

Research Associate

Centre for Early Mathematics Learning: Children's Experiences

Job Ref: REQ220122

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

Project Description

Following a £10m grant from the ESRC, Loughborough University is seeking to appoint highly-motivated Research Associates to join the Centre for Early Mathematics Learning (CEML). The new centre will be led by Loughborough University in collaboration with academics from the universities of Bristol, Edinburgh, Oxford, Ulster, York and University College London. A range of research and professional services roles are available.

CEML aims to transform research in early mathematics education by revealing new understanding of children's early mathematical learning, designing and evaluating educational resources based on the science of mathematical learning, and working with teachers, early years practitioners and families to translate these findings to practice.

The work of the Centre will be organised across five Challenges. One of the Postdoctoral Research Associate roles will be a five-year position to work on Challenge 3. This will involve the use of Conversation Analysis and a range of other qualitative approaches to further our understanding of young children's interactions both inside and outside the mathematics classroom.

Applicants should have a relevant PhD or equivalent experience and a desire to work in an interdisciplinary centre focused on early mathematics learning.

Job Description

Job Grade: Specialist and Supporting Academic Grade 6

Job Purpose: PDRA Challenge 3: Children's Experiences

The postholder will be expected to work independently and take the lead in day-to-day management of specific research activities under the supervision of CEML investigators. In collaboration with investigators, they will design and carry out studies to:

- Explore the nature of successful mathematical learning interactions between practitioners and children in Early Years settings using conversation analysis
- Investigate the nature and characteristics of young children's experience of mathematics outside the classroom using participatory research design and methods
- Understand how Early Years professionals design curricula and learning activities to support young children's mathematics learning, in the UK and internationally, using interviews

They will be involved in data collection in pre-schools, schools and Loughborough's research labs, with the support of graduate and undergraduate research assistants. They will take the lead on analysing and interpreting the data collected, as well as preparing draft manuscripts for journal publication and presenting at national and international conferences. All centre members will contribute to impact activities.

Job Duties

- Be responsible for the day to day running of research studies.
- Work in close collaboration with the Centre's Partnership Development Manager to recruit education settings and participants and maintain positive relationships with education settings.
- Conduct research studies to address the planned research questions.
- Supervise the work of graduate and undergraduate research assistants.
- Analyse data under supervision of the investigators.
- Write up regular progress reports and present outcomes to all investigators and collaborators.
- Travel to attend meetings and make presentations to collaborators and external stakeholders.
- Prepare draft manuscripts suitable for publication in high quality academic journals.
- Attend and contribute to conferences.
- Contribute ideas for new research activities.
- Contribute to impact and knowledge exchange activities.
- Comply with ethical procedures and data protection requirements and ensure that intellectual property (IPR) agreements are not violated.
- Engage in training programmes in the University (or elsewhere) that are consistent with the needs and aspirations of the centre.
- Undertake other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

Points To Note

The purpose of this job description is to indicate the general level of duties and responsibility of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility entailed.

Special Conditions

All staff have a statutory responsibility to take reasonable care of themselves, others and the environment and to prevent harm by their acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Policy & Procedures.

All staff should hold a duty and commitment to observing the University's Equality & Diversity policy and procedures at all times. Duties must be carried out in accordance with relevant Equality & Diversity legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance at the University's mandatory courses which include Respecting Diversity and, where appropriate, Recruitment and Selection.

Organisational Responsibility

Reports to Challenge Lead, CEML Board of Directors.

Person Specification

Your application will be reviewed with respect to meeting the essential and desirable criteria listed below. Your application will be reviewed against the essential and desirable criteria listed below. Applicants are strongly advised to explicitly state and evidence how they meet each of the essential (and desirable) criteria in their application. Stages of assessment are as follows:

- 1 – Application
- 2 – Test/Assessment Centre/Presentation
- 3 – Interview

Essential Criteria

Area	Criteria	Stage
Experience	Background in psychology, education or a related discipline	1
	Experience in conducting qualitative research and expertise in conversation analysis	1,3
	Authoring original work for academic journal papers, conference papers or technical reports	1
	Demonstrated awareness of recent developments in research design	1,3
Skills and abilities	Proficiency in qualitative research methods, including conversation analysis and interviewing	1, 3
	Experience of collecting video-recordings of naturally occurring interactions	1, 3
	Expertise in conversation analytic transcription	1, 3
	Experience of managing large digital datasets ethically	1, 3
	Excellent written and oral communication skills	1,3
	Self-motivated with ability to meet deadlines	1,3
	Excellent interpersonal, and organisational skills	1,3
	Ability to write project reports and make presentations to academic and non-academic groups	1
	Knowledge of relevant Health & Safety issues	3
Training	Demonstrate evidence of having undertaken further training	1
Qualifications	PhD (or near completion)	1
Other	Commitment to observing the University's Equal Opportunities policy at all times.	3
	Eligible to work with children, an enhanced DBS check may be required.	3

Desirable Criteria

Area	Criteria	Stage
Experience	Experience conducting research in mathematics education	1,3
	Experience working with children	1,3
	Experience engaging with schools or preschools in a research context	1,3
	Working in a high-quality academic research environment	1
	Experience of supervision of research staff	1,3

Skills and abilities	Authoring original work, in the highest quality refereed academic journals	1
	A strong publication track record	1

Conditions of Service

The position is full-time and fixed-term until 31 May 2027. Salary will be on Specialist and Supporting Academic Grade 6, £31,406- £40,927 per annum, at a starting salary to be confirmed on offer of appointment. The appointment will be subject to the University's Terms and Conditions of Employment for Grades 6 and above staff, details of which can be found [here](#).

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies which can be found [here](#).

The University offers a wide range of employee benefits which can be found [here](#).

We also offer an on-campus nursery with subsidised places, subsidised places at local holiday clubs and a childcare voucher scheme (further details are available at: <http://www.lboro.ac.uk/services/hr/a-z/childcare-information---page.html>)

In addition, the University is supportive, wherever possible, of flexible working arrangements. We also strive to create a culture that supports equality and celebrates diversity throughout the campus. The University holds a Bronze Athena SWAN award which recognises the importance of support for women at all stages of their academic career. For further information on Athena SWAN see <http://www.lboro.ac.uk/services/hr/athena-swan/>

Applications

The closing date for receipt of applications is **10 March 2022**.