



LECTURER/SENIOR LECTURER: QUANTITATIVE LITERACY (QL) RESEARCH LEAD

(Permanent; Full time)

Centre for Educational Assessments (CEA)

Centre for Higher Education Development (CHED)

The Centre for Educational Assessments' (CEA) mission as a department within the Centre for Higher Education Development (CHED) is to provide educational testing that contribute to access and success at the University of Cape Town and in the broader higher education and training sector. In realizing this mission, CEA develops educational tests that are reliable and valid in these higher educational contexts. Its educational measurement and learning analytics research supports and informs teaching and learning and educational policy relating to admissions (selection and placement) and throughput within these contexts.

The role of the Lecturer for Quantitative Literacy (QL) Research Lead is to develop the Quantitative Literacy tests and translate the diagnostic information from these tests into usable teaching and learning information to improve throughput, student retention and graduation. Relevant areas of specialization are Mathematics, Applied Mathematics, Mathematics and/or Statistics Education, Quantitative Literacy, Academic or Curriculum Development.

Requirements for Lecturer:

- A Master's degree (NQF 9 level) relevant to the Quantitative Literacy domain is a minimum requirement.
- At least three years' experience in teaching courses or designing curriculum aimed at the support of students in areas such as, but not exclusive to Mathematics, Quantitative Literacy, and Academic or Curriculum Development
- Evidence of a research track record in Higher Education appropriate to the level of appointment.
- Minimum of two years' experience of working in a collaborative research environment.
- Experience of the Quantitative Literacy requirements of Higher Education entry-level curricula.
- Ability to meet project deadlines in a pressured environment.
- Ability to lead and manage teams doing collaborative projects.
- Excellent command of spoken and written English.

Requirements for Senior Lecturer:

- A PhD degree (NQF 10 level) relevant to the Quantitative Literacy domain is a minimum requirement.
- At least five years' experience in teaching courses or designing curriculum aimed at the support of students in areas such as, but not exclusive to Mathematics, Quantitative Literacy, and Academic or Curriculum Development.
- An understanding of both quantitative and qualitative research methods and the most appropriate use of these.
- Evidence of a research track record in Higher Education appropriate to the level of appointment.
- Minimum of three years' experience of working in a collaborative research environment.
- Experience of the Quantitative Literacy requirements of Higher Education entry-level curricula.
- Ability to meet project deadlines in a pressured environment.
- Experience and ability to lead and manage teams doing collaborative projects.
- Excellent command of spoken and written English.

Advantageous:

- Experience of test development and measurement theory.
- Experience in secondary school mathematics education with a focus on the transitions between school and Higher Education study; student readiness issues; and curriculum reform.
- Experience in the development and/or administration of curricula or assessments in an online environment.
- A strong network of research and professional connection in the Higher Education sector in South Africa.
- Ability to engage with Higher Education academic and management staff at all levels.

Responsibilities:

The main purpose of this position is to establish a sound basis for the provision of effective Quantitative Literacy tests which meaningfully represent the purposes of the tests developed and administered by CEA and to manage the development of these tests. The responsibilities include:

- Test development, assembly and translation
Regularly reviewing and revising (when necessary) the Quantitative Literacy test specifications with respect to content and cognitive levels. Creating new tests for each academic year intake cycle, considering or adapting the base form to be used for each cycle, test data of the previous cycle, and all other review information. Reviewing test data (psychometric reports, etc.) to improve and adapt tests on an on-going basis.
- Item development and review
Liaising with subject specialists in Higher Education and teachers in Basic Education with respect to curriculum changes, challenges and specific demands that could have an impact on test requirements.
Liaising with academics actively involved in the Quantitative Literacy domain at university entry level with a view to setting up item development workshops as required, and item review workshops after each test cycle. Reviewing test information after each cycle, with a view to improving tests in the next cycle.
- Research
In consultation with the Director: CEA, Test Development Coordinator, other Research Leads, identify research topics and initiate processes necessary to carry out the required research and actively collaborate in the preparation of research papers for peer

reviewed journals as well as proposals and reports for donors, clients and institutions, and presentation materials for seminars and workshops.

- Provision of teaching and learning information

Use statistical data arising from the tests to provide diagnostic teaching and learning information to stakeholders in Basic and Higher education sectors. Coordinate and facilitate seminars at which such information can be shared in order to effect curriculum reform and better teaching and learning.

- Standard setting

In consultation with the Test Development Coordinator and Operations Manager, establish links and liaise with institutional users of NBTs to draw on the expertise of suitable academics to participate in standard setting workshops in the Quantitative Literacy domains.

This role should support that of the Test Development Coordinator in the research and development undertaken by CEA and the strategic planning of the department.

The incumbent will use data provided by test analysis to inform stakeholders on areas of concern which could lead to educational intervention at school level and within Higher Education. In addition to this there is a need for this incumbent to participate in workshops at which identified areas of concern and possible interventions would be addressed.

The annual cost of employment, including benefits is:

R 805 385 **at Lecturer Level**

R968 905 **at Senior Lecturer Level.**

To apply, please e-mail the below documents in a single pdf file to Mr Ian Petersen at recruitment02@uct.ac.za

- UCT Application Form (download at <http://forms.uct.ac.za/hr201.doc>)
- Cover letter,
- Curriculum Vitae (CV)

Please ensure the title and reference number are indicated in the subject line.

An application which does not comply with the above requirements will be regarded as incomplete.

Only shortlisted candidates will be contacted and may be required to undergo an assessment.

Telephone:	021 650 2163
Website:	http://www.uct.ac.za
Reference number:	E220425
Closing date:	01 December 2022

UCT is a designated employer and is committed to the pursuit of excellence, diversity and redress in achieving its equity targets in accordance with the Employment Equity Plan of the University and its Employment Equity goals and targets. Preference will be given to candidates from the under-represented designated groups. Our Employment Equity Policy is available at <http://www.uct.ac.za/downloads/uct.ac.za/about/policies/eepolicy.pdf>

UCT reserves the right not to appoint.