Geophysical Research Abstracts Vol. 20, EGU2018-7658, 2018 EGU General Assembly 2018 © Author(s) 2018. CC Attribution 4.0 license.



Thinking Detectives: Climate Change in the Alps

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Originally developed for children at level 2-3 of the Scottish Credit and Qualifications Framework, this visual clue card game is for anyone aged 10 or over. The game involves a fictional ski instructor, Richard Fromm, and his friends, Jack Shaeffer and Viktoria Engel. With climate change affecting the Alps, Richard has a career dilemma: should he remain a ski instructor or lead mountain bike tours instead. Each of the 18 clue cards details some aspect of Germany, the Alps and climate change. The participants work in small groups to examine each piece of evidence in the clue cards and decide what is relevant to Richard's dilemma, sifting through scientific information and deciding on relevant evidence, just like scientists. Each group then use their gathered evidence to help Richard decide what he should do, using scientific reasoning and inference. The groups are encouraged to develop different viewpoints of Richard's career dilemma and to ask other groups questions about their decisions. Again, there are parallels to communication of scientific research.

After discussion and questions, the "scientist's answer" to Richard's dilemma is revealed! It states: "There is no correct answer to Richard's dilemma. Climate change is creating difficult situations for people around the world and there are no easy answers. We need people like you to weigh information and make difficult decisions about how best to respond."

The game is based on research in the School of Geosciences at the University of Edinburgh. To inspire the upcoming generation, biographies of the real scientists behind the characters of Richard, Jack and Viktoria are included. Additional features of the game involve mapping skills and an introduction to Germany and the German language.

The Thinking Detectives: Climate Change (the Alps) is available from the Open Educational Resources web site at The University of Edinburgh under a licence only requiring attribution. This game format can be applied to other areas of research as it encourages people to develop their higher order thinking skills and understand the global nature of scientific research and researchers.