Bringing a creative voice in Science

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Creativity and Science is generally viewed as incompatible. Traditionally, science is taught without much room for creativity. Science involves rigorous, repetitive and methodical approaches whilst creativity requires imagination and thinking outside-the-box. One could argue the latter also fits the profile of a scientist, though perhaps not necessarily in an artistic manner. With Science Technology Engineering and Mathematics (STEM) as a national priority, educators and scientists are facing the challenge of engaging and inspiring our next generation to take up such subjects, equipping them with techniques and importantly, soft skills, for future jobs yet to exist.

This work showcases a trial of integrating creativity in a science subject, namely ‘Introduction to Haematology’ in tertiary education over 5 years. A key component is a research assignment designed to develop graduate attributes and employability skills. It aims to increase students’ capacity to engage in professional practice such as integrating critical thinking, distilling information, problem solving and collaborative skills. It fosters creativity whilst sharing/learning/teaching science as the instructor provides modelling and stepwise feedback. Students have the freedom to create their mode of findings delivery, may it be a professional lecture, drama, song or even a storybook!

Student feedback and presentation outcomes affirm this process. Notable remarks include: “I did science so I don’t have to be creative! Whilst the creativity thing was a bit daunting at first, it made me think differently and helped me learnt it a lot better. Plus, looking at other presentations, they were all different and wasn’t as boring as other classes’. Whilst another voiced “I couldn’t think of doing science in a creative way, and this is the best presentation I enjoyed so far in my degree.” The unconventional research assignment is fun, creative, low-stress, fosters employability skills, produces class revision notes and is readily applicable in other units.