School plan 2015 – 2017

Improving environmental and sustainability learning outcomes for all students

Fostering quality teaching and leadership in environmental and sustainability education

Building stronger partnerships for delivery of environmental and sustainability education

Dorroughby Environmental Education Centre
School background 2015 - 2017

SCHOOL VISION STATEMENT

Provide engaging sustainability education experiences that will contribute to the development of students’ knowledge and ability to think critically, creatively and ethically and assist them to become active and informed citizens of a sustainable world.

Environmental and Zoo Education Centre’s Vision Statement

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

SCHOOL CONTEXT

Dorroughby Environmental Education Centre (DEEC) is one of 25 Environmental Education and Zoo Education Centre’s (EZEC) supported by the NSW Department of Education and Communities. The centre is located 25km North East of Lismore amongst rural farming communities.

DEEC offers a variety of high quality field work and environmental sustainability education programs for school students K-12. The Centre’s program can be delivered on and off site. The neighbouring property owner allows access to a large dam and wetland area and a fully operational dairy farm. Popular venues nearby include Rocky Creek Dam, Night Cap Range National Park, Ballina / Flat Rock, Byron Bay and Iluka. The environment types at these locations include rainforest, mangroves, rock platforms and open forest. Overnight programs for students are also offered with dormitory accommodation at DEEC or camping available at local National Parks and reserves.

The centre supports schools to implement sustainability education across the curriculum and there is a strong emphasis on student led / inquiry based learning. A partnership program with Rous Water has provided a water science lab that focuses on open ended science challenges and collaborative learning.

Facilities at the centre include a microscope and technology room that contains an interactive whiteboard, digital and stereo microscopes and iPads. Other features include an aquaponics garden, native nursery and plant propagation area, vegetable gardens and campfire area.

The centre works closely with the local school communities and is part of the Rivers P-12 Learning Community in the Lismore region. Partnerships with the local community are also highly effective and the centre is affiliated with the Northern Rivers Group of Environmental Educators (NRGee) and the Northern Rivers Science Hub.

SCHOOL PLANNING PROCESS

Planning is informed by the Melbourne Declaration on the Educational Goals for Young Australians, the National School Improvement Tool, the School Excellence Framework, Public Schools NSW Strategic Directions 2015-2017 and DEC School Planning Guides and fact sheets.

A formal survey was given to local principals in the Richmond Valley and Lismore Networks to determine future directions and to identify the most successful and valued programs and professional development offered by DEEC. Discussions were also undertaken with principals from the Rivers P-12 Learning Community to identify features for a collaborative Big Scrub / First North School Plan.

Collaboration occurred with DEEC staff firstly though a specific one day school planning workshop and secondly through a two hour discussion of the draft school plan on a staff development day. The workshop included a review of all current programs at DEEC and these were compared to the goals developed from the Melbourne Declaration. Staff identified future goals and discussed ideas for a vision statement. Evaluations from schools that participated in 2014 DEEC programs were analysed and improvements discussed.

Guidance was provided by Principal School Leadership (PSL), David Silcock, in a personalised meeting and a collaborative regional workshop. Sydney PSL officers Murray Campbell and Betty Harper provided guidance to the whole EZEC group via a video conference in Nov 2014 and a joint planning session at the annual EEC Conference in February 2015.

Planning sessions were conducted with the NRGee to identify environmental education activities that could be provided in partnership with Northern Rivers schools. This resulted in a specific strategic plan for NRGee.
Purpose:
Facilitate quality learning through meaningful and contextually relevant sustainability education experiences so that students can be informed, active and responsible citizens with the necessary 21st century skills capable of positively influencing their future.

Purpose:
Build the capacity of DEEC and NSW school teachers to implement quality teaching and 21st century learning by providing professional learning through an environmental sustainability education context.

Purpose:
Building stronger partnerships with local government and community partners will provide increased expertise, resources and quality environmental sustainability experiences for students.

Collaboration with the EZEC network will develop systematic leadership in environmental and sustainability education, promote the EZEC community and improve organisational effectiveness.
Strategic direction 1: Improving environmental and sustainability learning outcomes for all students

**PURPOSE**

Why do we need this particular strategic direction and why is it important?

Facilitate quality learning through meaningful and contextually relevant sustainability education experiences so that students can be informed, active and responsible citizens with the necessary 21st century skills capable of positively influencing their future.

**PEOPLE**

How do we develop capabilities of our people to bring about transformation?

**Students:** Students will be engaged in teaching and learning that provides them with the skills to thrive as learners, leaders and responsible, productive citizens.

**Staff:** DEEC staff will attend professional learning that provides them with the skills to teach Sustainability Education and 21st Century learning effectively.

DEEC teachers will model best practice environmental sustainability education for visiting teachers, resulting in improved student learning outcomes and the development of environmentally responsible citizens.

**Parents:** Parents will develop positive sustainability behaviours through DEEC community open days and involvement in citizen science projects introduced to them by their children after attending DEEC.

**Community partners:** DEEC staff will provide engaging program ideas and professional learning for partners and discuss joint projects to offer schools.

**PROCESSES**

How do we do it and how will we know?

- Collaborate with teachers/ principals and other EEC’s to determine the best programs to deliver at DEEC.
- Review existing programs and pre and post visit resources to ensure alignment with the new curriculum and inclusion of 21st Century learning and technology.
- Develop student environmental awareness and leadership opportunities through partnerships projects with SCU, Coastcare, NRGee and Dorroughby Green Team.
- Collaborate with local aboriginal community, DEC offices and other agencies to develop a local Aboriginal Education program and identify Aboriginal Perspectives in all DEEC programs.
- Collaborate with the Rous Water Education Officer and Northern Rivers Science Hub to create engaging science programs focussed on working scientifically and problem solving.

**PRODUCTS AND PRACTICES**

What is achieved and how do we know?

**Products:**

- Successful delivery and development of locally relevant and engaging programs at DEEC.
- Approval of Aboriginal Studies program by the Aboriginal Education Consultative Group (AECG) and implementation of Aboriginal Perspectives in all DEEC programs.
- A Sustainability Conference is successfully delivered and positively evaluated by participants and teachers and the conference is included in Rivers Citizenship continuum.

**What are our newly embedded practices and how are they integrated and in sync with our purpose?**

**Practices:**

- DEC and NSW school teachers effectively lead school communities to implement sustainability education and aboriginal cultural awareness and support the development of environmentally responsible citizens.
- DEEC is functioning as a regional leader in science education.
- Students are engaged in active citizenship at school and in the community.
- Students confidently access digital technologies for information, communication and the creation of new understanding and ideas.

**IMPROVEMENT MEASURE/S**

Student and teacher evaluation data shows an increase in the percentage of students indicating positive knowledge skills, values and attitudes towards the environment.

- Increased percentage of teachers using pre and post visit resources evidenced by evaluations.

Threatened species (Koala) program delivered to six schools and a frog program delivered at the Big Scrub Enrichment Day with each school devising their own solution to the Koala and Barred Frog issue.

- Evaluation plan: Regular reporting against milestones.
- Data from online teacher and parent/caregiver evaluations.
- Student online surveys provide data on skills, knowledge and positive values toward the environment.
- Anecdotal evidence on program quality gathered from staff during visits.
Strategic direction 2: Fostering quality teaching and leadership in environmental and sustainability education

**PURPOSE**

Why do we need this particular strategic direction and why is it important?

Build the capacity of DEEC and NSW school teachers to implement quality teaching and 21st century learning by providing professional learning through an environmental sustainability education context.

**PEOPLE**

How do we develop capabilities of our people to bring about transformation?

**Students:** Students will be engaged in teaching and learning that is purposeful, successful and fosters positive behaviour change for the environment.

**Staff:** DEEC staff will attend professional learning that ensures they have the requisite knowledge and skills to deliver and model best practice in embedding sustainability education into programs.

**Teachers utilizing EEC services**

Offering a variety of high quality professional learning opportunities will support NSW teachers to better integrate environmental / sustainability education into their teaching and learning practices, and effectively develop and support environmentally responsible citizens.

**Parents:** Parents will be invited to attend an Environmental Sustainability Forum to support teachers implementing sustainability programs in the school.

**Community partners:** Partners will be invited to attend professional learning activities and informed of learning gained by DEEC staff.

**Leaders**

School leaders will be encouraged to utilise EEC professional learning opportunities to develop a school culture focused on environmental responsibility.

**PROCESSES**

How do we do it and how will we know?

**Offer professional learning in science, technology and environmental and sustainability education across the curriculum.**

Guide and mentor staff (including casual teachers) in delivering professional learning courses in environmental and sustainability education.

**Offer professional learning for DEEC staff in environmental sustainability education and teaching elements required for accreditation.**

Collaborate with EZEC network to share successful teaching practices and courses.

**Evaluation plan:**

- Attendance numbers of course participants and surveys of professional learning course effectiveness.

- Positive fieldwork evaluations from visiting teachers and successful completion of all teaching elements in TARS.

**PRODUCTS AND PRACTICES**

What is achieved and how do we know?

**Products:**

- Increased capacity to teach environmental and sustainability education through the delivery of three professional learning courses for DEC teachers with successful evaluations.

- DEC staff develop professional learning plans that support the implementation of the school plan and demonstrate quality teaching.

**What are our newly embedded practices and how are they integrated and in sync with our purpose?**

**Practices:**

- DEC teachers confidently lead the development of sustainability education within their own school.

- DEEC staff demonstrate high quality teaching and engage in professional learning networks that are purposeful, inclusive and optimise success for all.

**IMPROVEMENT MEASURE/S**

Increase in the number of teachers participating in professional learning courses.

Increase in the number of professional learning opportunities provided by DEEC.
Strategic direction 3: Building stronger partnerships

PURPOSE

Why do we need this particular strategic direction and why is it important?

Building stronger partnerships with local government and community partners will provide increased expertise, resources and quality environmental sustainability experiences for students. Collaboration with the EZEC network will develop systemic leadership in environmental and sustainability education, promote the EZEC community and improve organisational effectiveness.

IMPROVEMENT MEASURE/S

Positive survey results from teachers and students involved in joint partnership programs.

Improved leadership capabilities of EZEC staff.

DEEC and EZEC are effectively marketed through schools, the community and social media.

PEOPLE

How do we develop capabilities of our people to bring about transformation?

Students: Students will be engaged in teaching and learning that is purposeful and successful.

Staff: Staff will maintain communications with NRGee and Science Hub to strengthen community involvement in delivery of learning programs.

Parents: DEEC teachers will encourage parents to participate in programs and attend community open days.

Community partners: DEEC staff communicate with NRGee and Rous Water Education Officer to design and implement a regional NRGee plan.

Leaders: Leaders are collaborating to effectively communicate and deliver key reforms in partnership and communities.

PROCESSES

How do we do it and how will we know?

- Communicate and plan joint projects with community partners and neighbouring land owners. DEEC staff will attend NRGee and Science Hub meetings each term and maintain discussions through NRGee and Science Hub Google groups.

- EEC leaders guide, mentor and support all EZEC staff (including casual teachers) in contributing to EZEC portfolios. DEEC will focus on developing the Leadership and Management Portfolio.

- Expand EZEC and DEEC presence in the community through improved marketing and promotion.

- Collaborate with the Rivers learning community to provide engaging sustainability and joint enrichment programs to students across the learning community.

Evaluation plan:

Regular reporting against milestones.

Attendance at the annual EZEC Conference and reporting of Leadership Portfolio plan.

Teacher and student evaluations of partnership programs.

Monitoring of the implementation of EZEC marketing and engagement strategy.

PRODUCTS AND PRACTICES

What is achieved and how do we know?

Products:

DEEC contributes to joint NRGee projects. Science Week, Arts V’s Science, World Environment Day and Sustainable House Day.

DEEC water lab successfully engages the community through 8 community open days during the school holidays each year.

DEEC contributes to Rivers Strategic Directions and provides programs across the learning community.

Development of a Leadership and Management Portfolio Plan that is effectively communicated to the EZEC network.

What are our newly embedded practices and how are they integrated and in sync with our purpose?

Practices:

DEEC staff effectively communicate with the community.

EZEC staff and leaders collaborate effectively as a learning community to promote and coordinate the delivery of environmental/sustainability education as a key priority of the NSW education system.