CORE
Full STEAM ahead

2024

MARCH QUARTERLY REPORT

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At the start of a new school year, it's beneficial to assess the anticipated growth of the CoRE Expansion Program. This includes evaluating its geographical reach, specifically focusing on the number of educators who will be introduced to the learning model.

03 CoRE Schools and CoRE Learning Model

What developments have occurred with the CoRE Learning Model in CoRE schools? This encompasses the special learning activities, their impact, and the ongoing evolution of the Learning Model.

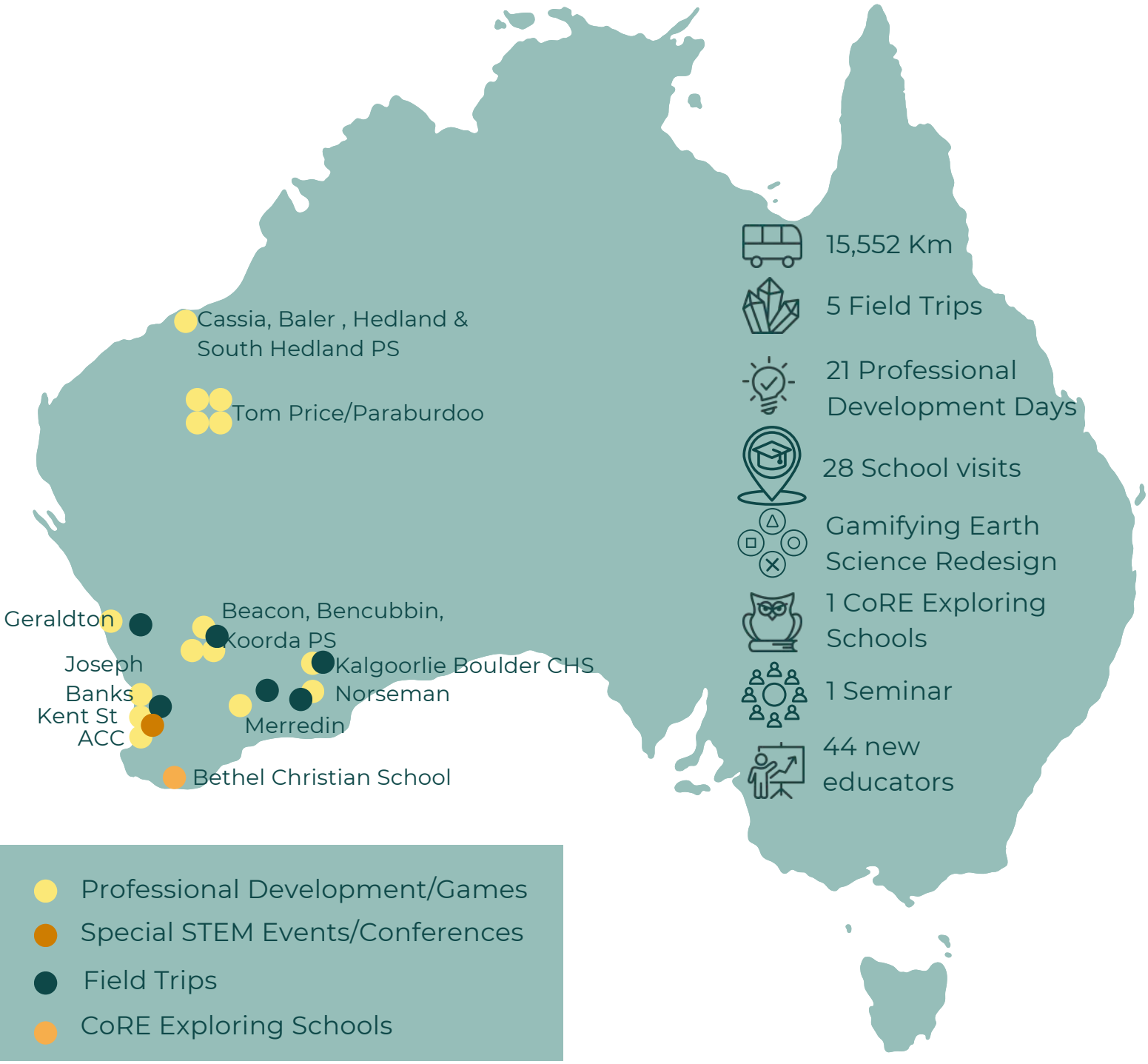
04 CoRE Highlights and Events

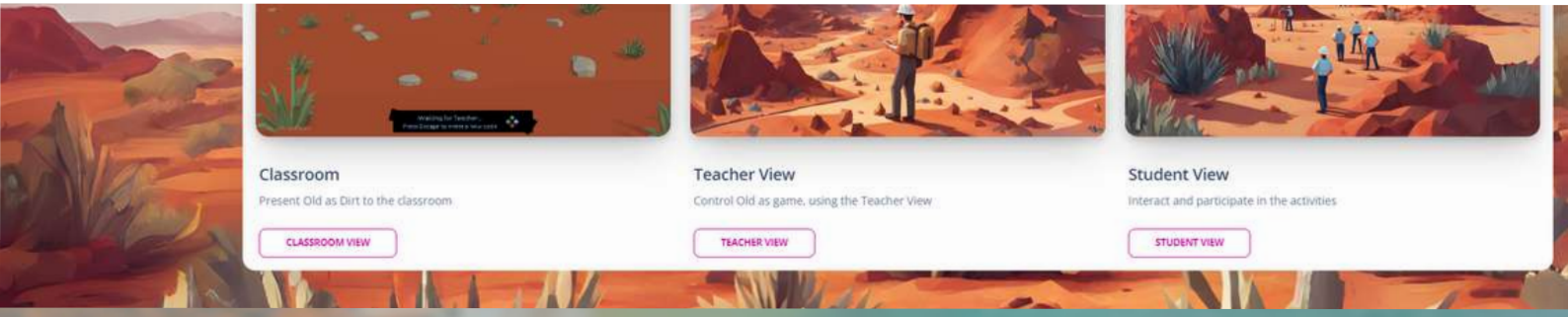
Let's examine recent events, including special celebrations of CoRE achievements, and what lies ahead: the incredible opportunities that bring recognition to CoRE.

05 CoRE Sponsors and Partners

The CLF extends heartfelt gratitude to our Sponsors and Partners for their invaluable support. Their commitment enables us to fulfill our purpose of "supporting today's youth for tomorrow's world."

EXECUTIVE SUMMARY





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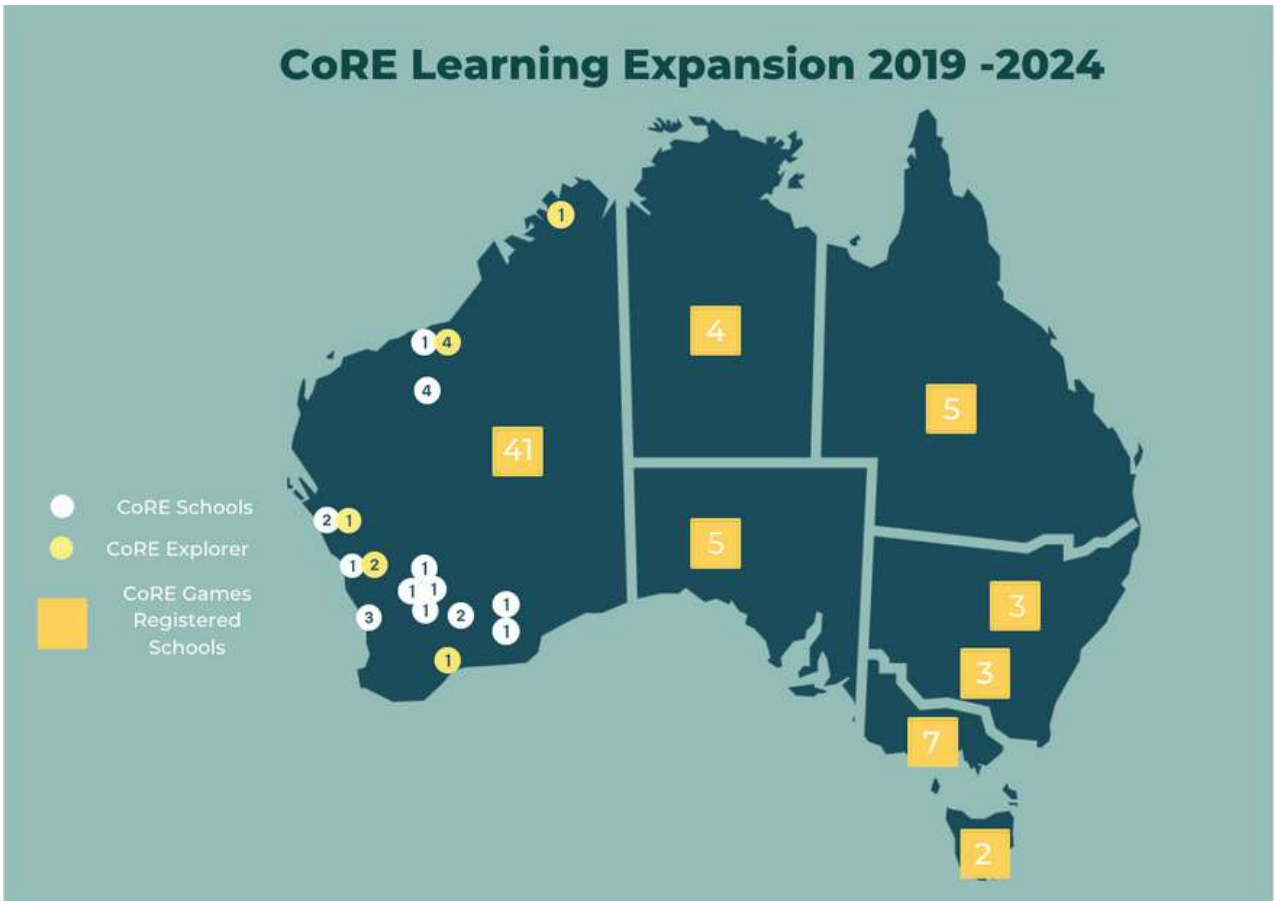
CoRE - Engagement and Impact



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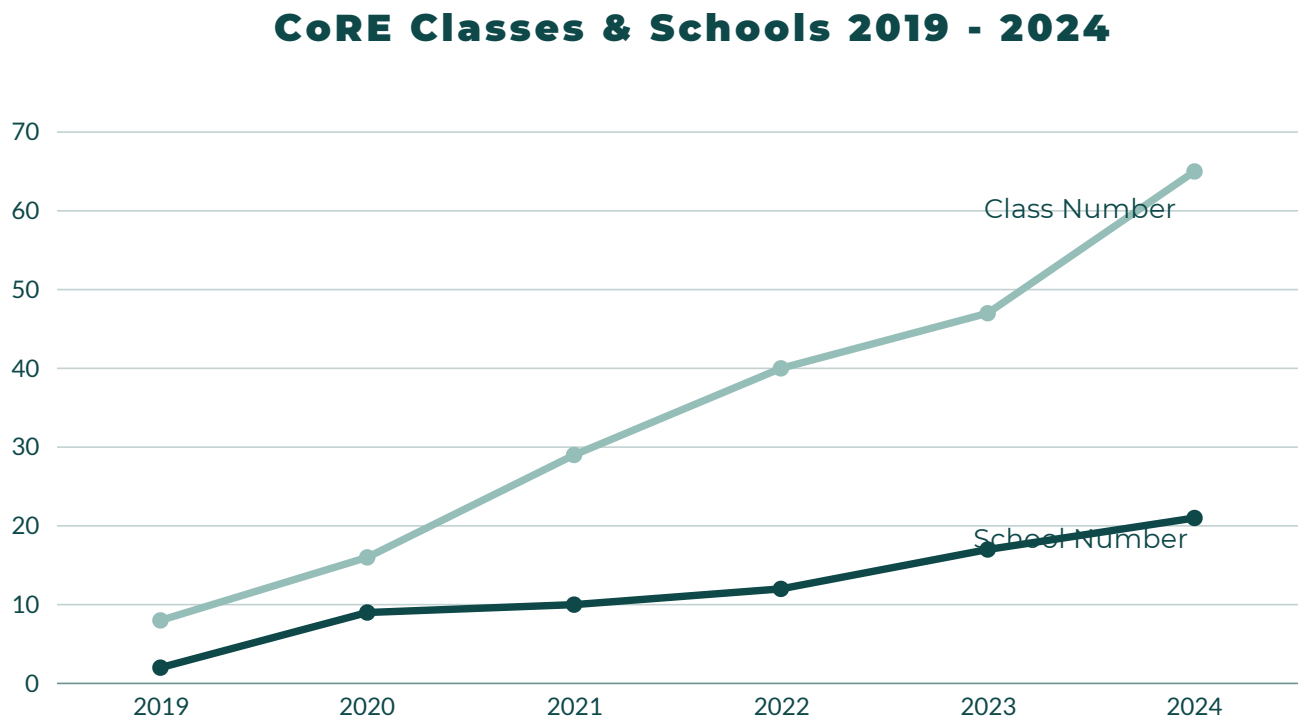
CoRE - Engagement and Impact



Over the past five years, CoRE's expansion has been fueled by schools that understand the significance of implementing the CoRE Learning Model. This model effectively engages a diverse range of students through various learning tasks, providing them with insights into the future of STEM fields and the career opportunities available to them.

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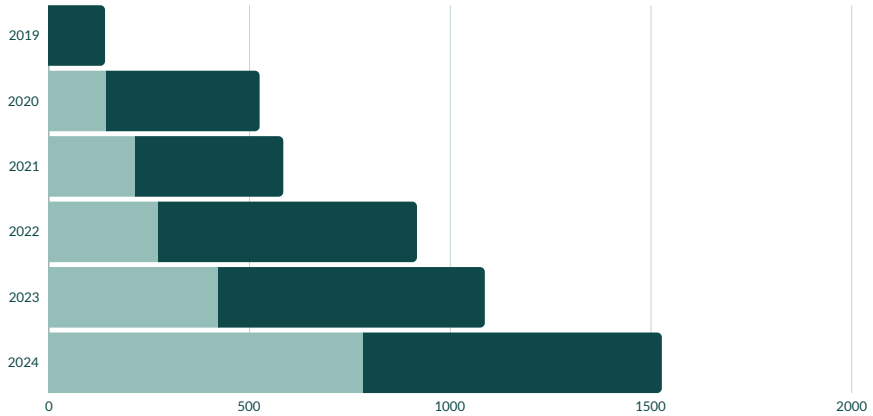
CoRE - Engagement and Impact

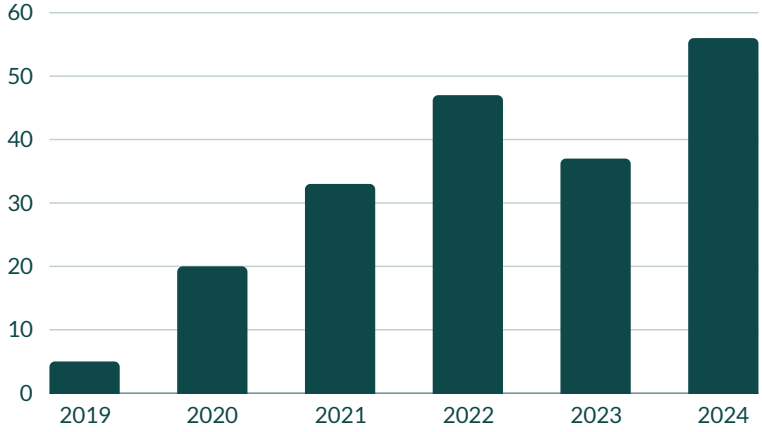


CoRE Students

2019 - 2024

It is the first time that primary school students have surpassed secondary students engaged in the CoRE Learning.

2023-2024 51 %



CoRE Educators

2019 - 2024

2023-2024 41 %

CoRE Professional Development - New Educators

Kayleigh from Geraldton

Courtney and Marie (moved from Tom Price) from Geraldton

Emma and Rachael join the Joseph Banks Team

Sue from Baler PS

Vahid from Cassia, Joan and Nikhi from Hedland PS & Stacey from South Hedland PS - CoRE Exploring

Debs from Kalgoorlie Boulder CHS

Elijah from Tom Price PS

Sue, Alice, Dave, Tate, Bradley, Katie, Aly, Liana & Karina from Baler PS

Leadership team at Baler PS

Amber from Merredin PS

Liam joins the Tom Price SHS Team

Carol moved from Hedland to KSSHS

CoRE Schools

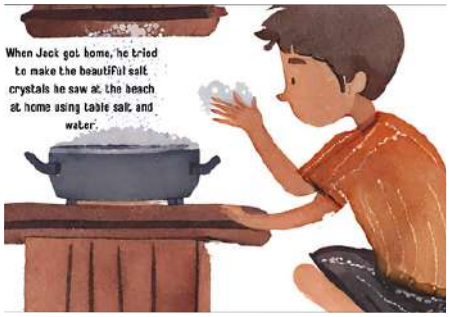
'Kent Street SHS - The upper school, year 11 & 12 ATAR Earth and Environmental Science field trips were in full swing this quarter. A visit to CLF's sponsor, Ramelius Resources - Edna May Gold Mine, was a highlight. "*Our visit to an operational mining site provided invaluable firsthand experience, surpassing the limited perspective gained from online imagery. It underscored the tangible application of the principles we study in EES and underscored the practical relevance of our learning*." (Bhvish Kumar)

As part of their PBL - A Journey Through Time - From Walkabouts to Hydrogen Energy.'

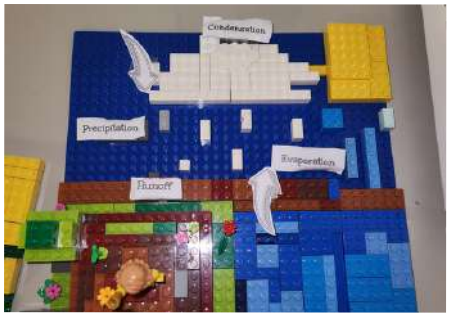
"We've had a great time at Beacon Primary School this term! We had a visit from the team at Zeff Energy, who gave an information session on Wind Turbines and discussed the positives and negatives of having this in our town. Students later wrote Persuasives on whether we should have Wind Turbines in Beacon. The company Playworks also visited and helped us make paper wind turbines. The class used Technic Lego to create wind turbines in small groups. After this was made, they used their coding skills to make the turbine move."

Lisa Clark, CoRE Educator, Beacon Primary School

CoRE Schools



'At Australian Christian College - Darling Downs, the CoRE classes are creatively and innovatively involved in their PBLs. Left - the Year 5&6 class have compiled storybooks explaining the science behind their 'Too Salty' PBL. Middel - for their 'Martian Invaders' PBL, the Year 7, designed and made the mechanisms behind the iron ore crusher on Mars. Right - the Year 8 & 9 classes are studying the science of iron ore formation and its chemistry through their 'Rusty Rocks' PBL. Their informative infographics testify to their research, communication and IT skills development.



The students at Koorda Primary school are engaged in their 'Summer Stormin PBL, using Lego to develop a connection between the water cycle and the formation of summer storms."

The Bencubbin Primary students are also learning about summer storms, and adding an extra layer with their potential connection to the Aurora Australis. Their school is located in a palaeochannel, a great place to run a mini field trip to study erosion.

It was the first field trip for Geraldton SHS Year 7 CoRE students. The field trip to The Walkaway Wind Farm and Ellendale Pool features the interaction of the Earth Spheres and the importance of water respectively, for 'The Mighty Murchison PBL.'

CoRE Schools

‘There is one PBL for different Year levels at Paraburdoo - ‘Paraburdoo’s Pilbara Flora and their contribution to the diversity of the landscape and environment.’
The PBL focuses on the natural environment, its sustainability, and how it relates to the mining landscape. For the two Year 4&5 classes, the Pilbara Survivor approach to natural flora and fauna in the area is achieved through the research and creation of an infographic, followed by a sculpture. For the Year 6 class, the study of triodia (desert spinifex) is examined as part of iron ore waste dump rehabilitation practices and making glue from it as the First Nations people did. (Images below)

Primary CoRE to Secondary CoRE at Merredin College

“The integration of CoRE into Merredin College's primary school curriculum has proven to be highly beneficial. The early exposure has provided students with a strong foundation in STEM fields from the outset of their educational journey.
One notable achievement this year is the noticeable impact CoRE has had on the learning experience of new students. By incorporating CoRE into the primary school curriculum, students are introduced to essential STEM concepts and equipped with practical skills that allow them to excel in their learning. This early exposure fosters a deeper understanding of CoRE principles and encourages students to explore and innovate from a young age.
Furthermore, having CoRE in the primary school setting has facilitated a seamless transition for students as they progress into higher grades. They enter secondary school with a solid grasp of fundamental concepts, enabling them to advance quickly and engage more deeply with advanced STEM disciplines.
Overall, the successful implementation of CoRE in Merredin College's primary school underscores the importance of early STEM education in preparing students for future academic and professional success. It serves as a testament to the ongoing commitment of CoRE and the school to providing innovative learning opportunities that empower students to thrive in an increasingly STEM-driven world. It is going to be an exciting year for Merredin College CoRE.“

Deb Cartwright, Wheatbelt CoRE Coordinator

CoRE Learning Model

A CoRE Curriculum Step - Up

Writing of the new SCSA Science in Practice Course for implementation at Tom Price SHS in 2025.

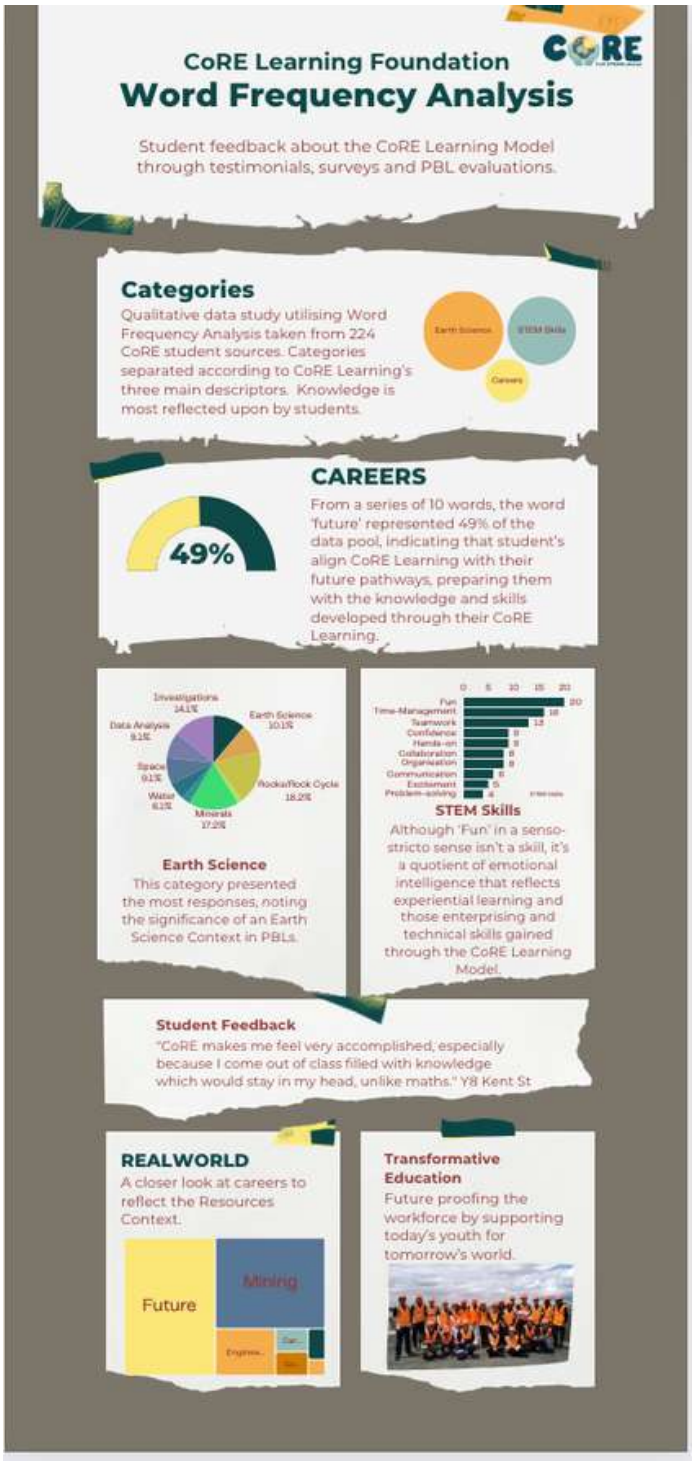
The Unit is called - 'The Red Pilbara, Our Special Earth.'

The following thirteen documents require ratification by SCSA and submission via the school Principal.

- Specific Unit Content for Context
- Course Outline (PBL)
- Assessment Outline
- Assessment Tasks & Marking Keys
  - Field Trip Report and Town Hall
  - Investigation Report
  - Practical Assessment
  - Written Assessment
- Teaching Learning Outline

The document will have its first viewing by SCSA next month, and the second unit titled 'Minerals to Medicine' is near completion.

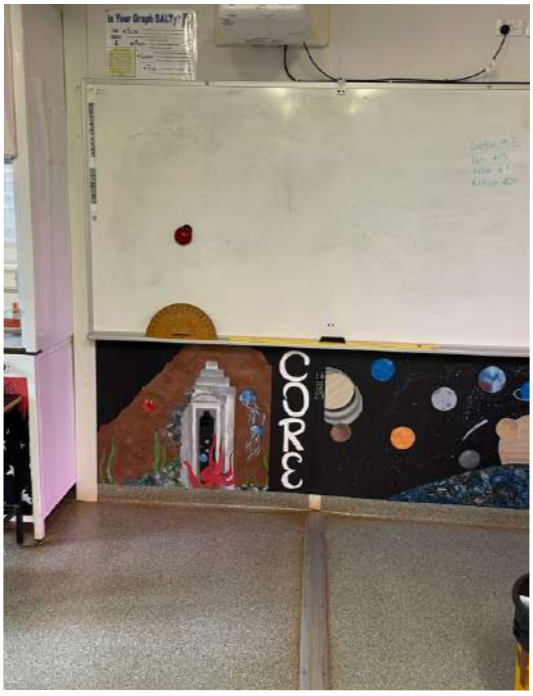
This is exciting for CoRE, representing a Year 11 & 12 CoRE pathway for General Courses, a good step into tertiary career choices. Recognition of this course would be a huge achievement for CoRE, particularly for the new CoRE Academy concept.



Over 200 pieces of qualitative student feedback were analysed through a word frequency analysis to understand the learning model's impact on student engagement.

CoRE Highlights & Events

- It was fantastic to walk into the CoRE Room at Tom Price SHS and become immersed in the murals of CoRE PBLs 2023. What a way to showcase the student's CoRE Learning Journey. Each year level designed a section of their mural based on the PBLs they conducted during the year.
- The IMARC collaboration was finalised with CoRE's Gamifying Earth Science (GES) booth at the conference, a whopping 18 square meters kindly sponsored by Newmont, and the itinerary for the Resources Engagement Day for 80 Year 9 students was finalised. IMARC has also sponsored four conference tickets for CoRE to attend. This is an international conference comprising over 120 companies and 9000 delegates. The current Federal Minister for Science, Innovation and Technology - Ed Husic, will accompany the students into the Gamifying Booth in the afternoon. This is amazing exposure for CoRE.
- There was an impressive response from mining students and companies to the CoRE booth at the AusIMM UWA Student Chapter - Student meets Industry evening.
- Currently, 160 schools nationally are active and engaged with Gamifying Earth Science (GES).
- The OaD Relauch is at CONSTAWA, April 9. There is much excitement about new design features that suit ease of implementation for maximum impact.
- CoRE achieved great exposure through the CME Women in Resources Awards.



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