

Cross Curriculum Priorities ... Term 3, 2018

... STEAMing along brilliantly!

Welcome to the October 2018 edition of news from the Cross Curriculum Leader. The WA Curriculum identifies Cross Curriculum Priorities (CCPs):

- ✚ Sustainability
- ✚ Aboriginal and Torres Strait Islander Cultures and Histories
- ✚ Australia's Engagement with Asia

These priorities are embedded across a wide range of learning areas, from English to Science, Technologies, Engineering, Arts and Mathematics (STEAM), Geography, Health and Physical Education.

Dr Lewis continues to oversee the implementation of the Cross Curriculum Priorities and work collaboratively within the Empowering Futures STEAM Committee. Many thanks to all the teachers who have supported the CCPs by taking on coordination roles this term:

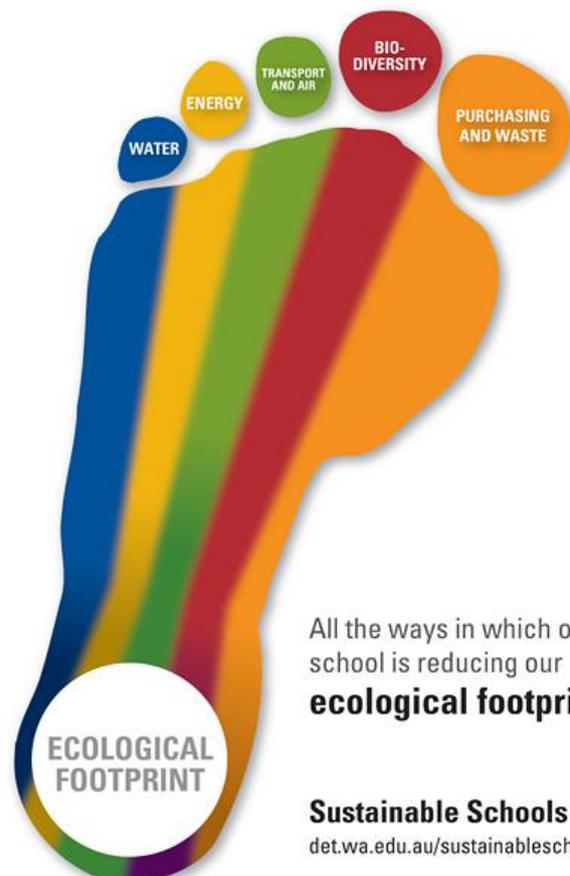
- ✚ Sustainability
 - Waterwise – Ms Sampson
 - Wastewise – Ms Melville
 - Your Move (TravelSmart) – Mr Erceg
 - EnergySmart – Mr O'Keefe
- ✚ Aboriginal and Torres Strait Islander Cultures and Histories - Ms Bower & Ms Hampton
- ✚ Australia's Engagement with Asia – Ms Platt & Ms Quinn

Sustainability

200 Tonne Plan ... on track!

The school is on track to achieve our 200 Tonne Carbon Emissions Reduction target set in the current school Business Plan (2017-2019). On average, our various tree planting, waste management, water saving, solar power production and transport actions reduce carbon emissions by 8 tonnes per month.

In total, since starting to monitor our carbon emission reductions in 2011, we have reduced our emissions by a total of 480 tonnes! We are on schedule to reach our total goal of 560 tonnes by the end of next year!



Eco Footprint

1. Biodiversity Action:

River Rangers in Term 3

All year levels were involved in River Rangers, with funding support on an increasing scale from Kindy to Year 6. Examples of activities include:

K-Yr 6 – tree planting: All classes participated in tree planting in our bushland. Students in the younger classes worked with their older buddy classes to plant over 300 seedlings in areas of the bushland needing rehabilitation.



Yr 2 (ELC 1) and Yr 4 (Room 10)

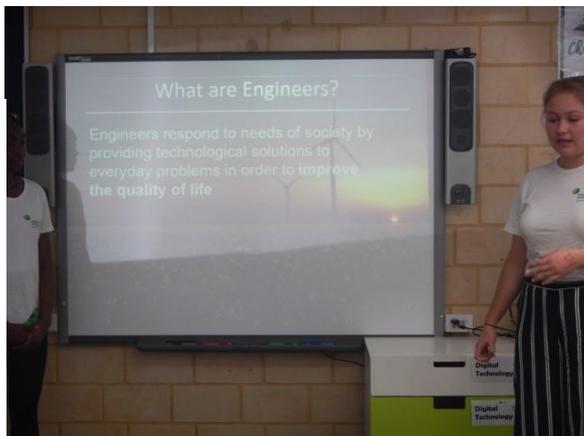
Yr 4 – Mildew Mania: Since the end of Term 2, Year 4 students in Room 9 have been growing barley as part of Curtin University's *Mildew Mania* project. They have grown four different varieties of barley and one of wheat to determine which varieties are most susceptible to mildew.

Near the end of Term 3 our citizen scientists collected leaf samples and specimen swabs from the barley and wheat plants they had grown. All varieties of barley and wheat grown were infected with powdery mildew. These samples were then sent to agricultural scientists at Curtin University for further analysis.



Being involved in Mildew Mania was a valuable learning experience. As one student reported, *"The results of this investigation will help WA farmers know which varieties of barley and wheat to plant in different regions of WA"*.

Yr 5 – learning about the importance of clean water: UWA's Engineers Without Borders believe that technology plays a vital role in humanitarian development within local communities across the world. Five UWA engineers visited Coolbinia Year 5 students, as part of a STEAM project about clean water. Our students investigated how to clean water using a range of materials, including sand, pebbles, gravel, cloth and activated carbon.



This water project started in Term 2 when a group of Year 5s went to Parliament House for the WA Branch of the United Nations Association of Australia's *Young Leaders Conference*. The students decided to investigate the United Nations Sustainable Development Goal 6, Clean Water and Sanitation. This inquiry project was opened up to all Year 5 students in Term 3. Next term, students will be making a different type of water filter, using our 3D printer.



Yr 6 – the Kids Teaching Kids Conference:

River Rangers attended the *Kids Teaching Kids* Conference in Mandurah. The students conducted two workshops at the conference on various environmental issues they had studied. The title of their workshop was: *Using digital technologies to promote environmental awareness and behaviour change with a youth audience*. Five technologies were showcased: EV3 robot eco stories; website creation; water testing with scans; animation skills and designing Pokémon cards with a dragonfly theme. To share what our River Rangers had learnt they conducted small group, hands-on learning sessions with Year 6-11 students from other schools.



The students represented our school with distinction and demonstrated their high levels of expertise with different technologies, as well as resilience, confidence and respect. Participation in this conference was an amazing learning experience!



Roots & Shoots Club



Roots and Shoots is a voluntary lunchtime club for children from Year 1-6. This term members completed painting the recycled wheelbarrows, planted, weeded and harvested produce. The children harvested over 100 potatoes from one of the wheelbarrows and cooked garlic and herb roast potatoes the following club day.



Roots & Shoots students also enjoyed a guided walk in our bush during lunchtimes. These are some of the stunning wildflowers in bloom in our school bushland ...



STEAM (Science, Technologies, Engineering, Arts and Mathematics)

Coolbinia's focus on STEAM is continued in Term 3, with engaging learning experiences related to our Chemical Science focus. For example, Year 6 students baked cookies, with the aim of learning about chemical changes. They learnt that an "Emulsion is a mixture of two substances that don't want to stay together", while "Maillard reactions occur when proteins and sugars break down and rearrange themselves". Check out the students in action in the Kwobadarn ...



	Before cooking	During cooking	Immediately after cooking
Temperature	The dough is room temperature same with choc-chips ✓	The oven was 180° but I expect the cookies were a little less than that because they wouldn't have needed that. ✓	About 158° after cooking. The air would have already cooled a tad. ✓
Colour	A creamy colour, choc-chips are a milky brown. ✓	A brown, creamy colour. The choc-chips were a little darker than before. ✓	A golden brown colour. The cream colour has faded. The choc-chips are looking like dark chocolate. ✓
Smell	A sloury, vanillary type of smell. ✓	A vanillary, sweet, chocolatey, doughy smell. ✓	When you smell it you can smell the chocolate mostly, although there is a tinge of vanilla. ✓
Size	Each cookie is Teaspoon size ✓	About the size of a tennis ball. ✓	About tennis ball size. They seem to have expanded. ✓
consistency	Wet and sticky ✓ Miss George ✓	They were harder than when we put them in and much drier. ✓	When we took them out they were hard, but not so hard so when we broke them they crumbled. When it went into there, here air pocket all through. ✓

Chemical sciences
 IRREVERSIBLE AND IRREVERSIBLE CHANGES
 Cooking experiment - 2

Thanks to Parent Volunteers during Term 3:

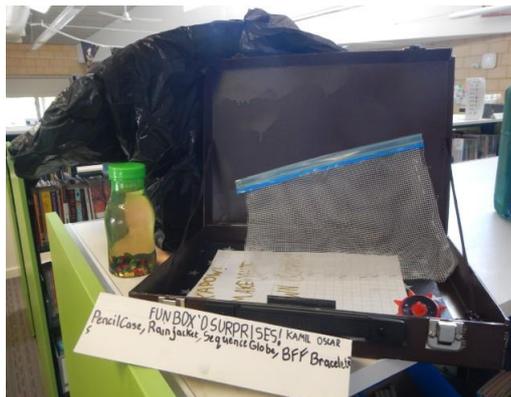
Sincere thanks to parent helpers for:

- ✚ Supporting in all learning areas
- ✚ Helping with cooking lessons
- ✚ Planting and weeding
- ✚ Providing plants for the assembly garden
- ✚ Helping at excursions and incursions

Without parent help we wouldn't be able to provide the amazing learning opportunities that we do!
Thank you all parent helpers.

2. WasteWise:

Year 4 students are the Waste Warriors, with Mrs Melville taking on the role of Wastewise Coordinator. Year 4 & 5s in Mrs Graca's class were on roster during Term 3 to manage wastewise duties, such as worm farming and composting. This class also conducted a STEAM inquiry project on plastic waste too. The following photographs show the 'waste' news desk in action and some of the recycled plastic creations these students designed:



Different Year 4 classes take turns managing the worm farming and composting roster throughout the year. These Waste Warriors, amongst other tasks, collect food scraps and recycle them in the worm farms and compost bins. Great job Waste Warriors!

Students learn about the benefits of worm farming and how to care for worms ...



Since Term 2 the whole school has been involved in a competition promoting recycling of oral care products. This competition closes at the end of October 2018, so please keep those oral care products coming in.



At Coolbinia we recycle:

-  batteries
-  old toothbrushes & oral care packaging
-  mobile phones
-  plastic bread bag clips
-  old pairs of glasses
-  ink cartridges
-  paper and cardboard

All these bins may be found at the Kwobadarn (student kitchen).

This year Nude Food Tuesdays ... and all days, are still in operation. Nude Food refers to student lunchboxes containing food without wrapping. Information about healthy, nude food lunches may be found at:

<https://www.kitchengardenfoundation.org.au/content/pick-mix-1-6-lunchbox-poster>

Please continue to support our focus on Nude Food this term.

Thank you for contributing to our Wastewise initiatives!



3. WaterWise:

Year 3 students are the Water Warriors. Mrs Sampson is the Waterwise Coordinator this year. Mrs Sampson also coordinates other waterwise duties, such as arranging Water Corporation incursions for all classes and the watering rosters. Roster students collect rainwater for watering the gardens and hanging baskets, as well as topping up the bird baths and frog habitat ponds. They also monitor taps for leaks.

Thank you Mrs Sampson and the other Year 3 teachers – Mrs Greer, Mrs Pratico, Mrs Jamieson and Mr Owen, for supporting and promoting waterwise behaviours.

Proud to be a
**Waterwise
School**

Education is the key for water saving at home. Visit watercorporation.com.au/save-water and watercorporation.com.au/whatsyourwaterstory to find out how you can save water.

4. EnergySmart:

Year 6 students are our EnergySmart leaders. Mr O'Keefe is the EnergySmart Coordinator. Room 12 students have been recording the school's electricity usage each term. This information will inform decisions about how to reduce our electricity usage.

Other EnergySmart actions taken this year include, whole school participation in Earth Hour to increase awareness of energy use. Another school action was Year 5s participation in the SolarBuddy program. Students made solar lanterns and sent them to countries needing to replace kerosene lanterns. Congratulations to all participants.



Our 73 solar panels continue to reduce our electricity costs and our carbon footprint. By the start of October our solar power system had generated over 110000kWh and saved over 104000kg of CO2 from being released into the atmosphere since 13 September 2012.

5. Your Move:

Year 5s are the Your Move (TravelSmart) students. Mr Erceg is the Your Move Coordinator. Room 7 and 8s Your Move teams organised whole school active travel events this year. Congratulations to everyone who participated.

The Year 5 student teams prepared posters and made announcements to promote these special events. Raffle tickets, stickers and other prizes were distributed to children coming to school in an active manner.

Please continue to support Your Move in Term 4: every Friday is a Fume Free Friday! Later this term we also have two special Your Move days, so watch out for the dates and support your school's active travel commitments.



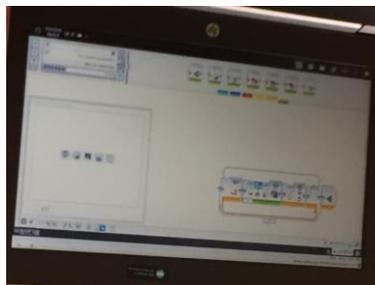
Social Handprint

1. Student & Staff Wellbeing:

Our school focus on student and staff wellbeing is extremely important for building happy, inspired children who love to learn. Various programs are conducted across the school to facilitate this, like KidsMatter and the Positive Behaviour Support (PBS) programs. Lunchtime and after school activities also support student wellbeing, for example, during Term 3 UN Youth Leadership team meetings, Coding, Robotics, RoboCup and Roots & Shoots Clubs operated.



RoboCup Club



2. Aboriginal Cultures:

Ms Bower is the Aboriginal Cross Curriculum Priority Coordinator this year, ably assisted by Mrs Hampton. Ms Bower successfully applied for the 2018 PALS \$1,000 grant:

- ✚ Partnership between Aboriginal and non-Aboriginal people;
- ✚ Acceptance of difference as unique and to be respected;
- ✚ Learning more about ourselves and each other, and,
- ✚ Sharing a common journey along the path of healing and reconciliation towards a more harmonious and optimistic future.

This year our successful PALS project focused on frogs, within the PALS categories of: Student Engagement and Community Participation; and Digital technologies.

The major engagement with the Aboriginal CCP during Terms 2 and 3 was through the creation of artworks related to our STEAM program. Year 3 and 4 students created paintings of local turtles and frogs with Sharyn Egan, a Noongar artist who has worked at our school previously.





Pre-primary, Year 1 and 3 students were guided by Lea Taylor, Noongar weaver, to make hanging creations called “Catching Dreams”, linking to Noongar Dreaming stories.

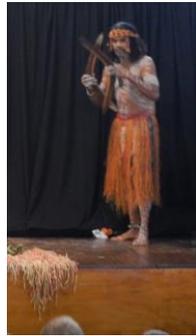


Kindy, Year 4 and 5 students worked with Acacia Collard to create the sensational sand art on the school oval:



3. Cultural & Social Diversity:

The whole school incursion in Term 2 was presented by Sean Choolburra. Sean was born and raised in Townsville and his ancestors are Gu-GuYalanji, Kalkadoon, Kandju and Bwngcolman from around Townsville and Palm Island.



Sean's performance was charismatic, vibrant and captivating. He fused his engaging energy and humour with historical facts, spiritual wisdom, depth of ancestral understanding and knowledge. Sean's exciting performance included dance – stories – painting – fire creation – didgeridoo playing.



4. Community Partnerships:

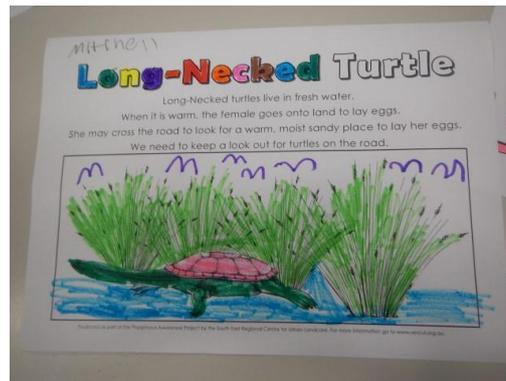
Since 2015 our school has been a member of the United Nations Association of Australia WA Division Global Citizenship Schools program. Each year a conference: *Tomorrow's Citizen Leaders – Local to Global* is held to support our young leaders.

In term 2 six Year 5 students represented the school at the 2018 conference, which was held at Parliament House. The students outlined a project they developed to address United Nations Sustainable Development Goals related to clean water. They are making a water filter with our 3D printer and experimenting with different ways of cleaning dirty water. This project is being implemented in Terms 3 and 4 this year and will be completed in Term 1 2019.



We greatly appreciate the support provided by United Nations Association of Australia WA Division, enabling our children to participate in this citizenship experience, which is an outstanding educational opportunity.

Another community partnership that has been valuable during 2018 was the South East Regional Council for Urban Landcare (SERCUL). An Education Officer from SERCUL provided free workshops on local wildlife, for classes from Kindy to Year 6. This support enhanced the children's learning in most engaging ways. Sincere thanks to SERCUL.



5. Economics & Built Environment:

Boya Currency

Boyas are our local currency created to acknowledge and reward environmentally and socially supportive actions. Boyas are spent at assembly garden produce stalls and the canteen.



Aboriginal Cultures and Histories

As discussed previously, Coolbinia PS has again participated in a PALS Grant project this year. The theme was related to frogs, as we studied frogs and our new frog habitat in the early childhood nature playground had just been completed. The components of our PALS project included:

Student Engagement and Community Participation

Art workshops with Sharyn Egan & Jade Dolman; PLC Gorna Liyarn Dance Group performance & Noongar 'Frog Dreaming' dance; Photographic competition; Community engagement through our annual Artopia festival; Noongar bush workshops; School frog habitats in bushland; *Kaarla Kaatijin* drama performance; and Bush tucker cooking and Noongar culture workshops.

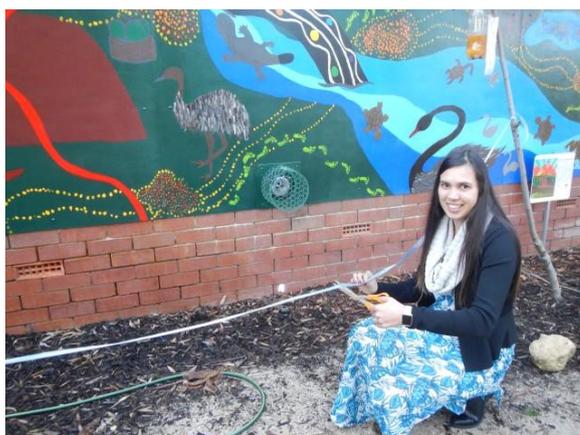


PLC Gorna Liyarn Dance Group



Reading and dancing with Gavin Rioli, Noongar cultural educator

Wadumbah Dance group



Jade Dolman cutting the ribbon to officially open the bush mural of the early childhood nature playground at our NAIDOC Week event.

Digital Technologies

Animation workshops conducted at Scitech using a variety of fresh water samples to highlight aspects of a healthy ecosystem and how this interrelates with Aboriginal cultures; a six week web design course that involves students selecting their own topic to explore an aspect related to the Aboriginal and Torres Strait Islander histories and cultures Cross-Curriculum Priority; participation in RoboCup EV-3 Robots to create environmental stories based on Aboriginal, histories, traditions and cultures; and teachers from K-6 will continue their integration of Digital Technologies and the Aboriginal and Torres Strait Islander histories and cultures Cross-Curriculum Priority within their classrooms in ways appropriate to each year level.



Another successful grant application, completed by Dr Lewis, was a NAIDOC Week Grant. This initiative was based around the NAIDOC theme “Because of her, I can!” and involved the school working with two community partners – the One World centre and the WA Chapter of the Australian Association for Environmental Education. The aims of the grant project were to celebrate the history, culture and achievements of Aboriginal and Torres Strait Islander peoples and to contribute to Reconciliation. Our hugely successful NAIDOC Week celebration was held on Friday 27th July, with the above artworks on show.



Because of Her We Can!

NAIDOC WEEK 2018

Australia's Engagement with Asia

The Asian CCP Coordinator this year is Ms Platt, with support from Ms Quinn.

Sustainable Development Goals

The key context for the Asian Cross Curriculum Priority has been based on the United Nation's Sustainable Development Goals (SDGs):

THE GLOBAL GOALS

For Sustainable Development



Coolbinia Primary School supports the achievement of these goals by having active membership with the One World Centre and the United Nations Association of Australia WA Global Schools Project, as well as the actions we take to address the various sustainability issues outlined in the SDGs.

This year our school has contributed to:

- ✚ Global Goal 13 (Climate action) through our work on our carbon emissions reduction plan.

Further actions based on other goals include for example:

- ✚ Global Goal 3 (Good health and wellbeing) through participation in the Positive Behaviour Support and KidsMatter programs.
- ✚ Global Goal 5 (Gender equality) by participating in the *Tomorrow's Citizen Leaders – Local to Global*, conference at Parliament House and taking subsequent action to address this student concern.
- ✚ Global Goal 6 (Clean water and sanitation) through our water filter project through the UNAA Global Citizenship Schools project.
- ✚ Global Goal 15 (Life on land) through our planting and care of wildlife programs.
- ✚ Global Goal 16 (Peace, justice and strong institutions) by participating in a Red Cross incursion called "In search of safety", our various fundraising projects and our Reconciliation actions.

Finally, please feel very welcome to email me or visit me in the Kwobadarn if you would like to have a chat about any aspect of the implementation of the Cross Curriculum Priorities.

Sincerely

Dr Elaine Lewis

Cross Curriculum Leader

River Rangers Coordinator

Roots and Shoots Coordinator

Part time role: located in the Kwobadarn on Thursdays

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8 October 2018