

Curriculum Vitae

Personal Information

First name(s)/Surname(s)

Professional email

Work phone

Daniel Duckworth

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+61 (0)3 8595 9835

Position/Organization

Work Experience

Dates

Occupation or position held

Main activities and responsibilities

2021–2024

Lead Researcher

Conceptualize and develop the IEA International Computer and Information Literacy Study Assessment Framework.

Design digital content and develop cognitive test items, including item piloting with cognitive labs.

Develop contextual questionnaire items.

Maintain instrument codebooks.

Review and revise Survey Operations Procedures manuals and develop scoring guides.

Coordinate instrument layout verification.

Develop and review described achievement scales.

Contribute as an author for field trial analysis, international and technical reports.

Disseminate information and provide training at National Review Committee meetings.

Name of employer

Type of business or sector

Stichting IEA Secretariaat Nederland, IEA (Amsterdam)

Non-profit research organization

Dates

Occupation or position held

Main activities and responsibilities

2015–2021

Research Fellow

Product owner for item banking software system.

General Capabilities Assessment: Developed classroom-based assessment content and scoring models. Coordinated assessment delivery and scoring.

IEA International Computer Information Literacy Study (2018): Developed storyboards, test content and managed software implementation of test content.

ACARA National Assessment Program in Information and Communication Technology (2017): Developed assessment framework, storyboards, test content and managed implementation of test content.

VCAA Critical and Creative Thinking Assessment (CCT): Developed test items and trained markers.

International Schools' Assessment (2017): Developed test items and trained makers.

Name of employer

Type of business or sector

Australian Council for Educational Research

Not-for-profit research organization

Dates

Occupation or position held

Main activities and responsibilities

2007–2013

Research Fellow

IEA International Computer Information Literacy Study (2013): Developed storyboards, test content and managed software implementation of test content.

ACARA National Assessment Program in Information and Communication Technology (2008, 2011): Developed assessment framework, storyboards, test

	content and managed implementation of test content. OECD Programme for International Assessment of Adult Competencies (PIAAC): Developed assessment materials for the computer-delivered literacy assessment. IEA International Civic and Citizenship Education Study (ICCS) (2009): Developed test items. Australian Council for Educational Research Not-for-profit research organization
Name of employer	
Type of business or sector	
Dates	2006–2007
Occupation or position held	Teacher
Main activities and responsibilities	Taught Year 9 integrated curriculum classes. Taught Year 11 English and Philosophy classes.
Name of employer	Melbourne Girls' College
Type of business or sector	Secondary school
Dates	2004–2005
Occupation or position held	Assistant
Main activities and responsibilities	Assisted coordination of the International Federation for the Teaching of English conference.
Name of employer	Victorian Association for Teaching English
Type of business or sector	Assistant

Other Professional Activities

Current	Conduct research and development activities supported by the IEA R&D fund.
Past	Delivered workshops on the assessment of 21st century skills and framework development for the Indonesian National Assessment Program coordinated by Puspendik.

Education and Training

Dates	2001–2004
Title of qualification awarded	B.A (Hons)
Principle subjects/occupational skills covered	Literature and philosophy
Name and type of organization providing education and training	Latrobe University
Dates	2005
Title of qualification awarded	DipEd
Principle subjects/occupational skills covered	English and social studies
Name and type of organization providing education and training	University of Melbourne

Personal Skills and Competencies

Mother tongue	English
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Publications

- Fraillon, J., Ainley, J., Schulz, W., Duckworth, D., & Friedman, T. (2023). ICILS 2023 assessment framework. International Association for the Evaluation of Educational Achievement. <https://www.iea.nl/publications/icils-2023-assessment-framework>
- Schulz W., Fraillon J., Ainley J., Duckworth D. (2021) Digital Competences: Computer and Information Literacy and Computational Thinking. In: Nilsen T., Stancel-Piątak A., Gustafsson JE. (eds) International Handbook of Comparative Large-Scale Studies in Education. Springer International Handbooks of Education. Springer, Cham. https://doi.org/10.1007/978-3-030-38298-8_43-1
- Fraillon, Julian & Ainley, John & Schulz, Wolfram & Friedman, Tim & Duckworth, Daniel. (2020). Preparing for Life in a Digital World: IEA International Computer and Information Literacy Study 2018 International Report. 10.1007/978-3-030-38781-5.
- Heard, J., Scoular, C., Duckworth, D., Ramalingam, D., & Teo, I. (2020). Critical Thinking: Definition and Structure. Australian Council for Educational Research. https://research.acer.edu.au/ar_misc/38
- Scoular, C., Duckworth, D., Heard, J., & Ramalingam, D. (2020). Collaboration: Definition and Structure. Australian Council for Educational Research. https://research.acer.edu.au/ar_misc/39
- Ramalingam, D., Anderson, P., Duckworth, D., Scoular, C., & Heard, J. (2020). Creative Thinking: Definition and Structure. Australian Council for Educational Research. https://research.acer.edu.au/ar_misc/43
- Duckworth, D. (August 2019). Assessing computational thinking. In K. Cockle (Ed.), Research Conference 2019: Preparing students for life in the 21st century: Identifying, developing and assessing what matters: Proceedings and Program: 4–5 August 2019, Melbourne Convention and Exhibition Centre. (pp.78-82). Melbourne: Australian Council for Educational Research.
- Fraillon, Julian & Ainley, John & Schulz, Wolfram & Duckworth, Daniel & Friedman, Tim. (2019). IEA International Computer and Information Literacy Study 2018 Assessment Framework. 10.1007/978-3-030-19389-8.