

2016; National Science Foundation Division of Undergraduate Education

Award: \$645,943

Project Title: *Collaborative Research: Spatial Visualization Skills and Engineering Problem Solving*

2014; PhD Travel Award, Department of Design and Manufacturing Technology, University of Limerick

Awarded €1000 to attend ASEE Annual Conference in Indianapolis, USA

2013; PhD Travel Award, Department of Design and Manufacturing Technology, University of Limerick

Awarded €1000 to attend ASEE Annual Conference in Atlanta, Georgia, USA

2012; PhD Travel Award, Department of Design and Manufacturing Technology, University of Limerick

Awarded €1000 to attend ASEE Annual Conference in San Antonio, Texas, USA

Professional Awards and Distinctions

- 2018; Frank Oppenheimer Professionalism in Research Award, American Society for Engineering Education
- 2015; Shortlisted for University of Limerick Excellence in Teaching Award based on Student Evaluation of Teaching results
- 2013; Frank Oppenheimer Professionalism in Research Award, American Society for Engineering Education
- 2012; Innovations and Ideas in Research Design Award, American Society for Engineering Education
- 2012; Chair's Award for Best Research Paper, American Society for Engineering Education
- 2011; Best Research Final Year Project, FYP Steering Committee, University of Limerick

Teaching, Research Skills and Technical Expertise

- Expertise in SPSS and AMOS for advanced statistical analysis and structural equation modelling
- Expertise in R coding language for application in educational and psychological research
- Expertise in NVivo for qualitative data analysis
- Expertise in Psychopy and python coding for experimental psychology studies
- Expertise in Qualtrics for survey and questionnaire design
- Expert user of Moodle, blackboard and CANVAS learning management systems
- Competent in MATLAB programming
- Expertise in EEGLab software for analysis of neurophysiological data for psychological research
- Expertise in scale development and psychometric assessments

Professional Memberships and Associations

- Chartered Member of the British Psychological Society
- Member of Educational Studies Association of Ireland
- International member of the American Psychological Association
- Member of the International Society of the Learning Sciences

Academic and community contributions

Community contributions and outreach

- **Co-founder and chair of the Transplant Education & Activity Movement research network.** This is a community research initiative involving collaborators from Ireland and the UK currently and supported by the Irish Kidney Association. The goal is to conduct research into the psychosocial aspects of living with an organ transplant or awaiting one and to promote awareness of the conditions and support initiatives to enhance quality of life.
- **Member of the Teaching Council of Ireland Research Engagement Group.** Contributing member to this community-based group involving collaboration between TC members, practicing primary and secondary school teachers and academics. The group aims to promote and support research activities in schools and increase the amount of school based research being conducted in Ireland.

Conferences and Workshops Organised

- **Co-chair** of Organising Committee for the inaugural Learning Connections 2019 Conference at UCC in December 2019.
- **Programme Chair** for the 73rd ASEE Engineering Design Graphics Division Annual Mid-Year Conference at University of California, Berkley, in January 2019
- IEEE STEM Education Research Workshop **Co-Organiser** (December 7th and 8th 2015 – University of Limerick) - Workshop Presenters: Prof. Sheryl Sorby (University of Cincinnati), Prof. Steve Cooper (University of Nebraska-Lincoln) and Prof. Lance Pérez (University of Nebraska-Lincoln)
- Member of the organising committee for the Engineering Design Graphics Division (ASEE) 67th Annual Mid-Year Conference, University of Limerick, November 2012, <http://edgd.asee.org/conferences/proceedings/67th%20Midyear/67th%20Midyear%20proceedings.htm>

Consultancy

November 2020

Qualifications & Quality Ireland Panellist and Report Writer for Reengagement and QA approval

- **Lead evaluation panels in areas of expertise** for private and public institutes (further education and higher education) going through review and revision of quality assurance policies and governance with reference to QQI guidelines and validation policy

- Acting as report writer for several panels in a variety of areas to ensure high levels of detail and communication in outcome recommendations for both the QQI and the related institute involved in any revengement

March 2018 – November 2019

External Authenticator/Examiner for the Cork Education and Training Board, Ireland

- Quality assurance role responsibility for contributing to curricular design and monitoring of assessment standards in several adult and continuing education certificate programmes
- Liaised with ETB officials in recommendations for curricular and assessment revisions

June 2018 – December 2018

Educational consultant for the Royal College of Physicians Ireland (RCPI)

- **Led on curricular re-design and reform** in the College of Anaesthesiologists
- **Curricular redesign was informed by research work in problem-based learning and this was a key element in the college's decision to seek me out for collaboration**
- Collaborated with the Royal College of Physicians Ireland in ensuring appropriate accreditation of curricular designs

January 2016 - December 2017

Consultant Researcher, Collaborative Research: Crossing the Threshold of Problem Solving: Electrical Engineering vs. Chemistry (2015-2017), NSF funded project,

https://www.nsf.gov/awardsearch/showAward?AWD_ID=1348632&HistoricalAwards=false

- Project aimed at developing a cognitive framework for assessing and promoting the development of abstract reasoning capacities in STEM education

January 2015 – May 2015

Consultant Researcher, Grading and Assessing Soft Skills (GRASS) Project, EU Funded

Workshops and Guest Lectures

March 13th 2017 – University of Limerick

Guest Lecture to Initial Technology Teacher Education Students on the Science of Learning and Instructional Design in Technology Education

Organiser: Dr. Donal Canty

Other Qualifications, Career and Skills Development Courses

April 2021

Digital badge in universal design in teaching & learning, National Forum for the Enhancement of Teaching and Learning

April 2020

Digital Badge in Postgraduate Research Supervision,
National Forum for the Enhancement of Teaching and Learning

January 2020

Qualified Crisis Volunteer, Crisis Text Line Ireland

- Completed intensive counselling training funded by the HSE to support individuals going through mental health crises.

**January 2016**

Collaborative Institutional Training Initiative (CITI), Ethical Training for Social Science Research, University of Nebraska-Lincoln

January 2014

Qualitative Data Analysis using NVivo, University of Limerick

January 2013

Basic Statistics for Researchers, University of Limerick

January 2013

Advanced Statistics for Researchers, University of Limerick

Professional References

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| <p>Professor Richard Kimbell, Technology Education Research Unit, Goldsmiths University of London, Email: r.kimbell@gold.ac.uk Tel: +44(0)1483202446 Mob: +44(0)7812149034</p> | <p>Dr. Máire Ní Ríordáin, Senior Lecturer, School of Education, University College Cork, Ireland, Email: maire.niriordain@ucc.ie Phone: +353-021-490-3000</p> |
| <p>Dr. Raymond Lynch Senior Lecturer and EHS Assistant Dean Academic Affairs, School of Education, University of Limerick, Castletroy, Limerick, Ireland Tel: +353 (0)61 202359 Email: Raymond.lynch@ul.ie</p> | <p>Professor Lance Pérez, Dean College of Engineering, Omar H. Heins Professor of Electrical and Computer Engineering, University of Nebraska-Lincoln, 114 OTHM, Lincoln City Campus Phone: +1 (402) 472-5259 Email: lcperetz@unl.edu</p> |
| <p>Professor Kathy Hall, School of Education, Lee Holme, University College Cork, Cork,</p> | <p>Dr. Reza Gholami, Reader in Sociology of Education, Head of Department of Education & Social Justice, School of Education, University of Birmingham</p> |

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| <p>Ireland Email: k.hall@ucc.ie Phone: 021 490 3469</p> | <p>Phone: +44 (0)121 414 2638 Email: R.Gholami@bham.ac.uk</p> |
| <p>Mr. Martin McCormack CEO, College of Anesthesiologists, 22 Merrion Square North, Dublin 2, Ireland Email: ceo@coa.ie Phone: 01 2650600</p> | <p>Dr. Conor Linehan Senior Lecturer, School of Applied Psychology, University College Cork, Ireland, Email: conor.linehan@ucc.ie Phone: +353 021 4904518</p> |
| <p>Dr. Mark Prendergast Senior Lecturer in Education, School of Education, University College Cork, Ireland, Email: mark.prendergast@ucc.ie Phone: +353 (0)21 4903000</p> | <p>Dr. Karl Kitching, Reader in Educational Policy, Department of Teacher Education, University of Birmingham Email: K.Kitching@bham.ac.uk</p> |