THE UNIVERSITY OF
MELBOURNE

Melbourne Graduate School of Education

POSTDOCTORAL RESEARCH FELLOW Melbourne CSHE

POSITION NO	0045756
CLASSIFICATION	Research Fellow Grade 1, Level A
	Research Fellow Grade 2, Level B
SALARY	$87,415 to $93,830 p.a., Level A
	$98,775 to $117,290 p.a., Level B
	Level of qualification is subject to qualifications and experience
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Fixed term (1.0 FTE)
BASIS OF EMPLOYMENT	Full-time (1.0 FTE) (fixed-term) position available for 3 years
	Fixed term contract type: Research
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers, select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT **FOR ENQUIRIES ONLY**	Professor Gregor Kennedy Tel +61 3 8344 8937 gek@unimelb.edu.au *Please do not send your application to this contact*

For information about working for the University of Melbourne, visit our websites:
about.unimelb.edu.au/careers

Position Summary

The Postdoctoral Research Fellow will have primary responsibility for undertaking research in a research program of the Melbourne Centre for the Study of Higher Education (CSHE) (*Learning Analytics for Personalised Feedback and Improved Task Design to Support Student Learning in STEM*). This is a three-year Fellowship, provided by the Melbourne Graduate School of Education (MGSE), aimed at attracting excellent early career researchers who are able to show evidence of outstanding potential as an academic researcher and leader.

The Fellowship requires the candidate to undertake a substantial new research project that investigates how learning analytics can be used to optimise the learning design of digital environments for enhanced learning in STEM education. Sophisticated analyses of student interactions in digital environments can provide educators with a better understanding of students' learning behaviour, particularly of problem-solving and scientific inquiry processes in STEM education. This knowledge can potentially be used to develop new forms of student feedback, and provide staff with feedback on the effective design of learning tasks. The Postdoctoral Research Fellow will determine the most appropriate methods, techniques, and algorithms for providing feedback in digital learning environments in higher education.

The Postdoctoral Research Fellow will be expected to build an academic profile and expertise through publications and collaborations and submit further grant applications by the end of the fellowship. In addition to undertaking the proposed research, the Fellow is expected to contribute to the research and academic culture of both the Melbourne CHSE and the MGSE. The Fellow will be expected to contribute to graduate research student supervision and to take a role in research committees and associated activities.

The Postdoctoral Research Fellow would join a multidisciplinary team of researchers in the Melbourne CSHE, who undertake foundational research in the use of educational technologies for learning, teaching and assessment in higher education, and would be mentored by senior members of this research team.

PLEASE NOTE: as part of the application process all applicants are required to submit:

i)   A CV. Please ensure this includes the following information:

- a statement of the nature of the field/discipline in which you have been basing your research and your contributions to the research field and any other evidence of performance which demonstrates your contribution to the field and capacity to undertake the proposed research.

- a statement regarding the research opportunities you have had in the context of your employment situation, and any career interruption or other aspects of your career or opportunities for research that are relevant

- details of your relevant academic, research, professional and industrial experience

- A list of your significant research outputs

Your full CV should be uploaded as the 'Resumé (CV)' document in the University's online application system.

ii)   A 1,500-word outline of the proposed research, including:

a) key questions and relevance of the project within the research program b) approach c) methodology and d) expected outcomes, including intended publication and other outputs; ongoing or new collaborations and other benefits to both the scientific and broader community. *This document should be attached as a 'supporting document' in the University's online application system.*

1. Key Responsibilities

1.1 RESEARCH

▸ Meeting expectations of 'research activity' as appropriate for a Postdoctoral Fellowship;

▸ Provide project management and coordination support as required, including for research grants;

▸ Assisting with the preparation of research proposal submissions, and contribute to the writing and/or tracking of ethics applications, where required;

▸ Produce high quality publications and other appropriate outcomes arising from scholarship and research, including as sole-author or part of a team;

▸ Contribute to the intellectual debate within the Graduate School and also within the community and relevant disciplines;

▸ Contribute to teaching and learning initiatives and programs within the Graduate School as appropriate;

▸ Preparation of a DECRA application to be submitted by the end of the Postdoctoral Fellowship; and

▸ Other research and project duties as assigned by the Research team leader.

1.2 ENGAGEMENT

▸ Disseminate findings via scholarly presentations and publications, as well as through social media and active networking with key stakeholders in government, industry and the non-profit sector;

▸ Contribute to the organisation of, and actively participate in, research seminars and conferences within MGSE and the wider university; and

▸ Present research findings at national and international academic conferences as required.

1.3 LEADERSHIP AND SERVICE

▸ Where appropriate, offer expertise/contribute to supervision and Advisory Panels for Research Higher Degree students; and

▸ Liaise and engage in projects with relevant external education and community groups.

1.4 BEHAVIOURAL EXPECTATIONS

All staff are expected to maintain the following behaviours:

▸ Treat everyone equitably; act fairly with staff and demonstrate respect for diversity; and

▸ Be an effective team player who is cooperative and easily gains the trust and support of staff, peers and clients through collaboration.

2. Selection Criteria

2.1 ESSENTIAL

- A recently completed PhD degree in education, science education, psychology, cognitive science, learning sciences, data science, or a related discipline, completed in the past 5 years.

- Demonstrated expertise in and knowledge of education, particularly of how pedagogy and assessment interface with data and analytics.

- Demonstrated expertise in statistical analysis and deep analysis of complex data sets; and the ability to communicate and design visualisations of statistical analyses.

- A research track record of publications commensurate with opportunity.

- High level research skills, with demonstrated experience in conducting literature searches, preparing research summaries and systems for managing research.

- Demonstrated ability to build effective working relationships with co-researchers.

- Outstanding interpersonal and communication skills, including demonstrated capacity to translate research for academic, professional and lay audiences.

- Demonstrated ability to work independently and collaboratively in a team to meet agreed deadlines and achieve project goals.

- Excellent organisational and project management skills.

2.2 DESIRABLE

- Experience in STEM education in higher education.

- Track record in preparing grant applications.

- Previous experience organising and facilitating research with multiple stakeholders.

3. Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the University's People Strategy 2015-2020 and policies that address diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous desire to strive for excellence and reach the targets of Growing Esteem.

4.   Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

http://safety.unimelb.edu.au/people/community/responsibilities-of-personnel

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

5.   Other Information

5.1   ORGANISATION UNIT

Melbourne Graduate School of Education

5.2   BUDGET DIVISION

Our Vision:

A society in which education enables full and equitable participation.

Our Mission

Through effective collaborations, we will deliver:

- relevant, high quality, high impact research
- research-informed, clinical teacher education that develops graduates with the capacity to inspire and improve individual learning outcomes
- outstanding quality postgraduate studies for professionals.

The Melbourne Graduate School of Education (MGSE) is Australia's number 1 and among the world's finest for Education (QS World Rankings by Subject).

MGSE is a hub of high impact research and teaching. Home to a number of internationally recognised experts, we are at the cutting edge of teaching and research in our field.

Part of the University of Melbourne's Parkville campus, we are based at 234 Queensberry Street and 100 Leicester Street. Our buildings are designed specifically for graduate education students, offering a range of contemporary learning and social spaces.

Our flagship Master of Teaching is based on a clinical approach to teaching, and is a significant shift away from traditional approaches to teacher education. We also offer a range of professional development and higher degree research courses for people working in education and related professions. A large number of significant research projects are based here, and we work closely with local, national and international partners on a wide range of projects across education and related disciplines.

For more information about us, visit: education.unimelb.edu.au

5.3   THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide-range of knowledge-based industries. With outstanding

performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded.

Further information about working at The University of Melbourne is available at http://about.unimelb.edu.au/careers.

5.4 GROWING ESTEEM, THE MELBOURNE CURRICULUM AND RESEARCH AT MELBOURNE: ENSURING EXCELLENCE AND IMPACT TO 2025

Growing Esteem describes Melbourne's strategy to achieve its aspiration to be a public-spirited and internationally-engaged institution, highly regarded for making distinctive contributions to society in research and research training, learning and teaching, and engagement. http://about.unimelb.edu.au/strategy-and-leadership

The University is at the forefront of Australia's changing higher education system and offers a distinctive model of education known collectively as the Melbourne Curriculum. The new educational model, designed for an outstanding experience for all students, is based on six broad undergraduate programs followed by a graduate professional degree, research higher degree or entry directly into employment. The emphasis on academic breadth as well as disciplinary depth in the new degrees ensures that graduates will have the capacity to succeed in a world where knowledge boundaries are shifting and reforming to create new frontiers and challenges. In moving to the new model, the University is also aligning itself with the best of emerging European and Asian practice and well-established North American traditions.

The University's global aspirations seek to make significant contributions to major social, economic and environmental challenges. Accordingly, the University's research strategy *Research at Melbourne: Ensuring Excellence and Impact to 2025* aspires to a significant advancement in the excellence and impact of its research outputs. http://research.unimelb.edu.au/our-research/research-at-melbourne

The strategy recognises that as a public-spirited, research-intensive institution of the future, the University must strive to make a tangible impact in Australia and the world, working across disciplinary and sectoral boundaries and building deeper and more substantive engagement with industry, collaborators and partners. While cultivating the fundamental enabling disciplines through investigator-driven research, the University has adopted three grand challenges aspiring to solve some of the most difficult problems facing our world in the next century. These Grand Challenges include:

> ▸ Understanding our place and purpose – The place and purpose grand challenge centres on understanding all aspects of our national identity, with a focus on Australia's 'place' in the Asia-Pacific region and the world, and on our 'purpose' or mission to improve all dimensions of the human condition through our research.

> ▸ Fostering health and wellbeing – The health and wellbeing grand challenge focuses on building the scale and breadth of our capabilities in population and global health; on harnessing our contribution to the 'convergence revolution' of biomedical and health research, bringing together the life sciences, engineering and the physical sciences; and on addressing the physical, mental and social aspects of wellbeing by looking beyond the traditional boundaries of biomedicine.

> ▸ Supporting sustainability and resilience – The sustainability and resilience grand challenge addresses the critical issues of climate change, water and food security, sustainable energy and designing resilient cities and regions. In addition to the technical aspects, this grand challenge considers the physical and social functioning

of cities, connecting physical phenomena with lessons from our past, and the implications of the technical solutions for economies, living patterns and behaviours.

Essential to tackling these challenges, an outstanding faculty, high performing students, wide collaboration including internationally and deep partnerships with external parties form central components of Research at Melbourne: Ensuring Excellence and Impact to 2025.

5.5 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at http://www.unimelb.edu.au/governance