March Quarterly Report

CoRE Learning Foundation

To help our youth of today succeed in tomorrow's world



MARCH 2023

PRESENTED TO

CLF Members & Sponsors

PRESENTED BY

Suzy Urbaniak



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Executive Summary 0323

CoRE Schools - Expansion and Explorers (CEP)

- 21 CoRE Expansion and Explorer Schools

Gamifying Earth Science (GES) - Connecting Industry and Education

- 119 Active and Interested schools engaging with GES



Key Successes

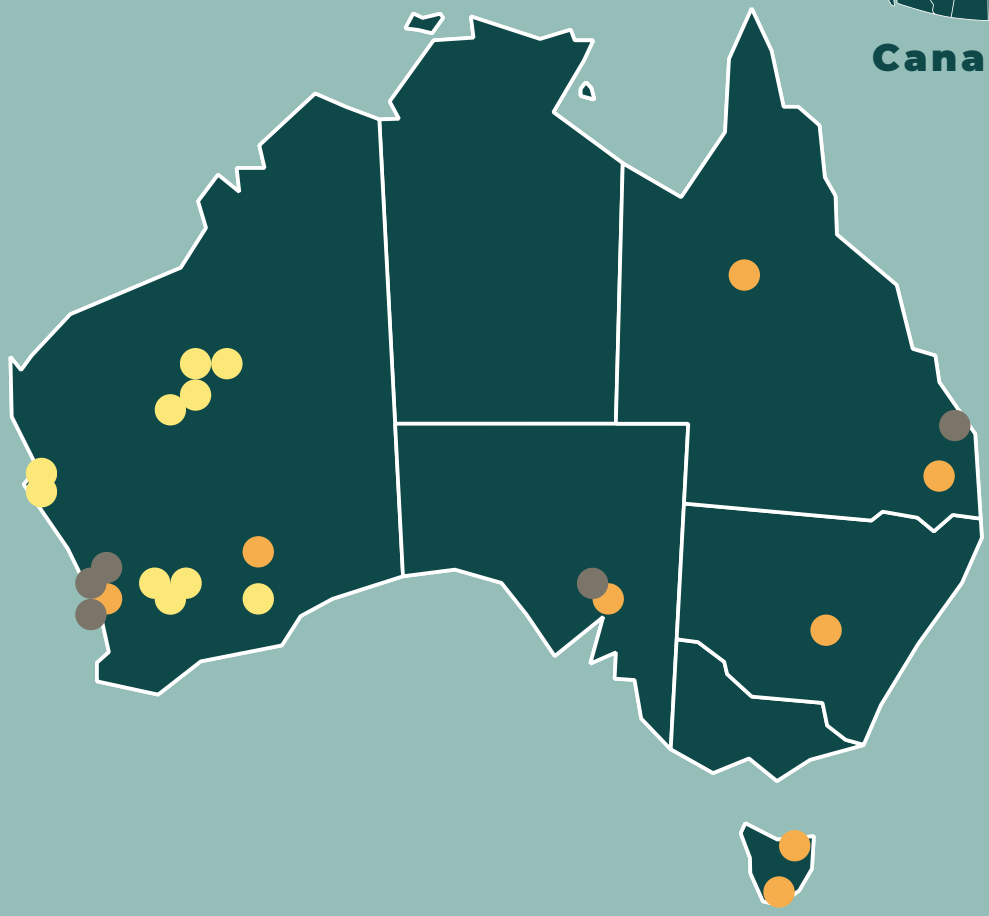
> 1000 CoRE Students in CoRE Schools

140 schools engaging with CoRE as CoRE Schools or through Gamifying Earth Science

Executive Summary 0323

CoRE Schools - Expansion and Explorers (CEP)
Gamifying Earth Science (GES)
CoRE Operations





Key Successes

18 school visits including professional development, GES tutorials and Field trips

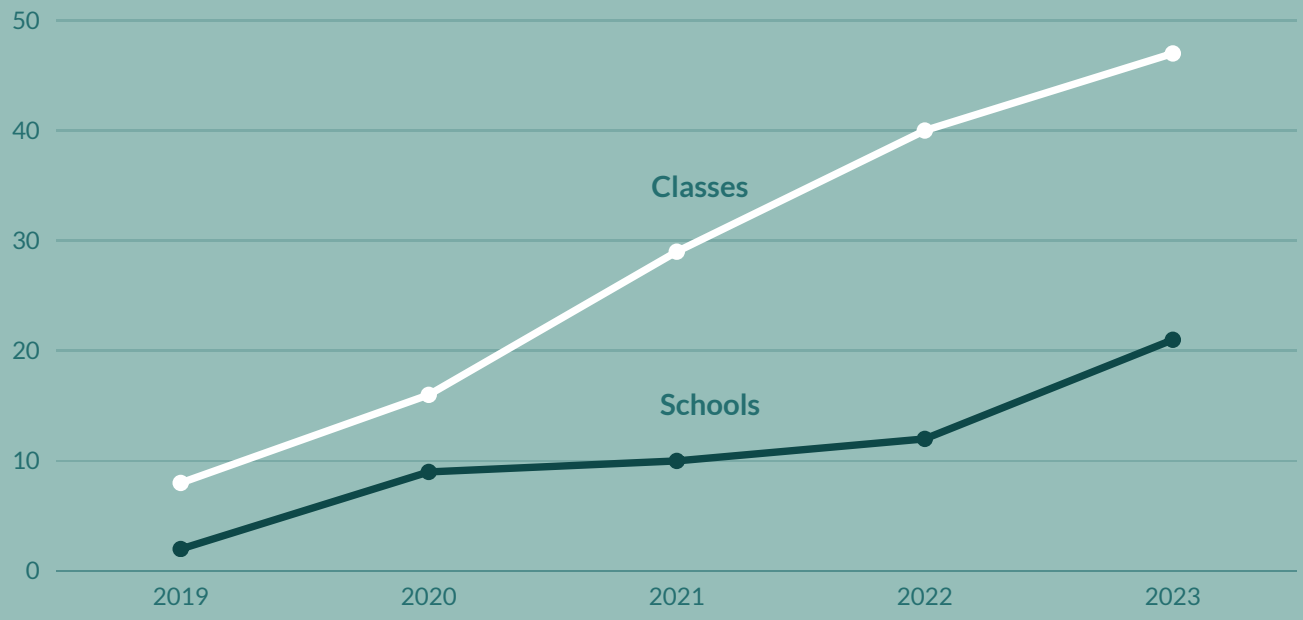
CoRE Promotion: 3 International Women's Day Speeches, Book Launch, STEM Conference in Launceston and the AEGC Student Day in Brisbane.

CoRE Schools - Expansion & Explorers

1086 CoRE Students

CoRE Growth through in school expansion

CoRE Classes & Schools 2019 - 2023

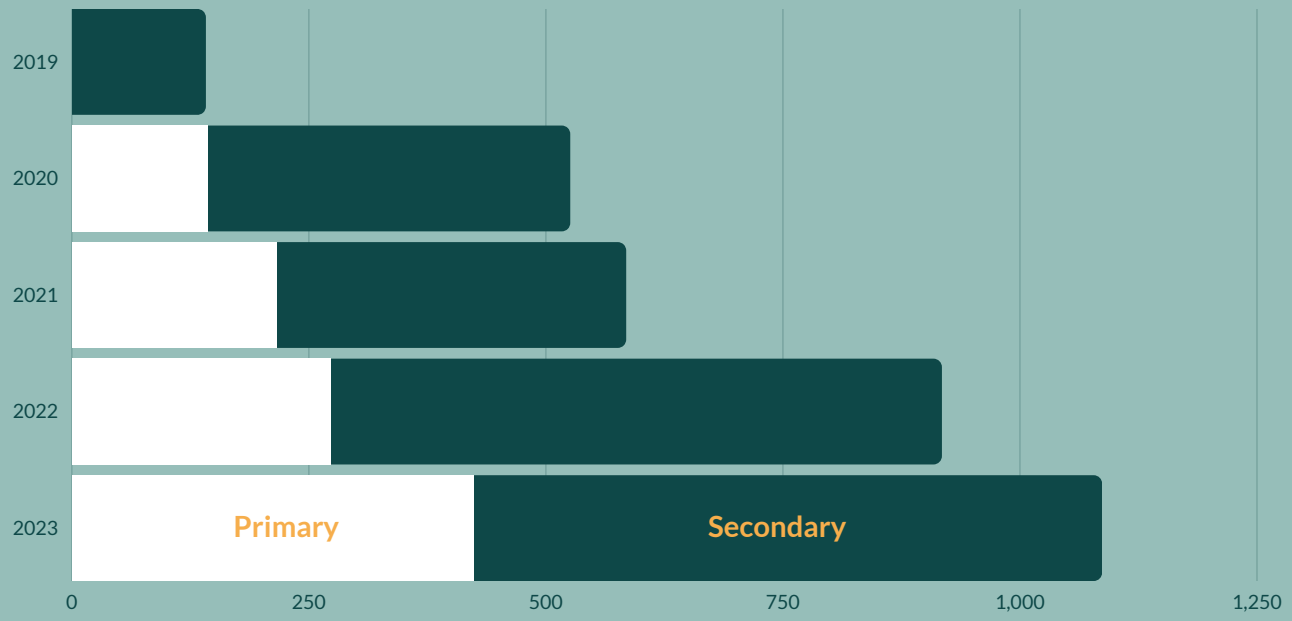


Key Successes

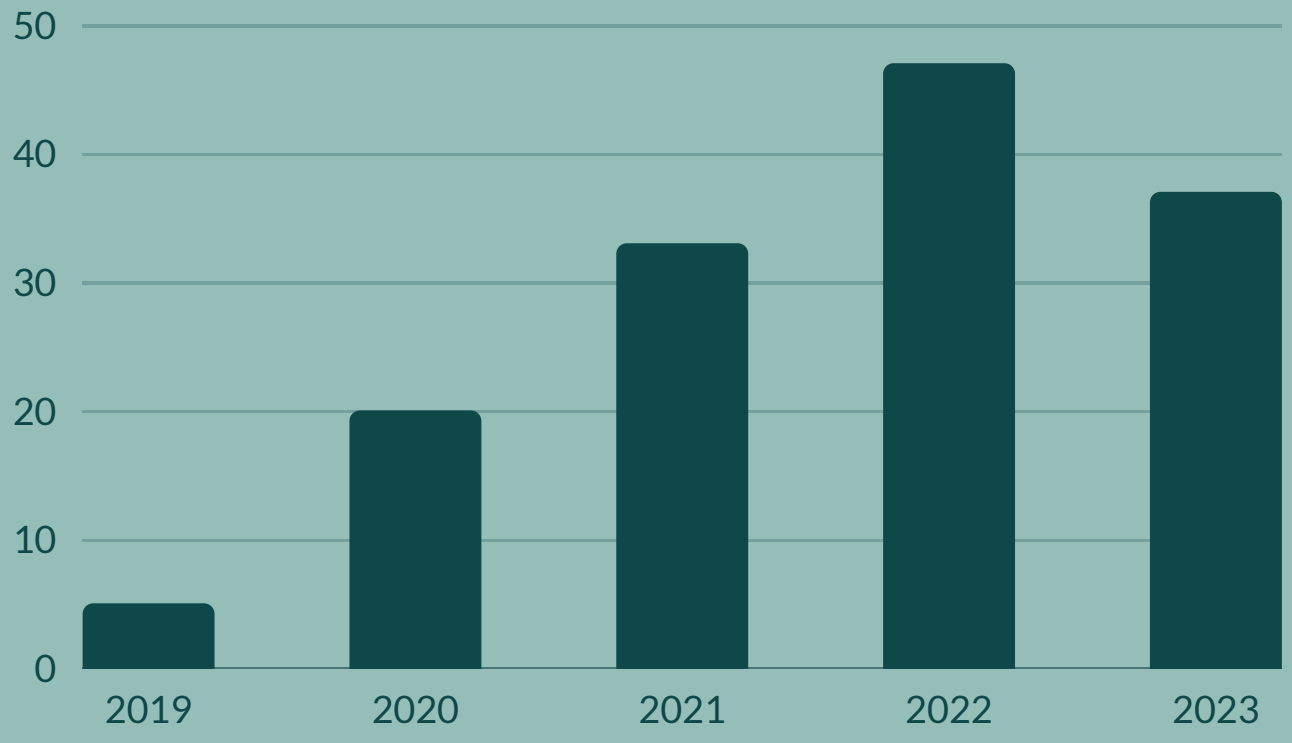
- 18% increase in CoRE classes from 2022
- 18% increase in CoRE students from 2022
- 75% increase in CoRE (CEP) Schools from 2022

CoRE Schools - Expansion & Explorers

CoRE Students 2019 - 2023



CoRE Educators 2019 - 2023



CoRE Schools - Expansion & Explorers

Benefit

"It has been a unique experience teaching the year 10 CoRE class as a second-year teacher. This program opened me to new knowledge and experiences any science teacher would dream of." Chelsea Trewan, Kent Street SHS



- Hedland CoRE has 7 educators across Years 7 - 10 with 2 classes/year group
- 5 new CoRE educators in the Wheatbelt, Pilbara and Metro areas
- Norseman CoRE has embedded CoRE from Years 4 - 10, engaging 60% of its students in CoRE Learning.
- 4 field trips, including Beacon, Koorda, Bencubbin, Merredin
- 13 school visits, including Carnarvon Community College and Carnarvon Christian Colleges, for their first professional development sessions.



Testimonial

"I'm actually enjoying learning and teaching CoRE. I hesitated as this was my first time teaching it, but we found it interesting. We are still learning and making changes as we go; at the end of our unit, we will reflect on how we went to make changes for the following unit."

Alicia Spurr, Tom Price Primary School.

Celebrating CoRE Learning

A purposeful educator leads an interested student. CoRE's CARMA (Contextual, Authentic, Relevant, Meaningful and Applicable) approach to teaching-learning further validates this insight. Please have a read of this snippet from Kent Street's Year 7 student Mehjaben Moon, placing the Crystal Cave Stalactite investigation into context.

"*Yanchep National Park is located about 54 kilometres north of Perth city. Yanchep is home to the magnificent tourist attraction known as Crystal Cave. Since 1986 and now recent years, urban development (land being replaced by buildings) has disturbed the agricultural areas and water supply. When we clear fields to create housing cubicles and roads, we are disturbing the cycle that allows water to thrive. When this happens, the water table slowly decreases and is lost underground.*"

Students connect science in their daily life and the world around them. This is purposeful teaching, and when connections such as these are established - students own their learning and education. This is an authentic and genuine example of what is behind #therealclassroom.



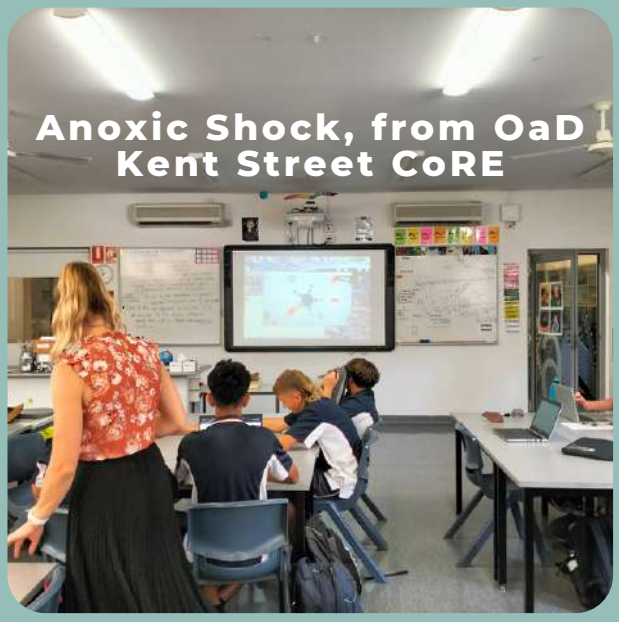




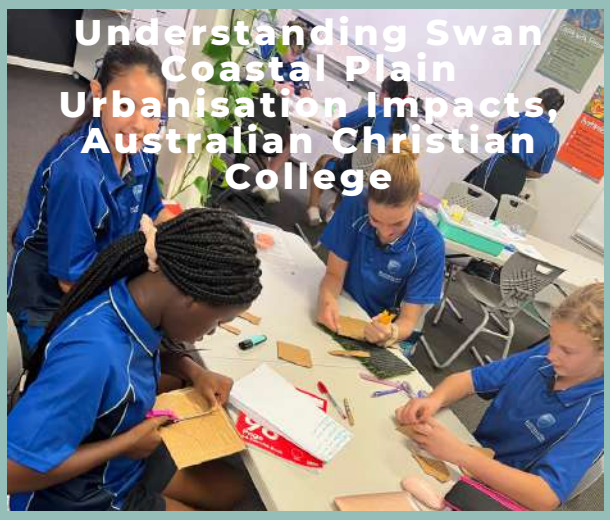
Celebrating CoRE Schools



Drone Construction Norseman 9-10 CoRE



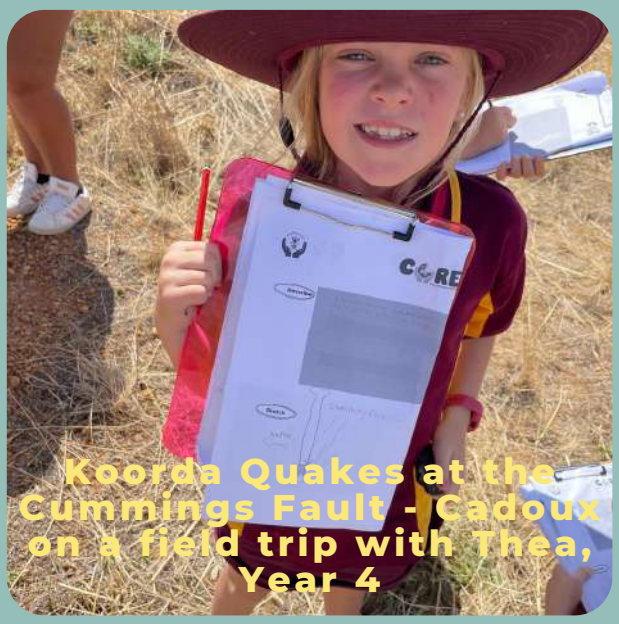
Anoxic Shock, from OaD Kent Street CoRE



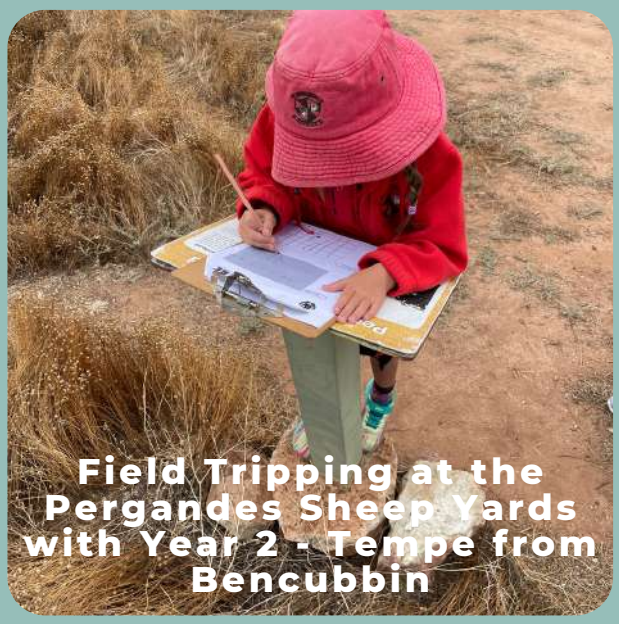
Understanding Swan Coastal Plain Urbanisation Impacts, Australian Christian College



Investigating Sheep Methane Production, Merredin CoRE Year 10

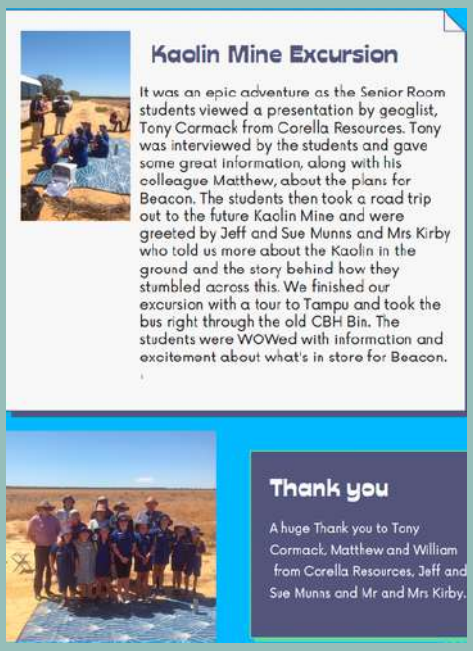


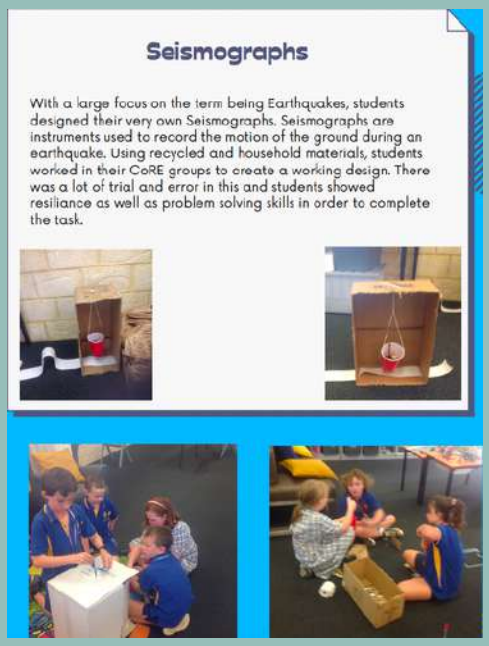
Koorda Quakes at the Cummings Fault - Cadoux on a field trip with Thea, Year 4



Field Tripping at the Pergandes Sheep Yards with Year 2 - Tempe from Bencubbin

Celebrating CoRE Schools





Beacon's first PBL is titled "***Bouncing Around Beacon - The Beacon Earthquake Swarm and its Futuristic Kaolin Mine."*** It is so pleasing to see the students engage in a field trip to the futuristic Kaolin Mine, study earthquakes and use CoRE's RRR Minecraft Game to learn about mitigation strategies for earthquakes and how this applies to the Minecraft Mine they will make using the real world Kaolin Mine and their town Beacon. This is an example of authentic learning in #therealclassroom. "*Yesterday, the Senior Room was in charge of the Assembly item. We performed the fault dance and earthquake rap and gave an Information session to parents about Earthquakes.*" **Lisa Clark, Beacon CoRE**

This month, the Year 9 students have been collaborating to investigate the impact of Tsunamis and the artificial strategies which could be implemented to reduce their damage.

A field trip to Fugro's Balcatta facility was organised to assist these students with their next project component. Students had the opportunity to tour the current projects under construction, including Autonomous Underwater Vehicles, Uncrewed Surface Vessels, and Remotely Operated Vehicles, including the chance



to try their hand at remotely operating a small aquatic ROV in the test tank. From here, students will be tasked with selecting one of Fugro's vehicles and modelling improvements to the current design. **Nathan White, Joseph Banks CoRE**

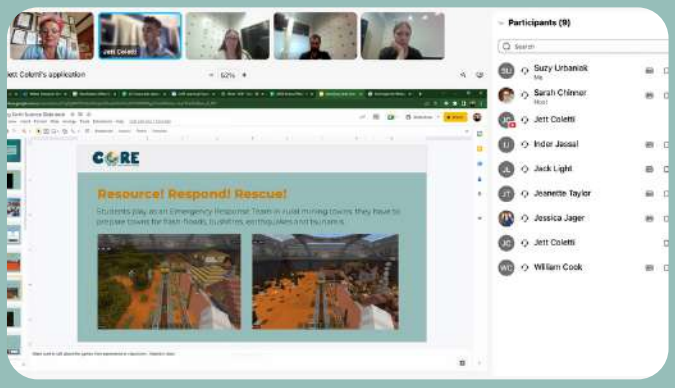
Gamifying Earth Science

A digital learning tool improving Earth Science education and connecting it to resource industry careers.

Benefit

"As a teacher, I've wanted to implement Minecraft education in the classroom, but it's daunting. Using the resources provided by CoRE has allowed me to build deeper relationships with my students and collaborate to thrive in our classroom."

Paula Woods, Australian Christian College







- The STEM Conference in Launceston generated 11 solid leads
- A tutorial session with 7 BHP employees from Adelaide was a successful outreach for GES promotion
- Games discussions with Newcrest's Red Chris and Brucejack Mines in British Columbia, Canada, are positively progressing.
- Kalgoorlie PEAC GES is entering its third year with wonderful success.
- The GES Manuscript for the World Mining Congress in Brisbane has been accepted for publication and presentation in June.
- BHP has provided financial assistance for the development of the OaD tutorial game.
- A detailed professional development session with Spinifex HS in Mt Isa has been organised for next quarter.
- Several schools in NSW around Dubbo, including Bathurst, have had face-to-face tutorials.
- Collaborating with the 2021 PM Prize winner Primary for RRR.

GES Feedback

Paula Woods - Australian Christian College, Darling Downs - WA

1. Three reasons to have CoRE Games in the Class.
- Increase facilitating ICT in the classroom.
- Collaboration of students in a platform that we already know they enjoy
- It looked really cool

2. Three problems solved by CoRE Games
- Distributing lots of information in one platform
- Safety - I didn't have to worry about the source of their resources/web searches for supporting articles.
- Engagement - students loved CoRE because of the opportunity to use Minecraft Education.

3. Three Challenges faced by the Class.
- We couldn't all join the same world (but we overcame this by them all individually downloading)
- Given that we weren't in the same "room", I was more vigilant about monitoring the room while they were using it or demonstrating on the board where I needed them to "meet" to describe something. (when we did the PD, I liked the feature that I could bring them all to a meeting spot)
- Other problems were more about reflecting on my teaching practice - like next time, I'd have a notebook as an example of what I'm looking for...but then at the same time, it's an opportunity for them to demonstrate their notetaking skills?

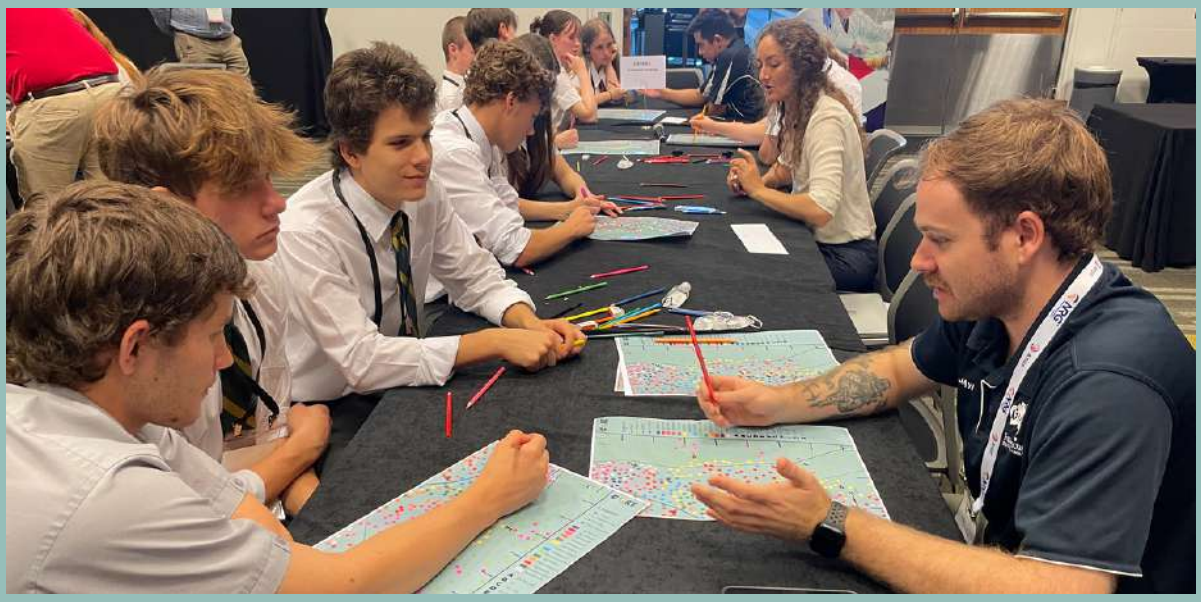
4. Three benefits provided by CoRE Games
- engagement of students,
- depth of knowledge,
- opportunity for connection,
- opportunity for students to shine.

5. An overview

"It's given them the base knowledge to have good quality class discussions about natural disasters and to relate them to the natural disasters occurring in our communities."



CoRE Operations



- A key focus has been developing and organising the May 18th Event - "A CoRE Investment - Futureproofing your Workforce". An industry showcase will follow a GES professional development session.
  - NewGenGeo is Beverage Sponsor
  - AIGWA Branch is Food Sponsor
- CoRE has welcomed its new Executive Partnership Officer - Jacobi Herringer
  - Chevron has maintained its Celestial Sponsorship
  - IGO has increased its Sponsorship within the Eucalypt Tier
  - The Resources Hub and Sandvik have been welcomed as Garnet Sponsors
  - AMPs are CoRE's latest Ochre Sponsor
- Three Keynote Speeches for International Women's Day, including Soroptimist International South Perth, Intertek and Hastings Technology Metals
- The STEM STARS Book was launched with an accompanying podcast
- CoRE led the student day at the AEGC in Brisbane. CoRE Alumni (above) Jayden Butterfill helped with the hands-on mapping sessions.
- Meetings for the International GeoSciEd_10 Conference that CoRE is Co-Chairing continued for Adelaide 2026.

CoRE Operations





From Saskatoon, Saskatchewan in Canada, Jacobi has Cree heritage. She grew up in the remote northern indigenous communities through a Montessori Education, 'learning through doing' with adventure and nature. She is a strong proponent of 'hands-on' experiential learning. Having grown up in a community where job opportunities relied on mining, she is very mindful of the importance of understanding the connections between industry and the jobs and careers with education within such communities. Jacobi led a very nomadic life and, after graduating high school, backpacked around the world for eight years, experiencing life in sixteen different countries.
Jacobi is enthusiastic about learning more about WA's Resources Sector and is too excited about seeing CoRE in Action; and want's to be around long enough to witness a student's CoRE Journey through to graduation.

This is the impact Jacobi wants to make for CoRE:

"I want to bring in as many financial resources as possible to enhance the growth of CoRE. I want to use my talents to gain invaluable resources that CoRE needs to grow."



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