



SFI Public Service Fellowship 2023

1. Name of Governmental Department or Agency
Geological Survey Ireland, Dept. of the Environment, Climate and Communications.
2. Title of the Project
GS18 Audit of Geoscience inclusion in the Irish Curriculum, both at Junior Cycle and Senior Cycle
3. Description of the Project
<p>Geoscience subjects are part of Geography and Science at Junior Cycle level and in Geography at Cycle level. They should also be included in the new Climate Change and Sustainable Development subject at Senior Cycle (Specification due in 2023). An audit of the provision for Geoscience topics and teaching across Secondary School teaching is required to examine the level of content included in the curriculum, the quality of content, and the availability of resources for teachers. The need for this is due to the reduction in numbers taking third level geoscience qualifications in Irish Universities at a time of Climate Crisis when more rather, than fewer scientists, who understand the Earth and Earth systems, are needed.</p> <p>The project would provide a solid basis across all geoscience organisations, including Geological Survey Ireland, Institute for Geologists in Ireland, and SFI-funded iCRAG, for the research-informed development of teaching resources, recommendations for curriculum adjustments, and teacher training. These organisations are all currently working of assisting teachers and students, but their work would benefit from a strategic and co-ordinated approach based on a comprehensive review of the curriculum.</p>
4. Project Scope
<p>The aim of this project will be to review the geoscience elements in the Irish Curriculum as described by the NCCA. Geoscience elements include geology, natural resources, sustainable development as related to natural resource management, water resources, changes in landscape in response to climate change, and all related topics. This review will cover the curriculum for the related subjects at Junior and Senior Cycles, but it could also look at the guidelines for Transition Year teaching as we know teachers and students have the freedom to look at topics related to climate change in this year. As comparison review of other curricula from other countries could be used to provide recommendations of good practice, if appropriate.</p> <p>The Fellow will primarily work within the Communications and Education Unit of Geological Survey Ireland, however there will be opportunity to engage will all programmes across the organisation. As a division of the Department of the Environment, Climate and Communications, the Fellow will also have an opportunity to engage directly with staff in collaborating national organisations (e.g.</p>

agencies and other government offices), academic partners and within DECC (including policy development, research, communications units etc).
5. Skills/Expertise Required
Demonstrated knowledge and/or experience of pedagogy, demonstrated writing skills, ability to synthesise information from multiple disciplines, some background in geoscience or environmental sciences would be helpful.
6. Expected Outputs of Project
<ul style="list-style-type: none"> • Comprehensive review of geoscience elements in the Irish curriculum at Junior Cycle and Senior Cycle and Transition Year guidelines in Ireland, and comparisons to similar curricula in Europe and globally. • A review/report to guide a strategy for Geological Survey Ireland for the future to improve training and resources for teachers to teach the geosciences and thus encourage more students to follow these careers at this critical time. • Report with recommendations for the Irish curricula to address the challenges of climate change and natural resource management as related to geoscience. • Recommendations for Irish geoscience/ science organisations on how teachers and the current curriculum could be assisted through teaching resource development, workshops, case studies. • Recommendations for the development of teacher CPD activities or short courses to enhance geoscience teaching and learning.
7. Working Arrangements
Ideally would be hosted in Geological Survey Ireland offices (Citywest and/or Booterstown), but flexible offsite/working from home arrangements available. It would also be useful if they could attend relevant events, conferences etc (costs can be covered)
8. Expected Timeline
Six months full-time.
9. Contact Details
Dr Siobhán Power, Team lead for Communications and Education programmes in Geological Survey Ireland.
Dr Aoife Braiden, Geological Survey Ireland Research Manager.