

# Rumbalara Environmental Education Centre Annual Report





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## Introduction

The Annual Report for 2016 is provided to the community of **Rumbalara Environmental Education Centre** as an account of the school's operations and achievements throughout the year.

It provides a detailed account of the progress the school has made to provide high quality educational opportunities for all students, as set out in the school plan. It outlines the findings from self–assessment that reflect the impact of key school strategies for improved learning and the benefit to all students from the expenditure of resources, including equity funding.

Christine Freeman

Relieving Principal

#### School contact details

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## **Message from the Principal**

After leaving the Centre as teacher in 2012, it has been my pleasure to relieve as principal at Rumbalara EEC for 2016. I have thoroughly enjoyed working with such an experienced team, reconnecting with Central Coast teachers and collaborating with our local community educators. Some of our biggest achievements this year include the development of new programs for the Geography and Science Syllabuses, further integration of technologies in teaching and learning, the delivery of professional development for Central Coast teachers to implement the new Geography syllabus. and the successful uptake of our 'Bright Sparks' alternative energies trailer (developed in 2015). I look forward to strengthening our community relationships in 2017 and delivering our new programs!

## School background

#### **School vision statement**

Students become global citizens contributing to the ecological sustainability of planet earth as a result of the experiences in, about and for the environment provided by Rumbalara EEC (REEC).

## NSW department of Education Environmental and Zoo Education Centres' Vision

To support NSW Public Schools in implementing sustainability education through meaningful learning experiences in, about and for the environment. We strive to be leaders in providing students with the skills, values and opportunities to act as responsible citizens.

#### **School context**

Rumbalara EEC is one of 25 Environmental and Zoo Education Centres (EZEC) operated by the NSW Department of Education and Communities (DEC).

Together these centres form a learning community that lead schools in the implementation of environmental and sustainability education. They provide students with experiential learning opportunities in natural and built environments and professional learning and support for teachers and school communities.

The centre is located at the entrance to Rumbalara Reserve and just a short walk from the central business district of Gosford. Our facilities support the delivery of fieldwork programs and the production of environmental education resources. They include a connected classroom, environmental resource library, field studies laboratory and bush walking trails.

The Centre particularly encourages and supports environmental sustainability in Central Coast public school communities. As a result of our services they will be:

- · more aware and appreciative oflocal and global environments;
- more knowledgeable about thecauses of environmental problems;
- · more skilled in communicating toenvironmental decision makers; and
- more actively involved in caringfor the environment

#### Self-assessment and school achievement

#### Self-assessment using the School Excellence Framework

This section of the Annual Report outlines the findings from self–assessment using the School Excellence Framework, school achievements and the next steps to be pursued.

This year, our school undertook self–assessment using the School Excellence Framework. The framework supports public schools throughout NSW in the pursuit of excellence by providing a clear description of high quality practice across the three domains of Learning, Teaching and Leading.

In the domain of Learning our evidence has led us to a judgement of Delivering in most learning elements and excelling in the area of Curriculum and Learning. Rumbalara has been working with the EZEC community and local teachers to develop new field work programs and delivery ideas for the new Geography Syllabus. This has resulted in three Stage 1–3 programs and new pre and post visit resources that support the use of Geographical Tools and the mandatory emphasis on field work. We have also been trialling new assessment and reporting methods to reflect on student learning. Our evidence to support our judgements includes visiting teacher evaluations, assessment rubrics, collection of student work samples and pre and post recorded student interviews.

In the domain of Teaching our evidence has led us to a judgement that we have been Sustaining in Growing in the area of Effective Classroom Practice, Learning and Development and Professional Standards. We also judged ourselves as excelling in Collaborative Practice. REEC has been collaborating with the Central Coast Curriculum Advisory Group (CAG) and the EZEC community to deliver professional leaning on the new Geography and science syllabuses. Relieving Principal Christine Freeman was also a member of the EZEC Collaborative Practice Team that met each term to discuss projects and priorities for EZEC state wide. Our evidence to support our judgements includes evaluations from our professional learning events, visiting teacher evaluations, minutes from staff meetings and the evaluation of the

#### Collaborative Practice Team.

In the domain of Leading our evidence has led us to a judgement that we have been Sustaining and Growing in most elements. The Centre has developed a strong relationship with the community and was involved in projects with the University of Newcastle, Take 3 Green Sea Turtle Project, Central Coast Council and NSW Department of Planning – Youth Forum (supported the Central Coast Regional Plan) In the area of School Resources REEC has been analysing the schools physical and financial resources to achieve improved students outcomes. A decision was made to increase student fees to be able to provide increased services to more schools in 2017. Our evidence to support our judgements comes from a survey of Central Coast Principals, collaborative program evaluations, Rumbalara School Plan, staff meeting minutes and visitation statistics.

Our self–assessment process will assist the school to refine the strategic priorities in our School Plan, leading to further improvements in the delivery of education to our students.

For more information about the School Excellence Framework:

http://www.dec.nsw.gov.au/about\_the\_department/our\_reforms/school\_excellence\_framework

## **Strategic Direction 1**

Learning for environmental Sustainability

## **Purpose**

Providing experiences in the environment that develop a deep understanding and ability to think critically, creatively and ethically for environmental sustainability

## **Overall summary of progress**

This year Rumbalara EEC collaborated with DEC Education Services, local environmental officers, local classroom teachers, the Geography Teachers Association(GTA) and the EZEC community to develop new programs and resources for the Geography Syllabus K–10. Our continued leadership in the delivery of field work has resulted in three new quality programs for Stage 1–3 Geography. The Centre also improved its science programs with an increased technology focus, an upgrade of our science lab/ hands on room and a redesign of our 'Bright Sparks' energy Investigation program. A grant was also received form Local Land Services to develop a new Environmental Arts program for thirty students from over fifteen different Central Coast schools.

Progress towards achieving improvement measures		
Improvement measures (to be achieved over 3 years)	Progress achieved this year	Funds Expended (Resources)
All REEC programs aligned to new syllabuses and new programs developed.	New programs developed and trialled this year include;  • three new geography programs for stages K–6.  • STEM program for our upgraded Science Lab /investigations room.  • Environmental Arts Program for Stage 3 that included photography and mixed media artworks.  • iPad nature documentary program and multimodal local environments program for GATS students.  • Stage 4 Geography program, Landscapes and Landforms for Wadalba High.  Current Programs that were improved include:  • 'Bright Sparks' / alternative energy program with teacher and student support pack. Produced a flyer and promo video. Thirteen Schools and 1018 students participated.  • update of the 'Our Aboriginal Heritage' resource pack.  • Stage 5 Geography –Terrigal Coastal Management resources	Arts Day teacher relief and resources –grant Local Land Services (\$1500)     Bright Sparks program development and delivery (\$14,149)     Wadalba –2 days casual relief from previous tied grant from Council \$880     Geography Consultation –1 day casual relief to attend HSIE head teacher meeting
25% improvement in student environmental knowledge, skills and attitudes as a result of participation in REEC programs.	Implemented new assessment strategies e,g assessment rubrics, student pre and post interviews, collected work samples. Trialled a new joint EZEC evaluation. and developed a new evaluation for 2017 based on learning from 2016 Evaluations from Rumbalara visiting teachers show that 83% of teachers felt that programs enhanced student's knowledge about the environment, and skills in interpreting the environment.	

#### **Next Steps**

Improve our support for STEM and Gifted and Talented students in the region. This will involve developing project based learning programs with a focus on Citizen Science and data collection and two environmental art days.

Continue to improve our pre and post visit resources for our primary programs.

Develop a Stage 2 history program that compliments 'Gosford Time Walks' (a community history program).

Develop a leadership program to support Aboriginal Students.

Continue to develop our Geography programs for Stages 4–5 with a focus on new resources for Environmental Change and Management, Sustainable Biomes and Landscapes and Landforms.

Prepare for the implementation of the new Stage 6 science syllabus by collaborating with local teachers and the EZEC team.

## **Strategic Direction 2**

Fostering quality teaching

#### **Purpose**

To build the capacity of teachers to deliver quality environmental education experiences in, about and for the environment

## **Overall summary of progress**

Rumbalara EEC was able to provide professional learning for teachers in Sustainability Education and for the new Geography Syllabus K–6. A new Cross Curriculum Sustainability Education Course was able to be developed through the EZEC team and the course was then delivered to two schools on the Central Coast. Both of these schools developed a sustainability education plan and one school developed units of work for each stage.

Rumbalara EEC also worked with the Central Coast Curriculum Advisory Group (CAG) to develop and deliver two Geography Professional Development days for curriculum leaders. This course was delivered by five other EEC's to over 300 teachers in Macquarie Park.

Progress towards achieving improvement measures		
Improvement measures (to be achieved over 3 years)	Progress achieved this year	Funds Expended (Resources)
More environmental sustainability professional learning opportunities for teachers.	In 2016 Rumbalara EEC delivered; • the annual Sustainability Leaders Forum • a cross curriculum sustainability education course to two schools on the Central Coast. • a full day geography course for the new K–6 Syllabus (fifty teachers attended over two days). • geography professional development sessions at nine staff meetings to Central Coast schools focusing on Geography Tools for the new Geography K–6 Syllabus Rumbalara also attended meetings with the Central Coast Curriculum Advisory group each term to plan professional leaning events for all primary schools across all K.L.A's.	Sustainability Forum \$813.00 Geography professional learning preparation and delivery \$2761.30 (funding from Central Coast CAG).
Increase in the number of schools contributing to the 'Green Schools' web based directory of best practice.	Three schools were selected to submit case studies of sustainability education best practice. These were showcased in our newsletter and added to our website.  Twenty five teachers shared their sustainability edcuation stories at our annual sustainability leaders forum.	
Improved pre and post excursion resources	<ul> <li>Our 2015 data shows that 45% of schools gave us the highest score for our pre and post visit material and 37% gave us the second highest score. In 2016 there was only a slight improvement with 45% of schools rating at the highest score and 39% rating with the second highest score.</li> <li>The Centre audited all programs to identify those that needed updating.</li> <li>Pre and Post Visit resources were developed for our Stage 3 Geography excursion</li> </ul>	

## **Next Steps**

Deliver a primary science professional learning session with Central Coast CAG.

Deliver the annual sustainability leaders forum with a focus on collaborative projects.

Add four new case studies of sustainability best practice to our Green Schools Website and Rumbalara News.

Continue to update our pre and post visit excursion resources.

## **Strategic Direction 3**

Environmental sustainability through strong connections

## Purpose

Forging strong networks by leading and inspiring a culture of collaboration and innovation to achieve environmental sustainability

## **Overall summary of progress**

During 2016 The Centre has developed a strong relationship with the community and was involved in projects with the University of Newcastle, Take 3 Green Sea Turtle Project, Central Coast Council – (Wise About Waste & Future Council) and NSW Department of Planning – Youth Forum (supported the Central Coast Regional Plan) and Forestry Corporation NSW (Strickland Forest Expo).

The Rumbalara EEC Relieving Principal was a member of the EZEC Collaborative Practice team which meant once a term to improve the delivery of environmental sustainability education across the EZEC network.

Improvement measures (to be achieved over 3 years)	Progress achieved this year	Funds Expended (Resources)
Development and implementation of new programs		Youth Forum \$172.66
		Valley School –1 day casua relief \$480
	Youth Forum in conjunction with the Department of Planning and University of Newcastle on the Central Coasts Regional Plan. (50 Students)	Future council– 1 day casual relief \$480
	2. 'GO M.A.D' (Students Making a Difference) program in conjunction with the EZEC team at Taronga Zoo. (150 students)	Green Sea Turtle– 2 days casual relief \$820
	3. A student leadership workshop for "Valley Schools" learning Community (50 students)	Wise About Waste – 15 days casual relief \$4786.69 (funding from Central Coast Council)
	4. Future Council in partnership with Central Coast Council (50 students).	Ourimbah Pre Service Teachers –3 days casual
	5. A Green Sea Turtle/marine debri program with Take 3 and Local Land Services (twenty schools).	relief (\$1440)
	Wise about Waste education program with Central Coast Council to seven schools.	Porters Creek Wetland Program– 11 days casual relief \$4739.80 (Funding from Central Coast Counci
	7. Sustainability Education and Geography Tools workshop to pre–service teachers at Ourimbah Campas (University of Newcastle)	mom contrar codet codino
	8. Strickland Forest Expo with Forestry Corporation NSW and Australian Wildlife Displays to commemorate Threatened Species Week.	
	The Centre also collaborated with Central Coast Council and local teachers to develop lesson outlines and an I Book teaching resource on Porters Creek Wetland.	
More effective delivery of environmental education as a	The Rumbalara Relieving Principal attended 4 meetings of the EZEC Strategic Alliance team	EZEC Collaborative Practice – 4 days casual

Progress towards achieving improvement measures			
Improvement measures (to be achieved over 3 years)	Progress achieved this year	Funds Expended (Resources)	
result of EZEC community collaboration	These meetings resulted in  the sharing of Geography programs for the new K–6 syllabus and development delivery of a combined EZEC Geography professional development course  the development of a geography toolkit guide with a focus on field work  the development of a cross curriculum sustainability course  the election of an official EZEC representative funded by EZEC collective funds.  Collaborative Practice projects were evaluated as successful by the EZEC team. 100% of Principals voted that the collaboration should continue.	relief and travel \$1769.04 – Strategic Alliance Grant	

## **Next Steps**

Continue our links and collaborative programs with the University of Newcastle and Central Coast Council.

Continue to attend meetings with the EZEC Collaborative Practice team and contribute to joint planning for the Stage 6 science syllabus. This will include establishing a site for water quality data for the network.

Improve our links with the community by supporting the Central Coast Environmental Education Network and attend quarterly meetings.

Partner with the Community Environment Network to deliver a Wild Watch program.

Partner with the Central Coast Marine Discovery Centre and the University of Newcastle to deliver professional learning for secondary science.

## Student information

In 2016 Rumbalara EEC conducted field work programs for 9073 students across the Central Coast. Of these students 70% were primary and 30% secondary. Our most popular programs in primary were Early Stage 1 Bush Picnic (science), Stage 1 Features of Places (Geography), and Stage 1 Living World (Science). Our most popular programs in Secondary were Stage 4 Geography (Coastal Management) and Stage 6 Science (Local Ecosystems).

An additional 1160 students were also involved in other special programs delivered in collaboration with partners such as Central Coast Council, Take 3 and Local Land Services (this includes a proportion of pre service students enrolled in Newcastle University's teacher training program.

## **Workforce information**

## **Workforce composition**

Position	FTE*
Principal	1
Classroom Teacher(s)	1
School Administration & Support Staff	1.19

<sup>\*</sup>Full Time Equivalent

## **Teacher qualifications**

All teaching staff meet the professional requirements for teaching in NSW public schools.

## Professional learning and teacher accreditation

Rumbalara EEC is active in enabling the ongoing professional learning of the twenty five Environmental and Zoo Education Centre's around the state. Through the EZEC Collaborative Practice team and the EZEC conference co—ordinators, the Centre contributed to learning sessions and programming for both teacher and principal EZEC conferences. Our specific contributions included sessions on Citizen Science and the teachers accreditation process for EZEC teachers.

Other professional learning attended by Centre staff included:

- maintenance of mandatory training in CPR, child protection and Code of Conduct
- a full day workshop on Central Coast environments and issues with professionals from Central Coast Council and the Office of Environment and Heritage
- STEM education showcase from schools around

- the state
- two day workshop on leadership for Regional Sustainability Education
- iPad configerator course
- Newcastle/ Central Coast Ed Connect Leadership conference
- EZEC SAM conference

# Financial information (for schools using OASIS for the whole year)

#### **Financial information**

This summary financial information covers funds for operating costs to 30 November 2016 and does not involve expenditure areas such as permanent salaries, building and major maintenance.

Income	\$
Balance brought forward	51 527.25
Global funds	36 428.70
Tied funds	10 593.23
School & community sources	21 894.50
Interest	930.76
Trust receipts	0.00
Canteen	0.00
Total income	121 374.44
Expenditure	
Teaching & learning	
Key learning areas	37 665.24
Excursions	0.00
Extracurricular dissections	8 102.81
Library	154.74
Training & development	3 290.45
Tied funds	13 464.32
Short term relief	2 843.88
Administration & office	9 601.08
School-operated canteen	0.00
Utilities	5 985.07
Maintenance	1 019.54
Trust accounts	0.00
Capital programs	0.00
Total expenditure	82 127.13
Balance carried forward	39 247.31

A full copy of the school's financial statement is tabled

at the annual general meetings of the parent and/or community groups. Further details concerning the statement can be obtained by contacting the school.

## Parent/caregiver, student, teacher satisfaction

Throughout 2016 we assessed visiting school teacher's perceptions of our field work programs. The responses are outlined below.

- Creating a Positive Learning Environment 81.4 % scored 4/4, 17.8% scored 3/4
- Rumbalara Staff demonstate high learning expectations 67% scored 4/4, 29% scored 3/4
- Relevance of field work programs to curriculum 79% scored 4/4, 19% scored 3/4
- Staff Knowledge of topics 90% scored 4/4, 10% scored 3/4

Below are some common responses from our student surveys

#### Q What did you like best about the program

I liked learning about the birds and how they lived

Being able to learn more about the environment while hanging with my friends

Being outside

Getting outside and learning about the environment

Learning more about wildlife in my area

## **Policy requirements**

## **Aboriginal education**

Most of the Centre's programs include an Aboriginal perspective. The 'Our Aboriginal Heritage' fieldwork program specifically focusses on traditional Aboriginal life and culture. This is one of our most popular programs. In 2016 we reviewed our support resources for this pack and consulted with members of Darkinjung Land Council, State AECG and DEC Aboriginal Education consultants about the content of this program. A meeting time to present these resources has been scheduled with the regional AECG in 2017.

Rumbalara EEC also conducted three field work days specifically for Aboriginal students from three schools in 2016.

## Multicultural and anti-racism education

The Centre's programs encourage students to consider sustainability as a global issue. They also demonstrate that environmental attitudes and values have a cultural basis. Our regular newsletter to schools and our website encourage participation in world wide students events.