

Science Education for All: Building a More Sustainable Tomorrow Together

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The world faces numerous environmental and social challenges that demand new approaches and expectations for science education. It is only possible to overcome these challenges if every person, regardless of their socio-economic status, feels responsible for all the harm has been done to the nature and learns what needs to be done to protect the environment. Educators, particularly science educators, have a tremendous obligation to ensure that their students are well-equipped and determined to achieve these crucial objectives before it is too late. Despite the scientific community's recognition of the importance of this mission, many chemistry students have lost interest in attempting to fully comprehend the topics presented, as the classroom emphasis has shifted from investigating global and local socio-scientific issues to covering abstract principles and from investigating real-life mysteries to conducting cookbook-style experiments.

This talk aims to shed light on the challenges of developing and implementing relevant, rich, and contextualized curricula by underlining the perspectives and efforts of chemistry educators primarily from North American universities. In addition, the talk will highlight the positive effects of incorporating socio-scientific issues such as phosphate sustainability into the General Chemistry curriculum on students' self-efficacy and motivation. Finally, the talk strives to emphasize the important role that chemistry educators play in fostering social responsibility in students and empowering them to address the greatest global challenges facing humanity in order to build a brighter and more sustainable future.