

Science on Stage: Engaging and teaching scientific content through performance art

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Engaging teaching material through performance art and music can improve the long-term retention of scientific content. Additionally, the development of effective performance skills are a powerful tool to communicate scientific concepts and information to a broader audience that can have many positive benefits in terms of career development and the delivery of professional presentations. While arts integration has been shown to increase student engagement and achievement, relevant artistic materials are still required for use as supplemental activities in STEM (science, technology, engineering, mathematics) courses. I will present an original performance poem, "Tectonic Petrameter: A Journey Through Earth History," with instructions for its implementation as a play in pre-university and undergraduate geoscience classrooms. "Tectonic Petrameter" uses a dynamic combination of rhythm and rhyme to teach the geological time scale, fundamental concepts in geology and important events in Earth history. I propose that using performance arts, such as "Tectonic Petrameter" and other creative art forms, may be an avenue for breaking down barriers related to teaching students and the broader non-scientific community about Earth's long and complex history.