Editorial

Fiona Williams

This issue brings together a range of timely and thought-provoking articles that address both enduring and emerging challenges in science education.

Focusing on student performance, Jennie Golding draws upon the latest findings of the Trends in International Mathematics and Science Study (TIMSS) for year 9 students in England. In two companion articles, she identifies key national trends and offers practical strategies to support groups of learners who have historically underperformed. These two articles are essential reading for anyone looking to bridge achievement gaps and ensure a more equitable science education.

Climate change remains one of the most urgent topics facing our global community. In this issue, Mary Gagen examines how we can improve communication around climate change to ensure education in this area is not only scientifically accurate but also emotionally and socially effective.

Understanding the nature of science is central to building genuine scientific literacy. Yet, persistent misconceptions often cloud students' perceptions of what science is and how it progresses. Mary O'Donnell, Thomas McCloughlin and Cliona Murphy identify three prevalent misconceptions and provide strategies for addressing them in the classroom. Adding a practical dimension, Steven Ka Kit Yu and Andrew Ching Yuet To share an engaging classroom activity designed to help students better grasp the nature of science, complete with examples and a ready-to-use instructional task sheet.

Helen Harden and I hope this issue offers both insight and inspiration, and we encourage readers to explore the full range of articles included.