Editorial – Welcome to Volume 21 Numbers 4 & 5

Welcome to the SaMnet Leadership Special Edition of IJ-ISME. We are delighted to present this bumper edition showcasing nine projects from eight Australian universities. These projects represent not only scholarly endeavours in learning and teaching but also the challenges and joys of developing and maintaining teams of learning and teaching scholars in environments of competing time and research-focus demands. The reflective and innovative practices demonstrated in these pages all centre on enhancing student learning, delivered in effective and efficient manners relevant to their disciplines. These underlying conditions are critically relevant in the current Australian environment, where Universities are under increasing financial and regulatory pressures. With ongoing support, these projects and their leaders have the potential to assist their disciplines and universities navigate these external pressures to continue to deliver quality student learning experiences.

While the examples presented here centre on particular disciplines, such as chemistry, biochemistry, mathematics and laboratory practices, they can be adapted to fit other disciplines. Therefore, take the lessons learnt by our authors, contact them for clarification and tips, start innovating in your own subjects and tell your colleagues about it through IJ-ISME or similar publications. These nine projects can be categorised into three key themes: (i) investigation of new approaches; (ii) integration of student-created media to enhance engagement; and (iii) integration of accepted models. In the first theme, Huth et al. describe their brave adventures in addressing the sacred space of laboratory class design and delivery, noting both the technical as well as the human barriers involved. This is followed by Loughlin et al., noting the emerging rumble of the somewhat forgotten second years. Here we see that in our sector-wide focus on the first year experience, we may have overlooked the first-second year transition phase and associated needs of our second year students. These authors bring lessons learnt from the USA to explore the issue at their own universities.

For our second theme, integration of student-created media to enhance engagement, we see how Gwen Lawrie and Emma Bartle from the University of Queensland, and Jessica Vanderlelie at Griffith University, have enhanced student engagement with chemistry and biochemistry respectively, by appealing to their creative side and integrating the use of new media. These authors embedded assessment items that utilised student-created multimedia, coupled with fostering a personal connection with their discipline through exploring their topic through a chemical or a pathway that was of personal interest to them.

The final theme brings together papers that demonstrate the implementation of accepted pedagogies such as POGIL, inquiry-based learning and student response systems, into various disciplines. A common theme throughout these articles is the importance of the staff experience, professional development in the new pedagogies, and collaboration with colleagues, as key factors to support the successful implementation and delivery of new approaches. Rayner et al describe their use of an inquiry-oriented learning strategy to blast

through the discipline silos to create rich, authentic student learning experiences. This paper describes a work in progress that we hope to continue to write about as the project progresses. We also have Madeline Schultz continuing her exploration of the integration of student response systems in large chemistry classes. Here we get an insight into the issues that can prevent broad scale uptake and use of a strategy shown to be effective and to advantage students. Madeline seems to have encountered the age old issue of 'you can lead a horse to water but you cannot make it drink' despite having done the research to ensure it was clean water and the horse was thirsty!

The editorial team, Gerry Rayner, Andrea Crampton and Stephanie Beames, along with the SaMnet steering committee, applaud the achievements of all our SaMnet scholars, including those who have not published in this volume. We hope that this energetic group of scholars will continue on their path and nurture the cross-institution collaboration and mentoring style of SaMnet, and to include others on their journey as they develop professionally to contribute to their institutions, disciplines and the dynamic sector we share.

We commend these papers to you.



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