

Global perspectives and diverse representation in chemistry education

Last reviewed: January 2025

Summary

Teaching chemistry with stories, contexts enriches learning for students and fosters a connection to a subject that is conceptually rich and can therefore sometimes seem abstract. The use of contexts helps students understand how chemistry is applied in the real world, both locally and globally. It helps students to understand the relevance of the ideas studied and how the discipline is evolving, to develop scientific literacy, and to appreciate what chemistry brings to our society.¹ But students should also see what society brings to chemistry the diversity of the people that carry it out and who introduce new viewpoints, fresh ideas and different ways of thinking.¹¹ Representation and inclusivity in chemistry education are critical to the learning experience and will help to ensure that pathways in the chemical sciences are open and attractive to all.

From an inclusion perspective, what matters when we tell the story of science?

• Representation A good chemistry education effectively portrays the practice of science,

Often a

, e.g. whether to follow a chemistry pathway at university, is strongly shaped by the alignment between their identity and that discipline.¹

What are the issues?

• Chemistry curriculums contextualise scientific discovery with examples of scientists that lack

What are we calling for?

- More diverse exemplification of scientist contributions in chemistry curriculums.
- Increased global perspectives in the chemistry curriculum, to show how a diverse society participates in science and delivers innovative solutions that make a difference to lives locally and globally.

What does this look like in practice?

Gobal perspectives

- In the course of their studies young people are regularly exposed to more diverse global perspectives, through examples of both historic and contemporary contributions from a wider range of nations, as well as situated knowledge² and practices of a wider range of communities.³
- Contemporary science developments are presented as collaborative efforts involving intersectoral, interdisciplinary and intercultural working within diverse teams. ^{vii} Better cultural contextualisation will help shape prepare them for a potential future in chemistry that w (p)-4 (In580.23fd(for)TjETQrtTT1 12 Tf372.91 550.0