



A framework for action in scientific publishing

Improving inclusion and diversity
in the chemical sciences

Background and purpose

Background and purpose

This framework for action has been developed by the Royal Society of Chemistry with the aim of encouraging progress on inclusion and diversity in scientific publishing. It is primarily intended as a tool for use by editorial decision-makers to help increase inclusion and diversity amongst editors (both RSC editorial staff members and our external editors), reviewers and authors.

Our framework was developed in collaboration between RSC Publishing and RSC Inclusion and Diversity teams. The idea of a framework specifically for scientific publishing was inspired by the Diversity and Inclusion Progression Framework for Professional Bodies, published in 2016 by the Royal Academy of Engineering and the Science Council.

The format and content of our framework were informed by a series of one-to-one interviews with authors, editors and reviewers. This was overseen by an RSC staff working group, and by an external advisory group of authors, editors and reviewers. The end result is a framework which is new and bespoke to scientific publishing.

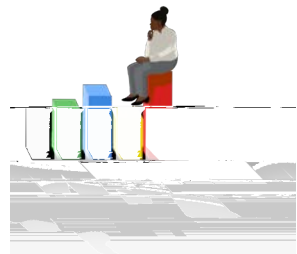
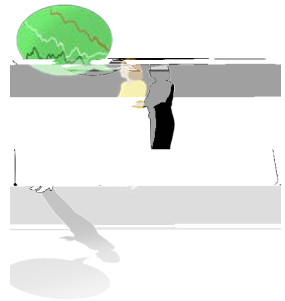
We define:

- 'inclusion' by people feeling that they belong in the world of chemical sciences;
- 'diversity' by anything that can make us different from others. This includes (but is not limited to) demographic background

This framework maps out the steps required to improve outcomes on inclusion and diversity at all stages of the scientific publishing process,

Framework contents

Part one of the framework is called Building the Foundations. The content has been

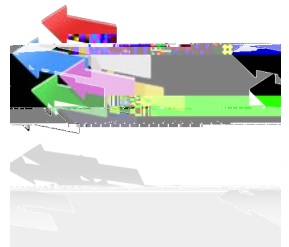


Part two of the framework is called Opportunities for Action. This has been developed to help senior leaders, editors and editorial boards implement specific interventions designed to make progress on inclusion and increase the diversity of reviewers, editorial decision-makers and authors in scientific publishing.

○ Opportunities for action – overview

Increasing diversity

Our data^{2,3} show differences in the likelihood of article acceptance depending on the gender of authors, reviewers and editors. Notably, women are at a disadvantage compared to men when disseminating the research⁴. One of the opportunities for action to address this is to focus on increasing the diversity of authors, reviewers and editors.



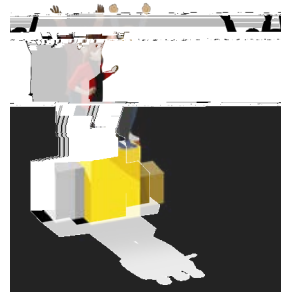
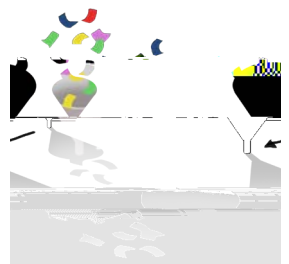
Addressing bias

Our data^{2,3} show that there are subtle differences in decision-making by reviewers and editors depending on gender at each stage in the publishing process. The same is expected in relation to other demographics such as geography. Increasing inclusion and diversity in publishing requires action to mitigate both the risk and the impact of bias in decision-making. The actions in this section respond specifically to RSC evidence.



Changing processes

Data published by RSC show that there are subtle differences in decision-making by reviewers and editors which impact on authors at each stage in the publishing process. Alongside action to mitigate both the risk and the impact of bias in individual decision-making, there are also changes that may be made to long-established processes in scientific





Making
the case

Establishing
leadership

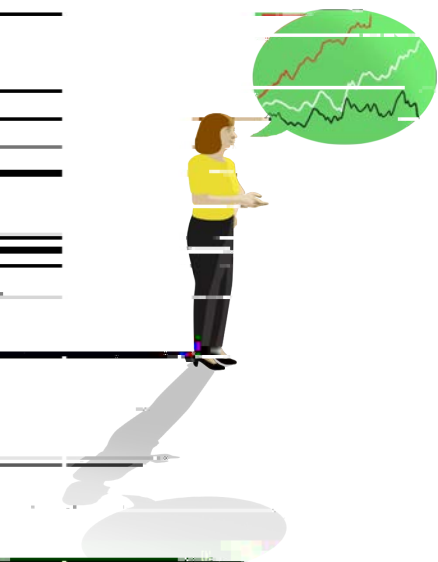
Defining
the problem

Establishing
accountability

Building the foundations

Making the case

Increasing inclusion and diversity in scientific publishing contributes to the quality and innovation of research, and inspires and attracts the next generation of chemists. ² However, conversations with authors, editors and reviewers suggest that not all of those involved in scientific publishing are convinced there is a need for change. Taking the steps in this section will make a targeted case for action.





Initiating

Identify the key decision-makers and influencers who need to understand and be convinced by the need for action on inclusion and diversity in scientific publishing.

Ask them about the kind of arguments that they find most persuasive, and about their concerns and any resistance to taking action on inclusion and diversity in publishing.

Review examples of the case for change on inclusion and diversity published by other journals, science bodies, publishing companies, scientific organisations and other sectors of interest, as well as the RSC's own overarching case⁴.



Establishing leadership

Any significant change on inclusion and diversity requires the influence, support and engagement of the most senior leadership in an organisation. The steps in this section make sure that the commitment of senior leaders to change is clear to authors, reviewers and editors.



Initiating

Views of senior leaders need to be taken into account in developing a compelling case for increasing inclusion and diversity in scientific publishing. Make sure that any case has been endorsed and championed by the RSC Publishing Board and editorial boards (also see 'Making the case').

Develop a clear ambition for inclusion and diversity in scientific publishing, agreed by RSC senior leaders. Communicate this vision alongside the case for change.

Identify at least one named individual on the RSC Board of Trustees to champion on inclusion and diversity in scientific publishing.

Developing

Ensure inclusion and diversity are integrated into the strategic plans and business priorities for RSC Publishing.

Make sure a plan of action to deliver on the vision and ambition for inclusion and diversity in RSC Publishing is agreed by RSC senior leaders.

Include in the plan of action the development of inclusive leadership skills and behaviours for RSC senior leaders and members of governance.

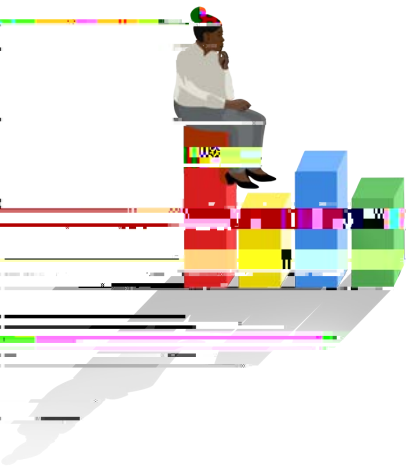
Engaging

The organisation's performance on inclusion and diversity in scientific publishing must be measured, monitored, reported to and regularly discussed by RSC senior leaders and governance.

Secure the commitment of RSC senior leaders and governance to influence and form partnerships with other scientific publishers, to scrutinise processes on inclusion and diversity and to share learning.

Defining the problem

Even where a compelling case for action has been developed, not everyone shares the same understanding of what the specific 'problem' of inclusion and diversity in scientific publishing is that needs to be addressed. The steps in this section help the user to define the problem and identify priorities for action.



Defining
the problem

Initiating

Ensure RSC Publishing Board and all editorial boards are clear on their overall responsibility and accountability for progress on inclusion and diversity.

Define the specific responsibilities and accountabilities on inclusion and diversity for different groups.

Developing

Define the specific responsibilities and accountabilities on inclusion and diversity for individual editors, and other publishing staff.

Make sure editorial board performance on inclusion and diversity is routinely measured, monitored and reported to RSC Publishing Board.

Engaging

Define any explicit responsibilities and accountabilities on inclusion and diversity for reviewers.

Regularly communicate accountabilities and responsibilities on inclusion and diversity both internally and externally.



Opportunities for action

Increasing
diversity

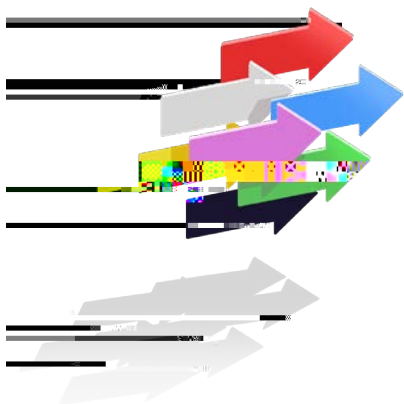
Addressing
bias

Changing
processes

Setting
standards

Increasing diversity

Our data ^{2,3} show differences in the



Developing

Develop a plan to demystify and communicate the publishing process to new authors, targeting those from under-represented groups.

Review and revise as necessary the identification, invitation and appointment process for new reviewers to make sure appointments are made from the widest possible talent pool.

Develop a plan to routinely monitor and report on the diversity of authors, reviewers and editors.

Engaging

Review and revise as necessary the process by which authors are encouraged and commissioned, to ensure diversity is taken into account in addition to – not in place of – scientific excellence.

Develop a plan to routinely monitor and report on the diversity of authors, reviewers and editors.

Addressing bias

Our data ^{2,3} show that there are subtle differences in decision-making by reviewers and editors depending on gender at each stage in the publishing process. The same is expected in



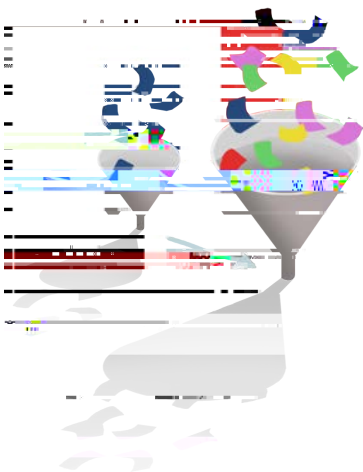
 Engaging

Issue regular and routine reminders to reviewers and editors on the impact of unconscious bias in decision-making.

Discuss and agree both individual strategies and a collective plan to address bias with the full editorial team.

Changing processes

Data published by RSC ^{2,3} show that there are subtle differences in decision-making by reviewers and editors which impact on authors at each stage in the publishing process. Alongside action to mitigate both the risk and the impact of bias in individual decision-making, there are also changes that may be made to long-established processes in scientific publishing. These steps identify potential alternative processes.









Developing

Working with key stakeholders, develop a shared understanding of the meaning of 'inclusive behaviour' and 'inclusive culture' in scientific

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