



Post Title	Research Assistant
Unit	Centre for the Advancement of STEM Teaching & Learning (CASTeL)
Project	Improving Gender Balance in Ireland
Funding Agency	Science Foundation Ireland
Post duration	Fixed Term Up to 5 months (full-time or part-time)

Introduction

Dublin City University (www.dcu.ie) is a research-intensive, globally-engaged, dynamic institution that is distinguished by both the quality and impact of its graduates and its focus on the translation of knowledge into societal and economic benefit. DCU prepares its students well for success in life, and in the workplace, by providing a high-quality, rounded education appropriate to the challenges and opportunities of the 21st century. Through its mission to transform lives and societies through education, research and innovation, DCU acts as an agent of social, cultural and economic progress. As Ireland's University of Enterprise, it is characterized by a focus on innovation and entrepreneurship and a track-record of effective engagement with the enterprise sector. Excellence in its education and research activities has led to its consistent ranking in the top 50 of the world's young universities (QS Top 50 under 50).

Centre for the Advancement of STEM Teaching & Learning CASTeL

The Centre for the Advancement of STEM Teaching & Learning (CASTeL), at Dublin City University, is multidisciplinary research team focussed on enhancing science and mathematics education at all educational levels, supported by evidence-based research and contributing to international good practice. CASTeL members, comprising of scientists, mathematicians and educationalists from Dublin City University (DCU)'s Faculty of Science and Health and Institute of Education, lead and participate in formal and informal STEM education projects, nationally and internationally.

Institute of Physics (IoP) in Ireland

The Institute of Physics in Ireland is a scientific membership organisation devoted to increasing the understanding and application of physics in Northern Ireland and the Republic of Ireland. It has over 2000 members, and is part of the Institute of Physics (IOP). The Institute of Physics has a world-wide membership of over 50,000 and is a leading communicator of physics-related science to all audiences, from specialists through to government and the general public. Its publishing company, IOP Publishing, is a world leader in scientific publishing and the electronic dissemination of physics. IOP in Ireland has a significant record in working to support the teaching and learning of physics by the provision of workshops, conferences and resources much of these in conjunction with the Professional Development Service for Teachers. IOP has developed a number of programmes to address issues around the low uptake of physics in schools by girls. The Improving Gender Balance project will form a part of other IOP gender projects in England and Scotland. IOP has also worked closely with CASTeL on a number of other educational and public engagement projects.

Project Background

Improving Gender Balance in Ireland

This research study aims to examine the engagement and retention of students, particularly girls, studying physics to Leaving Certificate. This study follows on from two other “Improving Gender Balance” pilot projects conducted by the Institute of Physics (IoP) in England and Scotland that have focused on increasing the numbers of girls participating in physics. This study will be carried out in collaboration with six Irish second level schools over the next two years. This research is conducted in partnership with the Institute of Physics (IoP) in Ireland and has received funding support from Science Foundation Ireland (SFI) and endorsement from the National Council of Curriculum and Assessment (NCCA).

This project aims to take a holistic approach to changing students’ experience with physics in order to encourage more students, especially girls, to choose to take it. By working with teachers, schools and students to change perceptions of who can study science and tackle the inequities that prevent students from engaging in physics, this project will promote the importance of STEM education in student’s lives and, through the project’s work with physics teachers, support STEM education itself. The uptake of physics by girls in Ireland remains stubbornly low at school level with only about 25% of the Leaving Certificate cohort being female. This imbalance continues through all levels of study and into the wider workplace, representing a significant loss of science capital to the country and, on an individual level, indicating that many women are not fulfilling their potential in this area. This project aims to optimize students’ experience with science in their first three years of secondary school and ensure that all students are able to make an informed and unbiased choice around physics. In order to achieve this aim, the project will work closely with teachers, students and other influencers (parents, school senior management etc.) to provide a holistic approach to addressing gender in physics and STEM education. By taking this whole school approach, the project will ensure that the wider school community is working in concert to create an environment that is encouraging for all. Activities will be supported by existing examples of excellent practice and resources made available from the IOP and CASTeL, both of whom have significant experience in this area, developed through related successful projects.

Research Assistant

We wish to engage a research assistant on a fixed term contract basis (can be offered on a full-time or part-time basis) to the DCU team working on Phase II of this Improving Gender Balance project. Phase one of the project engaged with seven secondary schools over 2017-2019. This second phase will engage a new cohort of twenty-one secondary schools in the Dublin/Leinster area over a period of five months up to December 2019, through a variety of activities including, teacher professional development, provision of classroom resources, careers workshops, workshops to build student confidence and resilience.

The Research Assistant (RA) will report to the project Principal Investigator Dr. Eilish McLoughlin. The duties and responsibilities attaching to the post include, but are not restricted to the following:

Principal Duties and Responsibilities

- Liaising with school management and teachers.
- Preparing and ordering project resource materials.
- Coordinating and delivering a range of school-based workshops.
- Supporting the evaluation of the project
- Preparing dissemination outputs from the project - publications, reports, presentations.

Desired Skills and Experience

Applicants for the post must hold an honours degree (NFQ Level 8) in a relevant Science/Science Education discipline and should demonstrate at least one year's relevant experience. It is desirable that the candidate has a second level teaching qualification and a good understanding of the second level education system. Demonstration of awareness of unconscious bias and gender issues in STEM education is desirable. The position is subject to the candidate being Garda Vetted.

Key Skills

- Excellent written and oral proficiency in English
- Excellent written and verbal communication and interpersonal skills
- Ability to work in a team and to take responsibility to contribute to the overall success of the team
- Ability to travel to schools and engage sensitively with a range of stake holders including students, teachers, senior management and parents
- Ability to present and address a large audience with confidence

Experience

The following are all desirable:

- Experience of teaching science in a secondary school setting
- Understanding of how Irish secondary schools operate and the regulations and requirements that bind them
- Experience of qualitative and quantitative evaluation
- Awareness of the issues of gender imbalance in subjects at school (particularly physics) and of the causes, effects and influences of gender stereotyping and how to counter them

Salary Scale: *€22,109- €34,612 per annum (Research Assistant Level 1)

**Appointment will be commensurate with qualifications and experience and will be made on the appropriate point of the salary scale, in line with current Government pay policy.*

Application Closing Date:

3rd July 2019

Informal Enquiries to:

Dr. Eilish McLoughlin, Associate Professor, Director CASTeL, Dublin City University E-mail:

Eilish.mcloughlin@dcu.ie Phone: +353 (0)1 700 5862

Note: Please do not send applications to this email address, instead apply as described below.

Application Procedure

Application forms are available from the DCU Current Vacancies (open Competitions) website at <http://dcu.ie/hr/vacancies/current.shtml> and also from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0) 1 700 5149

Applications should be submitted by email to hr.applications@dcu.ie or by Fax to +353 (0)1 700 5500 or by post to: Human Resources Department, Dublin City University, Glasnevin Campus, Dublin 9.

Please clearly state the role you are applying for in your application and email subject line, as follows:

Job Ref #RF1240 Research Assistant CASTeL

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