

## POSITION DESCRIPTION (ACADEMIC)

### POSITION INFORMATION

<b>Position Title</b>	Associate Professor (Data Analytics and Innovation in Education)		
<b>Faculty</b>	In the Research Centre for Digital Data and Assessment in Education (DDAiE) working with the Faculty of Education and Arts and the Institute for Learning Sciences and Teacher Education (ILSTE)		
<b>Nominated Supervisor</b>	Nominated Professor in ILSTE	<b>Campus/Location</b>	Brisbane
<b>Academic Level</b>	D	<b>Academic Career Pathway</b>	Research-focussed
<b>CDF Achievement Level</b>	2 Management (Middle)	<b>Work Area Position Code</b>	<i>#HR to assign</i>
<b>Employment Type</b>	Continuing	<b>Date reviewed</b>	April 2020

### ABOUT AUSTRALIAN CATHOLIC UNIVERSITY

Mission Statement: *Within the Catholic intellectual tradition and acting in Truth and Love, Australian Catholic University is committed to the pursuit of knowledge, the dignity of the human person and the common good.*

At ACU we pride ourselves on offering a welcoming environment for everyone. At the same time, we are a university committed to standing for something clear. We stand up for people in need and causes that matter. ACU's Mission is central to the University and informs every area – integrating the dignity of the human person, the common good, and ethical and social justice considerations into our core activities of student learning and teaching, research and service.

We are a publicly-funded university which has grown rapidly over the past few years. We're young, but we are making our mark: ranking among the top universities worldwide. We have seven campuses around Australia, more than 200 partner universities on six continents, and a campus in Rome, Italy.

We know that our people make us a university like no other. It's your values, action and passion that makes the difference. Whatever role you may play in our organisation: it's what you do that defines who we are.

We value staff, offering excellent leave and employment conditions, and foster work environments where they have the ability to grow and develop. We continue to invest in our facilities and workplaces, and actively involve staff in shaping the future direction of the organisation.

In order to be agents of change in the world, we all need to see life through the eyes of others. We believe that our role as a university is to inspire and equip people to make a difference – and that means cultivating their ability to act and think empathetically.

We hope that you might champion these values, and work with us to create a place of learning that is not only the envy of the world, but the making of it.

The structure to support this complex and national University consists of:

- Provost and Deputy Vice-Chancellor (Academic)
- Chief Operating Officer & Deputy Vice-Chancellor (Administration)
- Deputy Vice-Chancellor (Research)
- Deputy Vice-Chancellor (Education and Innovation)
- Deputy Vice-Chancellor (Coordination)
- Vice President

Each portfolio consists of a number of Faculties, Research Institutes or Directorates. The Vice President drives both the Identity and the [Mission](#) of the University. In addition, five Associate Vice-Chancellors and Campus Deans focus on the University's local presence and development of the University at the local 'campus' level.

## **FACULTY OF EDUCATION AND ARTS**

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The Faculty of Education and Arts (FEA) comprises two National Schools – the National School of Education and the National School of Arts and is recognised nationally and internationally as a leader in teacher education and educational leadership and for its rapidly rising profile in the humanities and social sciences. Operating across eight different campuses nationally and our Rome campus in Italy, the Faculty is home to a lively, multicultural community of more than 12,000 students and offers an engaging program of teaching and research for students and staff.

The National School of Education is the largest provider of initial teacher education in Australia with a strong reputation for its high quality, work-ready graduates. Adding to its traditional strengths in early childhood, primary and secondary initial teacher education, the National School of Education's disciplines reflect key strengths in the areas of early childhood, mathematics and literacy education, the arts, science and technology, educational studies, teacher professional practice, assessment, educational leadership, Indigenous education, and wellbeing and inclusive education.

These disciplines are evidenced both in the undergraduate programs and through its extensive postgraduate coursework programs with strong enrolments. The School also has a large number of students undertaking higher degree study through its PhD and EdD programs.

## **RESEARCH INSTITUTES and RESEARCH CENTRES**

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Research Institutes have been established at ACU as rigorous interdisciplinary and collaborative research environments without discipline-based boundaries, facilitating both immediate and ongoing collaborations of ACU researchers with international and national experts and enabling exceptional opportunities for innovative research to be conducted on a significant scale. This creates the potential for profound impact benefiting the research community and society as a whole.

The following Research Institutes have been established:

- Institute for Learning Sciences and Teacher Education (ILSTE)
- Institute for Positive Psychology and Education (IPPE)
- Mary MacKillop Institute for Health Research (MMIHR)
- Institute for Religion and Critical Inquiry (ICRI)
- Dianoia Institute for Philosophy
- Institute for Humanities and Social Sciences.

To build on the success of the research intensification strategy, the following Research Centres have been recently established in the areas of education, humanities and social sciences, health, theology and philosophy:

- Research Centre for Digital Data and Assessment in Education
- Gender and Women's History Research Centre
- Research Centre for Refugees, Migration, and Humanitarian Studies
- Research Centre for Social and Political Change
- Research Centre for Studies of the Second Vatican Council
- Research Centre for Sports Performance, Recovery, Injury and New Technologies (SPRINT)
- Healthy Brain and Mind Research Centre.

## **ABOUT THE INSTITUTE FOR LEARNING SCIENCES AND TEACHER EDUCATION (ILSTE)**

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The Institute for Learning Sciences and Teacher Education (ILSTE) is a national research institute hosting a team of internationally-renowned researchers and international scholars undertaking nationally-funded research studies with a range of industry-funded partners. Our research draws on both qualitative and quantitative methodologies and includes large-scale, longitudinal studies and meta-analyses. A priority focus is on research relating to policy and practice.

ILSTE's research focuses across six research programs:

- Assessment, evaluation and student learning
- Sciences, technology, engineering and mathematics in education
- Early childhood futures
- Educational semiotics in English and literacy pedagogy
- Teacher education, quality and professional practice
- Data analytics and learning interventions

Our researchers are concerned with generating and disseminating new knowledge to improve the learning outcomes of children and young people, especially those experiencing disadvantage, on the margins or at risk.

ILSTE provides a forum for researchers, scholars, policy makers and practitioners to collaborate and share evidence-based knowledge to address barriers to achievement and learning engagement faced by young people. Further information about the Institute can be found at: <http://www.acu.edu.au/ilste>

## **ABOUT THE RESEARCH CENTRE FOR DIGITAL DATA AND ASSESSMENT IN EDUCATION**

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The Research Centre for Digital Data and Assessment in Education (DDAiE) will examine digital disruption, assessment and data analytics as subjects of research, policy and practice in schooling reform and teacher education. The Centre recognises that education has the potential to transform lives, along with the recognition that new and emerging technologies are already transforming the practices and experience of education in and outside schooling: what and how young people learn and are assessed, and teachers' work and interactions with them. The matter of how such transformations are occurring and their impact is largely under-researched. The Centre will address this gap and extend ACU's research standing through generating new knowledge through research collaborations and other partnerships across researchers and with national, state-based and global education agencies (e.g., UNESCO).

The Centre will concentrate on three programs of Data/digital practices at system and school level; Data Innovation for Learning Progressions and Life Course in Teacher Education, and Digital Foundations in the Early Years.

## POSITION PURPOSE

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ACU is seeking to appoint an outstanding researcher to the new and exciting position of Associate Professor (Data Analytics and Innovation in Education) in the Centre for Digital Data and Assessment in Education working with researchers in the Institute for Learning Sciences and Teacher Education and the Faculty of Education and Arts. The incumbent will work within a high performing research team of senior, internationally recognised scholars to advance research on how data and digital practices are impacting learning, assessment design and evaluation. The successful applicant will contribute to the development of scholarship, research and/or professional activities in the Institute, consistent with the Centre's research aims and priorities. The position is aligned to the program: Data innovation for Learning Progressions and Life Course in teacher education and workforce participation. This Program provides opportunities for the successful candidate to identify their individual lines of inquiry of national and international significance and advance their writing program and related grant submissions. Access to and use of national longitudinal survey data and government administrative data will be encouraged to investigate learner growth and achievement trajectories of young people and factors that influence these trajectories.

The successful candidate will have an advanced knowledge of the state of national and international data analytics and innovation in education, as well as knowledge and experience with the use of big data, statistics and modelling and machine learning and the datafication of teachers and learners.

This position provides exciting opportunities to contribute your expertise in the areas of an expanded program in Digital Data Assessment in Education research at ACU and contribute to well above world class research excellence.

## POSITION RESPONSIBILITIES

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A number of frameworks and standards express the University's expectations of the conduct, capability, participation and contribution of staff. These are listed below:

- ACU Strategic Plan 2020 - 2023
- Catholic Identity and Mission
- Learning For Life Framework 2014-2017
- ACU Teaching Criteria and Standards Framework
- Research Quality Standards
- Academic Performance Matrices and Evidence Framework
- ACU Capability Development Framework
- Minimum Standards for Academic Levels (MSALs)
- Higher Education Standards Framework
- ACU Service Delivery Model
- ACU Staff Enterprise Agreement including provisions in relation to Performance Excellence and Academic Career Pathways.

The following two frameworks in particular are important in understanding the expectations of an academic position and the required qualifications and capability of a position holder:

- The [Academic Performance Matrices and Evidence Framework](#) which describes the performance standards in areas of academic activity.
- The [Capability Development Framework](#) which describes the core competencies needed in all ACU staff to achieve the University's strategy and supports its mission.

All academic staff are allocated workload comprising a range of academic duties/activities that fall within the following three broad areas of academic activity in line with the relevant Academic Career Pathway and Academic Level.

- Research
- Academic leadership/service
- Teaching, Curriculum Development and Scholarship of Teaching.

### Key responsibilities

Broad area of academic activity	Key responsibilities specific to this position	Relevant Core Competencies ( <u>Capability Development Framework</u> )
<b>Research</b>	<ul style="list-style-type: none"> <li>• Significantly contribute to Centre and Institute publication outputs through leading authorship in international peer-reviewed outlets.</li> <li>• Lead funding applications in the area of research speciality.</li> <li>• Lead the planning and conceptualisation of a research program. Oversee research program staff who manage research projects.</li> <li>• Provide advice and undertake advanced statistical data analysis for existing projects and preparation of reports of analysis and results and train research team in same.</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver stakeholder centric service</li> <li>• Collaborate effectively</li> <li>• Communicate with impact</li> <li>• Be responsible and accountable for achieving excellence</li> <li>• Make informed decisions</li> <li>• Coach and develop</li> </ul>
<b>Academic Leadership and Service</b>	<ul style="list-style-type: none"> <li>• Make a significant contribution to the University's research profile in the discipline and contribute to collaborative research opportunities in consultation with the Centre Director.</li> <li>• Actively contribute to the intellectual life of the Centre, Institutes, the Faculty of Education and Arts, and the University.</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborate effectively</li> <li>• Be responsible and accountable for achieving excellence</li> <li>• Make informed decisions</li> </ul>
<b>Teaching, curriculum development and scholarship of teaching</b>	<ul style="list-style-type: none"> <li>• Provide superior quality research supervision of higher degree research students as a principal supervisor.</li> <li>• Provide academic mentoring to researchers in the Institute and Faculty on quantitative or qualitative methodologies.</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborate effectively</li> <li>• Coach and develop</li> </ul>

### QUALIFICATIONS AND CAPABILITY OF THE POSITION HOLDER

This section sets out the qualifications, skills, knowledge, experience and competencies expected of the position holder, collectively referred to as 'qualifications and capability'. These are informed by the evidence and performance standards

for the relevant Academic Level and Academic Career Pathway and Academic Level drawn from the [Academic Performance Matrices and Evidence Framework](#) and the Core Competencies set out in the [Capability Development Framework](#).

Opportunities to develop capability are provided through the development programs coordinated by internal providers of professional development. See the [Training and Development website](#) for more information.

## SELECTION CRITERIA

<b>Qualifications and Capability</b>	
1.	<p>A PhD in a relevant discipline, i.e.:</p> <ul style="list-style-type: none"> <li>• Data Innovation in Education and</li> <li>• Education Research and</li> <li>• Digital Disruption in Education or</li> <li>• Data Analytics, Machine Learning, Statistical Analysis</li> </ul> <p>Experience in:</p> <ul style="list-style-type: none"> <li>• Superior research knowledge and methodological skills; demonstrated ability to utilise quantitative and/or qualitative research methodologies, including skills in using Bayesian formulation and computational estimation techniques, or statistical models, or application of predictive analytics including machine learning.</li> </ul>
<b>Research</b>	
2.	Superior research and academic achievement through evidence of outstanding research leadership and ability to capture national and international research opportunities and build research capability.
3.	Evidence of significant track record in attracting and managing competitive funding for research programs including the Australian Research Council.
4.	Evidence of research publications in high quality peer-reviewed journals and other publications including books and chapters in books with prestigious publishing houses.
<b>Academic Leadership and Service</b>	
5.	Proven superior communication skills and evidence of significant experience in contributing to and leading research teams of experienced scholars and early career researchers.
<b>Other Competencies</b>	
6.	Willingness to connect the purpose of one's work to ACU's Mission, Vision and Values.
7.	Evidence of ability to work with children and contribute to and protect their safety and wellbeing. The successful applicant will be required to hold a valid working with children clearance for the State or Territory in which the position is located.