

Geoscience Pathways Project Newsletter

(March - #36)

We are a 'not-for-profit' incorporated body of like-minded teachers, academics and geoscientists. We work together to support the teaching and learning of Earth in Space (R-10) under the Australian Science Curriculum and senior secondary (SACE) Earth and Environmental Science (EES). Thanks to the generosity of our sponsors we continue to offer unique and timely support as described on these pages.

For information contact the Geoscience Pathways Project:

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2022 Earth System Study Video Winners Announced

Congratulations to our 2 winners of the 2022 Earth System Study Video Competition

Students were invited to create a 2-minute video highlighting their community involvement in an environmental issue covered in their major external assessment piece.

1st Prize – Georgia McLeod https://youtu.be/g2UsYxuUlbQ

2nd Prize – Christine Welsh https://youtu.be/HVEKBw42jMg

The YouTube playlist with all the winners videos can be found here: <u>YouTube: 2022 EES Earth Systems Study Video</u> <u>Competition Playlist</u>

A note from Georgia McLeod's mother:

I do hope that Geoscience Pathways continues to assist in the expansion of the take-up of the Earth and Environmental Science subject in the South Australian curriculum. It is such an important subject for our young people to learn about so that they can be knowledgeable future leaders, enabled to make the changes needed to sustain our planet after so much damage has already been done. It is indeed a branch of the Sciences that needs to be placed with more prominence in the curriculum and I do believe the work you are doing is of vital significance and highly valued. Having competitions with such generous prize values will no doubt influence other children to participate in this subject as the word gets out about it. You will no doubt be pleased to hear that through Georgia's choice of studying EES in both Year 11 and 12, we have had so many family discussions around the dinner table at night with her informing us about the things she has learnt about in her studies. Furthermore, when she has shown me her work prior to submitting for marking, I have learnt so much further detail that I was unaware of, so in many ways her learning in the subject has informed a family of four people, not just one person - so your message is spreading to an even larger audience than perhaps you are aware. Please pass these words of encouragement on to your Committee and the Sponsors when you next meet! ~ Carmel McLeod

Thank you to all that were involved, the judges and importantly our sponsors the GSA.



Professional Development

Teachers who successfully offered 11 EES at their school participated in free professional development to prepare them for teaching the course for the first time this year.

This involved visiting all field sites present in the course and putting themselves in the shoes of students as they worked through the handouts provided.

Thank you to Kelly for running the workshop.

Annual Implementation Workshop 2023

On the 24th February, Geoscience Pathways Project ran their annual EES Implementation Forum. Teachers from 7 different schools attended to engage in feedback from a SACE marker and moderator of EES, advice related to the pedagogy required to teach EES and industry opportunities within the realm of geoscience careers.

The presenters included, Sarah Chinner (BHP), Jeremy Gramp (Green Adelaide) Richard Lilly (NExUS) and Kelly Sharrad (MC, GOO and more). Thank you to all the presenters and the University of Adelaide for hosting.













National Gold Education Program – Free kits for schools and STEM Sessions

The Gold Industry Group (GIG)'s National Gold Education Program provides teachers with an informative array of educational gold resources.

Exclusive Gold Resources Kits including large rock samples are available for teachers to order for their school.

Teachers can book free, interactive gold incursions delivered by passionate workers in Australia's gold industry to better inform students about the significance of gold, how it has helped shape our nation and the diverse range of careers available in the industry.

Lesson plans, an app, case studies, videos, other educational resources are also available covering gold careers, Science, Technology, Humanities and Social Sciences, Mathematics and Sustainability.

https://education.goldindustrygroup.com.au/

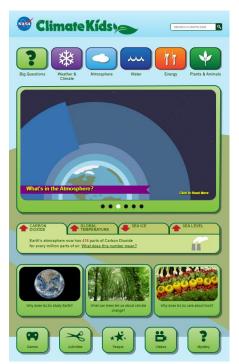
ClimateKids - NASA

Launched in 2010, NASA's Climate Kids website tells the story of our changing planet through the eyes of the NASA missions studying Earth. Targeting kids ages 8 and up, the site is full of games, activities and articles that make climate science accessible and engaging.

NASA's Role In the Study of Climate Change

NASA is a world leader in climate studies and Earth science. While its role is not to set climate policy or prescribe particular responses or solutions to climate change, its purview does include providing the robust scientific data needed to understand climate change. NASA then makes this information available to the global community – the public, policy- and decision-makers and scientific and planning agencies around the world.

https://climatekids.nasa.gov/



STEM opportunities for your students

The University of Adelaide would like to invite you and your students to participate in the innovative Energy, Mining and Resources School Outreach Program (EMRSO).

The EMRSO program offers a suite of interactive, curriculum-aligned workshops for Years 7-12 students delivered both at your school and on our campus. Additionally, the program will offer Year 12 student networking opportunities with industry as well as spark student interest in making the resources sector more sustainable and the global impacts they can make on an individual level.

In 2023 the University of Adelaide are also bringing two exciting immersive, on-campus experiences to give students the opportunity to gain hands-on experience in the sector. Register your interest via the links below:

Year 9 & 10 - Wednesday 27th of September 2023 (Term 3 Week 10) REGIST ER YOUR INTEREST

Facilitated by Phoebe Chilman, a graduate Chemical Engineer from the University of Adelaide with a specialisation in Sustainable Energy, Phoebe is passionate about our society's transition to decarbonisation and the role Australia's energy, mining and resources sectors are playing.











The industry underpins all areas of our modern life; our smartphones, our homes, means of transport, and even down to our health care provisions. In order to sustain our way of life in addition to meeting global energy demands in line with renewable energy targets, critical minerals and transformative energy technologies will be required at an unprecedented scale. To improve safety, efficiency and productivity, Australia's energy and resources sector is also undergoing significant digital transformation. Drones, virtual and augmented reality, autonomous systems, big data and off-Earth exploration require a workforce equipped with a new skillset. The future of this sector is changing rapidly, offering a range of exciting careers for young South Australian students with a demand that has never been greater.

For more information about the EMRSO program and book an activity: **FURTHER INFORMATION**

Everyday Jobs - Holly Cooke | Geoscientist, University of Adelaide

Meet Holly Cooke, a Geoscientist at University of Adelaide's NExUS (National Exploration Undercover School). Holly visits South Australian high schools to promote earth sciences and collaborate with educational partners to enhance geoscience outreach.

Holly shares her insights about how important it is to be passionate and curious about what you do, and to cast aside what others think you should do.

"What I would say about any conversation about any future job...is that the only thing that matters is that you love it – is that you're curious and have got a passion for it."

Watch the video here: https://vimeo.com/792066203

Funding Update

We are excited to announce that we have secured some funding and in kind support for 2023, More to come in the next newsletter as we finalise all the details. This will help with some of the overhead costs of this year.

Our sponsors currently are:



However to continue our work we still need sponsors...

PLEASE SUPPORT US

Gold sponsorship \$10 000 pa

Silver sponsorship \$5000 pa

Bronze sponsorship \$2500

For information about sponsorship contact: lenaltman9@gmail.com













Next Meeting Our next Committee meeting will be a 'virtual' meeting using Google Meet: Tuesday 30th May 2023 at 4:30pm Please email geoscience.pathways@gmail.com All are welcome.

2022 Committee Members

The following are the members of our current Geoscience Pathways Management Committee who were elected at our AGM in March 2022 – we will soon organise our next AGM, anyone is welcome to join:

Len Altman (Chairperson) Kelly Sharrad (GOO, Open Access College) Luke McKay (GPP Coordinator) Amanda Vernik (GPP Webmaster, GPP Secretary) Graziela Miot da Silva (Flinders University - Earth Scientist) Nick Wilkins (Flinders University) Bronte Nicholls (Adelaide Botanic High - Teaching EES) Tamara Cave (Tate Museum) Lewis Subelli (Uni of Adelaide - Pre service teacher) Alan Collins (University of Adelaide - Professor) Carol Aldous (Flinders University - Earth Science Teacher Education) Sarah Chinnner (BHP) Zoe Hewett (Department for Energy and Mining) Alan Brenchley (TafeSA) Adam Davey (TafeSA)

Thank you to our members for their dedication and support to the Geoscience Pathways Project.













