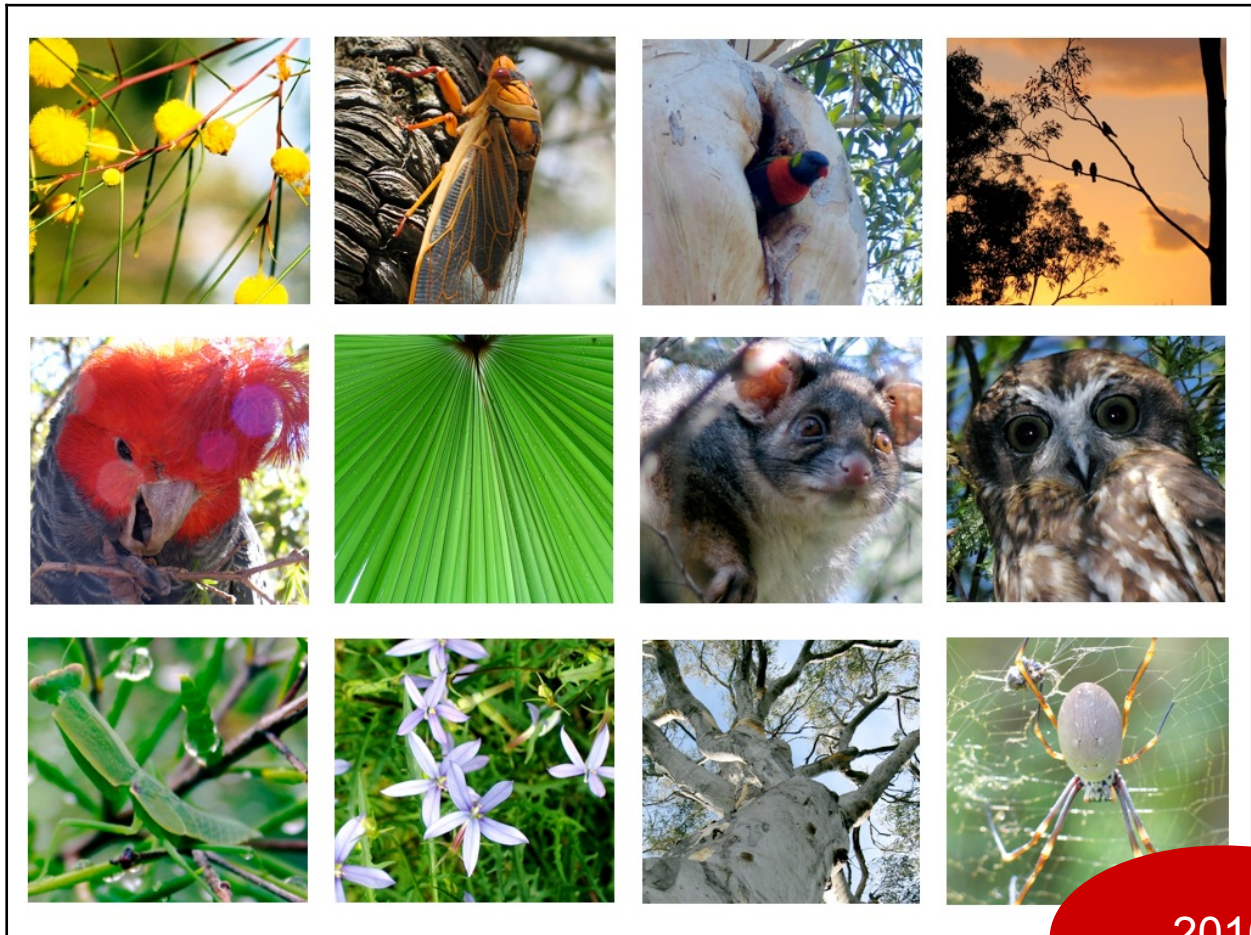


Field of Mars Environmental Education Centre Annual Report



2016



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Introduction

The Annual School Report for 2016 is provided to the community of Field of Mars Environmental Education Centre as an account of the centre's operations and achievements throughout the year.

It provides a detailed account of the progress the centre has made in providing high quality educational opportunities for all students and other priorities as set out in the school plan. It also 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.

Steven Papp

Principal

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Message from the Principal

One of the key goals of the Field of Mars Environmental Education Centre (EEC) is to ensure students have high quality authentic learning experiences in natural settings. Research suggests that when students experience quality time in these environments there are a range of measurable benefits including; increased creativity, increased resilience and reduced stress. Students are calmer, better at critical thinking, their behaviour and attention span improves, signs of attention deficit disorder are reduced and as a result, students tend to do better in standardised tests. The benefits of taking students outside are therefore real and quantifiable.

During 2016, the centre continued its focus on the development of new and innovative sustainability education programs and resources as well as the renewal and updating of existing core programs. All our programs have a strong focus on literacy, numeracy, visual arts, geography, science and technology and many are regarded as exemplars of the high-quality learning that can be accomplished using mobile technologies. The teaching and learning in our programs has been carefully planned to be student-focussed and driven inline with contemporary educational best practice and curriculum priorities and is clearly focussed on the quality teaching dimensions of intellectual quality, significance and quality learning environments.

Steven Papp

School background

School vision statement

Our vision inspires the organisation we want to become in the future. This vision was created through an alliance of the NSW DoE Environmental and Zoo Education Centre network.

To support NSW 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 enable them to act as responsible citizens.

Our branding, “experience, engage, enable” is at the heart of why we exist. That is, to enable the immersion of all students in experiential learning in, about, and for the environment.

School context

The Field of Mars Environmental Education Centre (EEC) is one of 25 environmental education and zoo education centres operated by the NSW Department of Education.

An “Environmental Education Centre is a teaching and learning facility operated by the Department which students attend to participate in educational programs relevant to all primary and secondary key learning areas and/or to receive specific instruction in fieldwork, and which provides support to schools in implementing environmental education.” *2.18 NSW Teachers Award 2009.*

Field of Mars EEC is located in a reserve of remnant urban bushland in East Ryde. It offers programs to support schools and their communities with environmental and sustainability education. Programs are conducted on site at the Field of Mars Reserve, at other sites such as local reserves, in school grounds and via connected classrooms video conferencing technology. The centre also provides support, advice and resources for teachers. It is used as a workshop venue for schools and other professional learning meetings. The Centre has multi–sectoral partnerships to enhance its capacity to create sustainable futures within our school communities.

EECs provide authentic contexts for exploring, investigating and understanding values, concepts and systems in the natural and made environments and equip students to design solutions to real world sustainability problems.

The FoM EEC teaching staff demonstrate specialist expertise in environmental and sustainability education K–12, building relationships across local schools and with visiting teachers to develop programs which address specific curriculum targets, tailored to the learning needs of all visiting students.

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, the school's achievements and the next steps to be pursued. The School Excellence 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.

The Field of Mars EEC completed the self-assessment in the following domains of the School Excellence Framework:

Learning

Our centre has primarily focused on the domain of Curriculum and Learning. Continuing in Term 1 2016, we reviewed programs to ensure alignment with new NESA syllabus with a particular focus on Geography K-10. Staff were involved in professional learning to support the transition towards this new syllabus.

Teaching

Our focus has been on professional learning and development. Professional learning has been conducted in house and externally to enable enhanced teaching and learning practices. Staff are continuing to align teaching and learning with NESA Syllabus as they are progressively implemented.

Leading

Our school has focused primarily on leadership and school resources. We have focused on establishing meaningful partnerships to enable high quality student programs and professional learning.

Our self-assessment process will further assist us 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

Improving learning outcomes for all students

Purpose

At Field of Mars EEC we believe that for students to develop their potential as lifelong learners, leaders and sustainable global citizens they need to become confident, creative and critical problem solvers.

We believe this has flow-on benefits for social, environmental and economic sustainability at family, community, national and global levels.

Overall summary of progress

In 2016 the centre reviewed programs to ensure they remain contemporary and aligned with NESA syllabus.

New and refined programs include *Special Places*, *Features of Places* and *Factors that Shape Places*.

Progress towards achieving improvement measures

Improvement measures (to be achieved over 3 years)	Progress achieved this year	Funds Expended (Resources)
Development of new Geography programs for Stages ES1, 2, 3, 4, 5 and 6.	<p>A complete suite of Geography programs for K–6 have been developed and trailed including ES1 – Special Places, Stage 1 – Features of Places, Stage 2 Earth's Environment – Eucalypt Forest, Earth's Environment – National Parks, Stage 3 – Factors that Shape Places.</p> <p>Development of Stage 4/5 programs has begun.</p> <p>Teacher evaluation has been very positive.</p>	10 x days casual relief \$4500
Development of pre, post and parallel activities and resources to support classroom teachers.	<p>The centre launched a range of digital multimodal books for iPad, iPhone and Macs. Titles included the Needs of Living Things: Animals, Eucalypt Forest and Fieldwork K–6.</p> <p>These books are designed to support classroom teachers and the requirements of the NESA Syllabuses for the Australian Curriculum.</p> <p>Collectively the Field of Mars EEC Multi-Touch books have been downloaded over 20000 times and are frequently featured in the top 10 of the education section of the iBooks Store.</p> <p>The centre has begun to develop teaching and learning units to support our new Geography excursion programs.</p>	20 x days casual relief \$9000

Next Steps

During 2017 the centre will focus on developing learning experiences and teaching and learning programs for NSW NESA Syllabus with a specific focus on the new Geography Syllabus, especially Year 7–12.

Pre and post visit activities will be added to program visit plans.

The centre is currently developing the following Multi-Touch Books: Learning Outside with iPad Vol. 2, Needs of Living Things: Plants and Energy.

Strategic Direction 2

Enhancing professional leadership, teaching and learning practices

Purpose

At Field of Mars EEC we believe teaching and leadership quality is the strongest school-related factor that can improve student learning and achievement.

Through the provision of quality teacher professional learning for all EEC staff, classroom teachers and DoE leaders we have the ability to transform teaching and learning in outdoor and classroom contexts.

We aim to lead the delivery and development of authentic learning pedagogies to support 21st century students, classrooms and practices.

Overall summary of progress

Centre staff participated in extensive professional learning focusing on technology integration, syllabus implementation, pedagogy and environmental and sustainability education.

The introduction of Professional Development Plans and lesson observations for both permanent and casual staff has, amongst other things improved the the dialogue process that informs professional development.

Progress towards achieving improvement measures

Improvement measures (to be achieved over 3 years)	Progress achieved this year	Funds Expended (Resources)
Development of teacher professional learning courses for Geography.	The centre collaborated with other EECs and DOE education consultants to develop the workshop, <i>Introducing the K–6 Geography Syllabus</i> . The centre successfully trialled short Geography Fieldwork K–6 teacher professional learning afternoon.	4 x days casual relief \$1800
Development of professional learning courses to support learning outside the classroom.	The centre continued to run <i>Plugging into Nature: Learning Outside with iPad</i> professional learning events for teachers. Staff from the centre presented at local and international conferences including the Apple Distinguished Educator Global Institute, iPadpalooza, Slide2Learn and the Australian Association for Environmental Education National Conference.	4 x days casual relief \$1800
Centre staff achieving/or maintaining accreditation at proficient, highly accomplished or lead teacher levels.	EEC staff participated in a range of professional learning events as outlined in Professional Learning and Teacher Accreditation section.	\$21918 includes casual relief and professional learning course/conference costs.

Next Steps

Pursue accredited status for Geography Fieldwork K–6 workshop.

Develop centre staff expertise in the use of the new MyPL tool for the systematic authoring, delivery and evaluation of professional learning products.

Develop additional professional learning courses for teachers. These include *Plugging into Nature Online*, *Natural Books* and a series of Adobe Connect sessions that unpack sustainability pedagogy and the use of technology.

Strategic Direction 3

Partnerships to enable sustainability education

Purpose

At Field of Mars EEC we believe that we can build stronger partnerships as an educational community by leading and inspiring a culture of collaboration, engaged communication, empowered leadership and organisational practice.

We aim to create, enhance and grow a school culture which is dynamic, equitable and sustainable, where all students, staff and partners are provided with opportunities to connect, succeed and thrive.

Overall summary of progress

Throughout 2016, Field of Mars EEC continued to raise its profile and engagement with a number of partners through participation in networks, special events, workshops, conferences and programs.

Progress towards achieving improvement measures

Improvement measures (to be achieved over 3 years)	Progress achieved this year	Funds Expended (Resources)
Increase in effective centre collaboration with EZEC network. Development of new partnership programs and initiatives within DoE	Contributed to the development and delivery of the Annual EZEEC NSW Conference. Collaborating with Gibberagong, Botany Bay, Observatory Hill, and Wooglemai EECs along with Western Plains and Taronga Zoos to design and deliver successful student leadership events. The centre supported NSW DoE consultants in developing the Geography Teaching Framework K–6 and the Geography Toolkit K–6.	8 x days casual relief \$3600
Development of new partnership programs and initiatives beyond DoE.	The centre worked with NSW National Parks and Wildlife Service to develop new and revised teaching and learning programs to support the Geography Syllabus. The centre collaborated with Apple Australia to develop and trial an iBooks Author workshop for teachers.	4 x days casual relief \$1800

Next Steps

The centre will collaborate with EECs to develop teaching and learning sequences that support the new Geography syllabus and revise NESAs Syllabus for 7–12.

Student information

At total of **15261** K–12 students visited the centre in 2016.

This compares to 16013 students in 2015 and 16961 in 2014. This variability is comfortably in line with historical records.

Workforce information

Workforce composition

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

*Full Time Equivalent

Teacher qualifications

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

Teacher qualifications

Qualifications	% of staff
Undergraduate degree or diploma	50
Postgraduate degree	50

Professional learning and teacher accreditation

Professional learning is provided to all permanent, temporary and casual staff in the centre through in-house workshops and sharing sessions or via other professional learning providers.

In 2016 there was significant expenditure on professional learning to ensure all staff were capable of supporting the development and delivery of high quality centre programs.

Professional Learning Expenditure – \$21918

Average expenditure per person (inc permanent, casual and temporary staff) – \$2739

Professional learning provided the opportunity for staff to develop knowledge and skills in environmental and sustainability education with a focus on integrating these skills across all Key Learning Areas.

Professional learning included attendance at:

Apple Distinguished Educator Institute Berlin

NSW EEC Annual Conference in Armidale

iBooks Author Workshop

Slide2Learn Carins

NSW AAEE Conference Adelaide

NSW Geography Teachers Association Conference

NSW EEC Principals' Conference

Hornsby Principal Network Meetings

SASS EEC Conference

Secondary Literacy

SASS GA Conference

First Aid and CPR

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

Financial information

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

Income	\$
Balance brought forward	72 278.48
Global funds	33 145.31
Tied funds	30 269.23
School & community sources	260 546.41
Interest	1 270.23
Trust receipts	0.00
Canteen	0.00
Total income	397 509.66
Expenditure	
Teaching & learning	
Key learning areas	243 371.01
Excursions	0.00
Extracurricular dissections	10 371.54
Library	677.43
Training & development	21 918.91
Tied funds	18 677.63
Short term relief	0.00
Administration & office	22 513.16
School-operated canteen	0.00
Utilities	4 812.73
Maintenance	952.50
Trust accounts	0.00
Capital programs	0.00
Total expenditure	323 294.91
Balance carried forward	74 214.75

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

In 2016 the centre sought opinions of parents, students and teachers about the centre. Discussion and unsolicited feedback indicates a high level of satisfaction with the centre's programs and our interactions with staff and students. In particular, comments experiences are engaging, informative and relevant.

Formal feedback from our Professional development workshops was very positive.

Policy requirements

Aboriginal education

Aspects of Aboriginal culture and knowledge are integrated into most of the centre's programs.

The centre offers specific programs that educate students about the traditional Aboriginal inhabitants of the area, their relationship with the land and their use of bush resources.

Multicultural and anti-racism education

The FoM EEC supports visiting schools and students to ensure that the culturally inclusive practices of every school are maintained and supported.