

EGU21-8576

<https://doi.org/10.5194/egusphere-egu21-8576>

EGU General Assembly 2021

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Using an interdisciplinary MOOC to teach climate science and science communication to a global classroom

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MOOCs (Massive Open Online Courses) are a powerful educational tool, making scientific content available to a large and diverse audience. The MOOC “Making Sense of Climate Science Denial” applies science communication principles derived from cognitive psychology and misconception-based learning in the design of video lectures covering many aspects of climate change. As well as teaching fundamental climate science, the course also presents psychological and critical thinking research into climate science denial, teaching students the most effective techniques for responding to misinformation. A number of the enrolled “students” have been secondary and tertiary educators, who have adopted the course content in their own classes as well as adapted their teaching techniques based on the science communication principles presented in the lectures. The MOOC—developed by John Cook while at the University of Queensland’s Global Change Institute—integrates cognitive psychology, educational research and climate science in an interdisciplinary online course that has had over 40,000 enrolments from over 180 countries since the MOOC was launched in 2015.