

Institutional initiatives in professional scientific ethics: three case studies

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The
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-serving science & profession

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My name is Edmund Nickless and I am the Executive Secretary of the Geological Society of London. I am also a Board member of the UK Science Council and of the AGI working group on ethical guidelines.

Outline

- Why should ethical concerns matter to professional bodies?
- Diversity, equality and inclusion
- Linking ethical and professional behaviours
- Styles of leadership – what works best?



This is what I propose to cover

- What is the case?
- What do we mean by D, E & I?
- What effect will it have?
- How do we make it happen?

Geoethics and the profession - why does it matter?

- ‘Doing the right thing’ – a profession open to all
- ‘The geoscience workforce’ – current and future skills shortages
- ‘A plurality of scientific views’ – nurturing dissenting voices



Why does it matter? Putting aside ‘it’s a good thing’ (heart), there are cogent business reasons (head), including

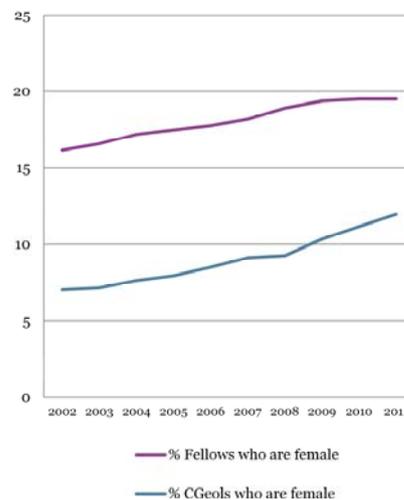
- Recruiting and retaining membership
- Membership should reflect broader society
- Existing and future skills shortages
- Wish to attract the most able into science
- There is strength in attracting diverse views, cultures and experiences

GSL membership

- Membership does not mirror UK population, which is 51% female, 13% Black and Minority Ethnic (BME)
- We know about gender of our membership, but not (yet) ethnicity, disability, etc



Proportion of female Fellows and CGeols, 2002-2011



In the language of D,E & I we are embarked on a journey.

That journey needs long term commitment - at least 10 years to embed changes of attitude.

It will take a least that time for those presently at university to significantly alter the diversity balance within the GSL Fellowship.

And it will be 15 to 20 or more years before those presently at school begin to come thorough into the geoscience workforce.

So it a long term commitment and the most difficult part is beginning the journey.

University student intake

- 13.7% of UK-domiciled physical science undergraduates at UK universities are BME (compared with 16.5% of 16-24 year olds in the UK)
- 11.7% of physical science undergraduates declare that they have a disability
- Numbers for individual science subjects (e.g. geoscience) not known



So looking at who are members are and from where they come:

Those wishing to be members of the Society must have a degree in geology or a cognate subject.

Just under 14% of students whose permanent address is in the UK are enrolled on undergraduate courses or programmes in physical science.

however 16.5% of 16 – 24 year olds on the UK come form BME groups. So there is underrepresentation.

Just under 12% of undergraduates in the physical sciences decalre they have a disability.

UK Science Council: Declaration on Diversity, Equality and Inclusion

- Signed by 16 scientific societies, October 2014...
- ...including Geological Society of London
- 22 societies now signed up
- The next generation of UK scientists
- Being more welcoming to all



I mentioned that I am a member of the UK Science Council Board. The Science Council is an umbrella body bringing together 41 organizations concerned with the professional practice of science, from the Association of Clinical Biochemistry and Laboratory Medicine to The Organization of Professionals in Regulatory Affairs.

The Preamble of the Science Council Declaration of D, E & I says:

“By promoting equality, diversity and inclusion the Science Council and its member bodies will create greater opportunity for any individual to fulfil their scientific potential, irrespective of their background or circumstances. In so doing it will also help science to better serve society by attracting the widest possible talent to the science workforce and fostering a greater diversity of scientific ideas, research and technology.

The Science Council is committed to widening participation in science education and the workplace. To this end the Science Council and its member bodies declare a commitment to promote equality, diversity and inclusion throughout their communities and challenge prejudice and discrimination. This will require leadership from the highest level in the Science Council and its member bodies. As a leading voice in science and the application of science, the Science Council will therefore seek every opportunity to be proactive in promoting and communicating this vision to educators, employers, policy makers, opinion formers and other publics.”

GSL - putting the declaration into practice

- A decade-long transformation
- At the heart of our membership, education and outreach activities
- Working with other Science Council members, and the wider geoscience community



So as a signatory to the Science Council Declaration what are we in the GSL doing?

A decade long programme of change reflecting on such questions as

Are we welcoming?

Are we open to all who satisfy the requirements of membership?

Do we recruit from all social categories, backgrounds and ethnic groups?

Are we inclusive or the preserve of a few?

Do we attract the best?

Are we representative of civil society, of the university population? AND

THE ANSWER TO THAT IS NO. WE DO NOT HAVE THE FIGURES BUT LESS

THAN 5% OF THE MEMBERSHIP IS FROM BME GROUPS

First steps

- Owned by Council
- Diversity Champion on Council, working with CEO
- All staff and committees involved
- Monitoring diversity of the membership – ethnicity, disability, sexuality, etc
- Launched 1 February – 550 responses so far



So the Science Council Declaration sets out some actions on those organisations that sign up:

- i. Appoint a board level diversity champion to work with the senior executive staff member to be accountable for improving practice and communicating our diversity strategies to our staff, membership and other stakeholders;
- ii. Planning and implementing a programme of work to embed the principles of equality, diversity and inclusion into our current organisational policies, practices and behaviours;
- iii. Measuring, assessing and reflecting on our progress annually; **MONITORING**. We know date of birth and gender but no other demographic information.
- iv. Sharing these outcomes with the Science Council through joint learning and sharing good practice.

AGI: Guidelines for Ethical Professional Conduct

- Approved 13 April 2015
- Links professional and ethical principles and behaviours
- Honesty, integrity, accountability
- Science at the service of society



Preamble:

“Geoscientists play a critical role in ethical decision-making about stewardship of the Earth, the use of its resources, and the interactions between humankind and the planet on which we live. Geoscientists must earn the public’s trust and maintain confidence in the work of individual geoscientists and the geosciences as a profession. The American Geosciences Institute (AGI) expects those in the profession to adhere to the highest ethical standards in all professional activities. Geoscientists should engage responsibly in the conduct and reporting of their work, acknowledging the uncertainties and limits of current understanding inherent in studies of natural systems. Geoscientists should respect the work of colleagues and those who use and rely upon the products of their work.”

Identifies behaviours. What is expected of a geoscientist as

an individual - honesty, integrity and accountability;

a member of the professional and scientific community – science at the service of society.

AGI: Statement on Access and Inclusion

- An aspect of being inclusive and welcoming to diverse groups
- Removing barriers to participation by those with disabilities and impairments
- Draft document now under discussion



Preamble to the statement, presently in draft:

“The member societies of the American Geosciences Institute (AGI) are committed *to enabling educational and career opportunities to all geoscientists through proactive efforts that engage individuals with disabilities and reduce barriers to full inclusion.*”

By:

- Developing and promote in all learning environments,
- increasing participation and support retention of geoscientists who live with disabilities in academic communities, our professional organizations and the workforce.
- Promote accessible pathways for students with disabilities to transition into geoscience careers.
- Promote full participation and integration in employment and professional development opportunities.

REALISING POTENTIAL OF THE INDIVIDUAL

And the image here is of an ACCESSIBILITY field trip during the GSA annual meeting in Vancouver last October. It can be done.

GSL conference: access to fieldwork

- ‘Confronting barriers to inclusion: opening the gate to accessible fieldwork’, 26 June, London
- Awareness raising
- Fieldwork leaders may not be aware of participants’ disabilities – which may not be visible



And to raise awareness, we will follow-up with a discussion meeting in London on 26 June working with colleagues in North America and aiming to attract an audience from UK academia and the larger employers of geoscientists.

Encouraging a 'culture of disclosure'

- We ask 'Do you have any dietary requirements?'
- Could we also ask... 'Do you have any physical or mental disability?'
- Are we embarrassed by disability?
- An individual characteristic like any other...



How do we break down barriers?

We ask about dietary requirements? Do we ask those attending meetings about physical or mental impairment? Should we?

AGU: Scientific Code of Conduct and Professional Ethics

- A well-intentioned initiative
- Long, detailed, prescriptive...
- ... so, will anybody take any notice?



What are others doing? Where is AGU in this? AGU has a 21-page document called a "Scientific code of conduct and professional ethics".

Its a dense, visionless 21-page document, full of process about misconduct and dealing with complaints, quite unlike the inspiration for its preparation, a memorandum issued in March 2009 by President Barack Obama in which he stated:

"Science and the scientific process must inform and guide decisions of my Administration on a wide range of issues, including improvement of public health, protection of the environment, increased efficiency in the use of energy and other resources, mitigation of the threat of climate change, and protection of national security."

Leadership styles - what will work best?

- How can learned and professional bodies encourage ethical and inclusive behaviour?
 - Issue a code?
 - Develop guidelines?
 - Share best practice?
 - Encourage a change of culture?
- Enforcement or encouragement?



What works best?

We might all agree that the images here of Mahatma Gandhi, Joseph Stalin, Margaret Thatcher, Martin Luther King and Helen Suzman are of a contrasting leadership styles.

Who and where are the influencers, the leaders within our community? My suggestion is it is us, each and every one of us, working through our membership of the learned and professional bodies of which we are members. So how are we to influence the leaderships of those organisations and what will they do. Lead by example? Enforce or encourage?

Geoscience communication

- Are we welcoming?
- Are we seen as open-minded, accessible?
- Do we welcome diverse scientific views?
- How can we challenge preconceptions of 'what geologists are like'?
- How can we break down barriers?



How do we communicate?

Thank you!

Questions?

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Useful links

<http://www.sciencecouncil.org/content/diversity-equality-and-inclusion>

<http://www.americangeosciences.org/policy/american-geosciences-institutes-guidelines-ethical-professional-conduct>

<http://www.geolsoc.org.uk/diversity>

