

Secondary School Science Advisors – Proposal

I'm Rosie Willatt, a Research Fellow (postdoctoral researcher) at UCL. I work on interpretation of satellite data to investigate polar climate change. I'd like to work with A-level/equivalent students, using a 'flipped learning' approach - showing them a challenge I'm having in my work, and getting them to set me the science questions – which I'd then go away and investigate. The aim is to engage the students in cutting edge climate science, allowing them to direct the research and showcasing the scientific process.

The students could be studying anything – it is open to everyone. Students studying Physics, Maths, Computer Programming or Geography-related courses may find it especially relevant to their studies. Sessions are tailored to their skills and interests. It is presented virtually, and runs over a couple of hours, or a series of 25 min sessions (e.g. class or lunch times) every couple of weeks.

Please contact r.willatt@ucl.ac.uk for further information or read on for further details of the sessions.

Suggested content, to be tailored to students' skills/interests

Part 1

Students introduce themselves and state what they'd like to get out of the project (5 mins)

Rosie presents (10 mins):

- A bit about herself and career path
- Context – polar regions, role in climate change, remote sensing using satellites
- The current challenge – what data I have and what I want to find out

Students discuss (5-10 mins):

- Questions for Rosie
- Discuss how they will work together to formulate a way forward
- Start thinking about key science questions and approaches to be used

Part 2

Students work together in groups to develop their ideas, then report: (15 mins)

- What approaches they have identified
- Actions for Rosie

Rosie confirms details and outlines any potential issues (10 mins)

Part 3

Rosie presents what the suggested approaches have produced (15 mins)

All discuss what has been achieved and what next steps could be (10 mins)