

Steps Towards Positive Change in the Geosciences: Inspiring Girls into Geoscience Scotland

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ATKINS



1 INTRODUCTION

The School of Geographical and Earth Sciences (GES), University of Glasgow, is home to Girls into Geoscience (GIG) Scotland (Section 2), a branch of the UK-wide grass-roots initiative launched in 2014 at the University of Plymouth. It aims to increase the visibility and inclusivity of geosciences as a subject for young people (ages 14-17) to study and pursue careers (Fisher, 2020).

Here we present insights into the positive impacts of GIG Scotland and virtual GIG events from participant survey data (2019-2021). We share perspectives from both current students and GIG Scotland staff across GES involved in the events and reflect on the importance of female role models in addressing gender imbalance in the geosciences (Section 3). Planning for a hybrid GIG Scotland event in 2023 is currently underway, with hopes that these initiatives continue to stride towards positive change in the geosciences (Section 4).

2 THE STORY SO FAR

GIG events bring together high school pupils (S5 & S6), the GIG Scotland team consisting of members from GES (from PhD students to professional staff), and women from industry, government bodies, and across academia to highlight and promote the roles geoscientists play in our society. The first GIG Scotland event took place in 2019, consisting of interactive talks, hands-on workshops, and a visit to the Hunterian Museum (Figure 1).

The first GIG Scotland event took place in 2019, consisting of interactive talks, hands-on workshops, and a visit to the Hunterian Museum. As a response to the pandemic, online UK-wide events took place in 2020-21 with GIG branches from Scotland, Plymouth, Wales, and Ireland collaborating to deliver inspiring speakers, workshops, and virtual fieldtrips, providing an insight into the wide variety of exciting careers and opportunities available in the field.



Figure 1. On Campus GIG Scotland activities

4 NEXT STEPS...

GIG SCOTLAND 2023

The next GIG Scotland 2023 takes place in the School of Geographical and Earth Sciences on June 16th, and brings together industry professionals and academics in geoscience to inspire the next generation of geoscientists.

FIND OUT MORE:

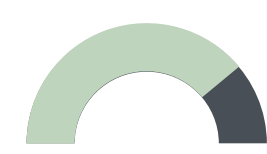
@GIG_Scotland @girlsintogeosciencescotland

3 STEPS FORWARD...

Underrepresentation of women is well documented in the geosciences (Mattheis et al., 2022; Pico et al., 2020) with geoscience subjects being recognised as some of the least diverse of all STEM fields (Mattheis et al., 2022; Gonzales & Keane, 2020).

Due to a lack of geoscience curriculum and exposure in schools across Scotland, there is an increasing responsibility of geoscience departments to enhance the recruitment and retention of students, particularly for young women and underrepresented groups (Sexton, et al., 2018). Creating a welcoming environment and addressing the negative preconceptions of geoscience is key to promoting change. Our survey data (2019-2021) suggests these events have a big impact on the visibility of opportunities and

MAKING A DIFFERENCE



78% of participants responded that they planned to study a geoscience field (e.g. Geology, Planetary Science, Geotechnical Engineering) after the event.

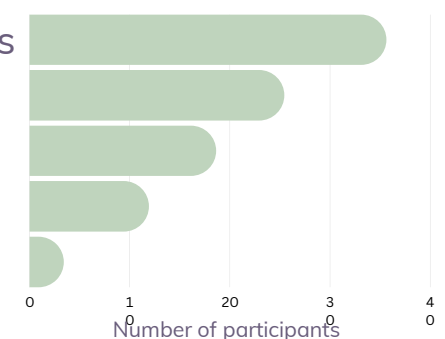
POSITIVE ROLE MODELS



67% of participants responded that career talks and hearing personal stories and experiences was the most enjoyable part of the day.

What participants valued most at the 2021 event:

Interacting with inspiring female geoscientists
Building their understanding of geoscience
The virtual activities (workshops & field trips)
Insight into University
Accessibility of the event



- 2021 participant

"I liked how it gave an insight on the different careers available in both geography and earth science and that there is a group of women that are breaking the stereotypes that science-based jobs are only for men, which gives me hope for the future"

"[I enjoyed] listening to brilliant and accomplished women in the field speak confidently and passionately about topics in their field. The overwhelming majority of professors and professionals I encounter in geoscience (and STEM in general) are male, so interacting with women makes me feel included and welcome."

- 2021 participant.

"Girls into Geoscience has been one of my most enjoyable outreach contributions so far. I delivered a session online during the pandemic from BOSCORF, the UK's deep sea sediment core store, and took the students into the collection, and talked them through some of the recent science stories revealed by deep sea mud. I had a lot of questions, and even some follow up research with a new colleague as a result of GiG and would encourage anyone interested to take part."

- Dr Millie Bompard, PDRA, & GIG Workshop Leader.

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