



Session 45

Innovations in Geoscience education: Inspiring students to become tomorrow's earth scientists

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Earth science university programmes have recently suffered a global drop in enrollments. Yet to address multi-hazard societal resilience including climate change we need earth scientists, so it is crucial to reverse this drop. One of the contributing factors in kindling interest is the first contact with the topic during primary and secondary education. This session aims to bring together all those working to improve the teaching of geosciences at schools through challenging conventional curricula and enhancing the learning experience with innovative approaches, in order to spark students' interest and ultimately fortify society against natural hazards.

Using real-life equipment and cutting-edge technologies can offer endless possibilities. Seismic sensor demos and in-class labs as well as experiential workshops are long-standing approaches to teaching that go beyond the book and enrich formal curricula and motivate students. More recently, 3D printing technologies empowered educators to transform abstract concepts into tangible experiences, bringing geological structures to life, while virtual/augmented reality enabled students to step into a new dimension, gaining a unique perspective on Earth processes to better comprehend complex physical phenomena.

In this session we welcome contributions from both educators and researchers who have implemented novel techniques and technologies in geoscience education. We are hoping to share ideas, experiences and best practices, to highlight the challenges faced, impart lessons learned and provide real-world examples illustrating how departure from conventional teaching methods can enhance the educational experience for both instructors and students.

