

ACSME 2019 Special Issue – Editorial

Special Issue Guest Editors:

Assoc Prof Louise Lutze-Mann^a, Dr Reyne Pullen^b and Ms Stephanie Beames^c

^aSchool of Biotechnology and Biomolecular Sciences, The University of NSW, Sydney NSW 2052, Australia

^bThe School of Chemistry, The University of Sydney, Sydney NSW 2006, Australia

^cFaculty of Science, The University of Queensland, St Lucia QLD 4072, Australia

The Australian Conference of Science and Mathematics Education (ACSME) has long had a strong culture of interdisciplinary collaboration and has provided an opportunity to share the experiences of our colleagues around Australia. As both long-time attendees, the lessons we have learned from our colleagues within chemistry, physics, biology, mathematics, and others have certainly influenced and inspired our own practice and research. More so than in previous years, 2020 has challenged us to rapidly innovate whilst dealing with anxious and uncertain times. So, it is especially refreshing to read about, and reflect on, successes and creativity in the tertiary, and secondary, education sectors - reinforcing the idea that we are one community and being one community is our strength.

While this special issue was planned, and submissions received, prior to the COVID-19 pandemic, the three papers presented in this issue provide insight into three unique perspectives from our community. This includes the reflection of a group of academics, learning from one another on their path to improving their teaching practice and creating positive learning environments in their classrooms; an example of collaborative research between undergraduate students and academics exploring the potential of modern technologies, such as VR, in the chemistry classroom; and an investigation into how our students think, and importantly, how we can scaffold their learning to develop their scientific thinking skills both inside and outside the classroom.

Looking ahead into future years and the uncertainty of what our classrooms will look like, we would like to extend an invitation to all within our communities to engage in scholarly learning and teaching innovations - which we encourage you to share with the community in our journal, IJISME. The ambitious leaps taken this year across the country, and worldwide, to find creative solutions to teaching online leaves us with the question - what will you be keeping as you plan for 2021 and onwards? Speaking from our own discussions in writing this, we are already identifying teaching innovations that are now being recognised as strengths around which we could centre our teaching in future years.

We acknowledge and pay respect to the Gadigal people of the Eora Nation, the traditional owners of the land on which we research, teach, and collaborate at the University of Sydney and the University of New South Wales.