School Improvement Unit
Report

Moreton Bay Environmental Education Centre
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1. Introduction

This report is a product of a review carried out by a review team from the School Improvement Unit (SIU) at Moreton Bay Environmental Education Centre from 20 to 21 October 2016.

The report presents an evaluation of the school’s performance against the nine domains of the National School Improvement Tool. It also recommends improvement strategies for the school to consider in consultation with its regional office and school community.

The report’s executive summary outlines key findings from the review and key improvement strategies which prioritise future directions for improvement.

The schools will publish the executive summary on the school website within two weeks of receiving the report.

The principal will meet with their Lead Principal to discuss the review findings and improvement strategies.

For more information about the SIU and reviews for Queensland state schools please visit the SIU website.

1.1 Review team

Noeleen Rowntree  Internal reviewer, SIU (review chair)
Rhonda Hawthorne  Peer reviewer
Glyn Thomas  External reviewer
### 1.2 School context

<table>
<thead>
<tr>
<th>Location:</th>
<th>Stradbrook Avenue, Wynnum</th>
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<tbody>
<tr>
<td>Education region:</td>
<td>Metropolitan Region</td>
</tr>
<tr>
<td>Year opened:</td>
<td>1986</td>
</tr>
<tr>
<td>Year levels:</td>
<td>Prep to Year 12</td>
</tr>
<tr>
<td>Enrolment:</td>
<td>n/a</td>
</tr>
<tr>
<td>Indigenous enrolment percentage:</td>
<td>n/a</td>
</tr>
<tr>
<td>Students with disability enrolment percentage:</td>
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</tr>
<tr>
<td>Index of Community Socio-Educational Advantage (ICSEA) value:</td>
<td>n/a</td>
</tr>
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<td>Year principal appointed:</td>
<td>July 2015</td>
</tr>
<tr>
<td>Full-time equivalent staff:</td>
<td>3.0</td>
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<td>Significant partner schools:</td>
<td>Wynnum Manly State Education Alliance (WMsea) cluster schools</td>
</tr>
<tr>
<td>Significant community partnerships:</td>
<td>Queensland Parks and Wildlife Service (QPWS) (Heritage Parks Unit), Port of Brisbane Pty Ltd, Newstead House, Matt Burns (Cultural Officer, Quandamooka), University of Queensland (UQ) Marine Science Institute, Griffith University, Queensland Wader Study Group, Department of Education Solid Pathways, Brisbane Urban Environmental Education Centre and Toohy Forest Environmental Education Centre, Commonwealth Scientific and Industrial research Organisation (CSIRO), Moreton Bay Marine Park (Department of National Parks, Sport and Racing)</td>
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<tr>
<td>Significant school programs:</td>
<td>Habitat Heroes, Science, Technology, Engineering, Mathematics (STEM) Horizons (Years 6, 7 and 9), Moreton Bay studies (Years 11 and 12), Young Writers’ Program, Theatre in Education programs in partnership with QPWS, First Contact</td>
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1.3 Contributing stakeholders

The following stakeholders contributed to the review:

School community:

- Principal, two experienced senior teachers, two teachers, Science, Technology, Engineering, Mathematics (STEM) Horizons coordinator, Business Service Manager (BSM), boat officer and supply teacher

Community and business groups:

- Two Queensland Parks and Wildlife Service (QPWS) Rangers, Communications and marketing manager, Newstead House

Partner schools and other educational providers:

- Principal secondary school, deputy principal secondary school, three primary school principals, four Heads of Curriculum (HOC), classroom teacher and deputy principal primary school

Government and departmental representatives:

- Lead Principal Metropolitan, Solid Pathways

1.4 Supporting documentary evidence

- Annual Implementation Plan 2016
- Investing for Success 2016
- Headline Indicators 2015
- Business Plan 2015-2016
- Professional learning plan 2016
- Data Plan 2016
- Curriculum Plan 2016
- 2016 Feedback Exit Survey Data
- Pedagogy of the Edge at Moreton Bay
- Explicit Improvement Agenda 2016
- Strategic Plan 2013-2016
- Annual Report 2015
- School budget overview
- Centre Visitation Data spreadsheets
- Responsible Behaviour Plan
- Professional development plans
- Centre website and Facebook
- School Opinion Survey Data 2016
2. Executive summary

2.1 Key findings

Staff member morale is high and there is a positive and optimistic feel at the centre.

The teaching and support staff members all contribute to the development and implementation of a range of engaging programs, which are linked to the Australian Curriculum (AC) and promote student learning. The centre is a hub for networking in its cluster and has become a vibrant meeting place for principals and Heads of Curriculum (HOC). Representatives from these groups are positive regarding the influence that the centre is having on creating a positive collaborative culture within the cluster.

The centre principal and staff members are united in their commitment to improve learning outcomes for all students with whom they work.

A broad improvement agenda is being implemented and includes explicit targets, strategies, actions and timelines. Priority areas for improvement are identified in centre documents. These priorities are quality programs and quality teaching, pedagogical practices, partnerships and wellbeing.

Centre staff members are experienced, enthusiastic and committed to the facilitation of safe, interactive, engaging programs that promote student learning.

Centre staff members have a common commitment to inquiry-based, hands-on learning drawing on evidence-based teaching strategies appropriate to environmental education. There is a commitment to provide unique learning experiences that are not possible for students to have in their normal school environment. There is not yet clear evidence of a formal process of instructional leadership including the observation and provision of feedback for all teaching staff members.

Teaching staff members are able to articulate how and why students learn in their programs.

The teaching staff can individually draw on evidence-based principles of teaching and learning. A centre-wide, shared common language and understanding of the core pedagogy of the centre is not yet established.

Centre staff members have developed a comprehensive range of programs for primary and secondary year levels.

The centre takes pride in making the AC locally relevant through the use of unique local learning environments focused on the learning journey to become ‘Champions for the Bay’.
The Centre has a broad range of positive relationships across the region, schools, environmental and other community groups.

Positive partnerships have been formed with a significant number of visiting schools which is evidenced by the number of schools who visit annually. The centre connects with numerous organisations to support the learning outcomes for students participating in the various programs offered. Whilst it is clear that all of the partnerships are positive, it is not clear how much mutual benefit each of those partnerships provides, particularly with respect to the Explicit Improvement Agenda (EIA).
2.2 Key improvement strategies

Narrow, sharpen and communicate the improvement agenda with all staff members.

Revisit the pedagogical framework so that it articulates how evidence-based principles underpin and inform the way teachers teach and students learn in the centre’s programs.

Ensure that professional development plans align with the EIA and the revised pedagogical framework and includes observation, support and feedback for centre teachers.

Evaluate the mutual benefits of all partnerships and relationships to the centre’s core business and align to the EIA.

Continue to develop the collegiality within the centre and across the cluster encouraging local school communities to be more involved with the business of the centre.
3. Findings and improvement strategies against the domains

3.1 An explicit improvement agenda

Findings

The centre principal and staff members are united in their commitment to improve learning outcomes for all students with whom they work.

Staff members identify some aspects of the improvement agenda as outlined in the ‘School Improvement Focus for 2016’.

The staff members work as a team to make a difference for students, leaders in local schools, community members and high achieving learners.

A broad improvement agenda is being implemented and includes explicit targets, strategies, actions and timelines.

Priority areas for improvement are identified in centre documents. These priorities are quality programs and quality teaching, pedagogical practices, partnerships and wellbeing.

Progress towards targets is monitored and initiatives and programs are systematically evaluated for their effectiveness, informing centre staff members on alignment to school needs, quality and delivery of learning experiences and impact on student learning and outcomes.

Teachers from visiting schools report significant student engagement and valuable learning development.

The centre communicates clearly that it expects all students to learn successfully and sets high expectations for all students.

Achievement of explicit targets is communicated and celebrated with the wider community.

There is an optimistic commitment by all staff members that further improvement is possible.

Improvement strategies

Narrow, sharpen and communicate the improvement agenda with all staff members.
3.2 Analysis and discussion of data

Findings

The centre principal and teachers articulate a strong commitment to collecting and analysing valid data linked to teaching and learning, which is analysed to improve teaching practice and student learning outcomes.

The centre has implemented a detailed data plan to inform real-time decision making, productivity, performance and student services, critical insights into future market development, forecasting student load, program demand and resource viability.

Data is collected from visiting school staff members whose agreement level is 100 per cent that student behaviour, learning outcomes, student engagement and safety are all well managed and well delivered. Headline indicator data indicates centre teachers deliver high quality teaching with the centre being well resourced and well organised.

The centre has built upon the outdoor and environmental education sector, state-wide feedback survey tool to gather site-specific feedback data from visiting teachers to support the enactment of the centre’s EIA.

Student feedback and data collection from Science, Technology, Engineering, Mathematics (STEM) Horizons for high achievers, impact science and an Honours Thesis research ensure centre program objectives are met for these extension programs.

Data is used for viewing trends over time to inform planning and future centre directions.

The centre collects information from their visiting schools prior to each program relevant to the health needs of the students. This information includes learning, behavioural, physical, medical and relevant health needs of students. The information is utilised by centre teachers to adjust the learning experiences to best meet the needs of students and the client school.

The principal and teaching staff members express a commitment to the collection and analysis of data. Time is set aside for analysis of the data. The principal works as part of the team analysing the data as part of the centre’s EIA and student learning.

Centre data targets are summarised, displayed and communicated to all stakeholders.

Improvement strategies

Refine the documented data plan to ensure data is collected, analysed and used in a timely manner aligned to the narrow, sharpened improvement agenda.
3.3 A culture that promotes learning

Findings

Staff members and stakeholders alike provide positive feedback regarding the role the current principal has played in establishing a positive learning community.

The School Opinion Survey (SOS) data indicates positive perceptions of the learning community at the centre.

The teaching and support staff members all contribute to the development and implementation of a range of engaging programs which are linked to the AC, and which promote student learning.

The ‘Our journeys across the edge’ metaphor used to describe what occurs on centre programs includes pre- and post-visit activities with visiting schools. The staff members and students from these schools indicate the importance of these visits to the successful integration of the learning experiences with the school’s curriculum.

The centre is a hub for networking in its cluster and has become a vibrant meeting place for principals and HOCs. Representatives from these groups are positive regarding the influence that the centre is having on creating a positive collaborative culture within the cluster.

The centre and its staff members have been nominated for awards and cluster showcases that recognise the quality of the centre’s programs and the teaching provided. The centre is a regional winner and State finalist in Showcase 2016, finalist - Healthy Waterways Award, Students on Board for MangroveWatch and Bunya 2 the Bay.

The staff members at the centre work hard to create an attractive and stimulating physical environment that supports and encourages learning. The boat that is owned and operated by the centre is a critical resource in the provision of engaging learning opportunities for the students on the centre’s programs.

All staff members at the centre promote a culture of inquiry, creative exploration, and critical thinking on all programs.

Staff member morale is high and there is a positive and optimistic feel at the centre.

Improvement strategies

Continue to develop the collegiality within the centre and across the cluster.

Empower the local school communities to be more involved with the learnscape at the centre.
3.4 Targeted use of school resources

Findings
The centre facilities are environmentally designed with the outside learning areas and centre building used for student learning and as a hub for the Wynnum Manly State Education Alliance (WMsea) cluster schools for developing teacher and school-based leadership, Professional Development (PD), curriculum and planning meetings.

The learning environment at the centre is welcoming for students and the many school leadership teams. Learning spaces include a walkway planted with significant local native plants, a pond with native water plants and local native fish endemic to the local area and edible gardens that are all part of the teaching and learning for the centre.

The centre utilises a range of specialised learning sites beyond the centre grounds including the operation of a 12 metre, dual hull marine vessel ‘Inspiration’ for curriculum delivery. Programs are delivered across all of these sites and on-board ‘Inspiration’.

Centre programs are delivered in partnership with a variety of groups, including scientists, government bodies, universities, local Indigenous Elders, Queensland Parks and Wildlife Service (QPWS), historical and wildlife groups. These learning sites add to the scope and authenticity of learning available for students.

There has been an increase in the instructional hours delivered by the centre and in 2016 the centre reached its maximum instructional hours.

A business plan 2015 - 2016 is developed with Business Solutions and Advice (BSA) identifying direct and indirect costs and funding sources for ‘Inspiration,’ as a water-based learning facility. The business plan highlights the need to operate the vessel at full cost recovery and to explore ways to maximise income.

Teaching staff members specialise in the areas of science, history, early childhood and high quality, meaningful real world projects targeting high achieving students within the local WMSEA cluster.

Input to the centre’s ‘Budget Overview Report’ is provided by all staff members at appropriate levels and clearly identifies sources and uses of funds which are aligned with centre learning programs and initiatives.

Investing for Success (I4S) funding of $5 000 has been allocated to improving student understandings and learning in Prep to Year 3 for selected science initiatives, including STEM and history within the WMSEA cluster.

The current bank balance is $304 526.54.

Improvement strategies
Strengthen the use of the available resources within the centre to augment opportunities for student learning and consolidate community partnerships.
3.5 An expert teaching team

Findings

Centre staff members are experienced, enthusiastic, and committed to the facilitation of safe, interactive, engaging programs that promote student learning.

The staff members of the centre have a common commitment to inquiry-based, hands-on learning drawing on the evidence-based teaching strategies appropriate to environmental education. There is a commitment to provide unique learning experiences that are not possible for students to have in their normal school environment.

The expertise of teaching staff members and the principal is recognised and demonstrated through their nominations for awards and invitations to present at conferences.

A formal mentor program has been initiated by the principal drawing on the expertise of the experienced staff members.

A high level of collegiality amongst centre staff members allows them to collaborate on the planning, implementation and delivery of programs.

There is not clear evidence of a formal process of instructional leadership, including the observation and provision of feedback for all teaching staff members.

Professional learning plans are used and appropriately funded at the centre and through them staff members engage in learning opportunities that are relevant, collaborative and future focused.

All staff members report that they feel well supported and are able to engage in external PD opportunities aligned with their identified needs.

Improvement strategies

Ensure that professional development plans include a process of observation and feedback on teaching for all teaching staff members aligned with the EIA.

Encourage teaching staff members to continue sharing their expertise beyond the local community.
3.6 Systematic curriculum delivery

Findings

The centre has a documented snapshot of their Prep to Year 12 curriculum plan to deliver the AC which reflects the decisions, resources and priorities of the centre. Documentation is subject to continuous monitoring and review and shows clear links to the AC.

Staff members have a common commitment to inquiry-based, hands-on learning drawing on the evidence-based teaching strategies appropriate to environmental education.

Centre staff members have developed a comprehensive range of programs for primary and secondary year levels that include learning goals and links to the curriculum centre framework Learning Journeys.

There are numerous examples of the inclusion of Indigenous perspectives and environmental sustainability in program activities.

The centre has designed specialty and extension programs including Solid Pathways program, Young Writers’ Program, IMPACT, science in partnership with Brisbane School of Distance Education (BSDE), Duke of Edinburgh and STEM Horizons.

The centre takes pride in making the curriculum locally relevant through the use of unique local learning environments which are accessed by using the centre’s boat and through community partnerships which include QPWS, Port of Brisbane Pty Ltd, Newstead House, University of Queensland (UQ) and WMsea cluster.

Good relationships have been initiated with community partners with scope to strengthen mutual benefits.

Teaching staff members take pride in referencing the learning journey to become ‘Champions for the Bay’ where students: ‘Walk up to the Edge’ ( Adopting a role, accepting the challenge, know the purpose); ‘Stepping over the Edge’ (Explore the Edge – Connect to the place and complete the task); and, ‘Looking back at the Edge’ (Reflect on the journey, demonstrate understanding and acknowledge their learning).

An opportunity exists to develop and trial assessment strategies which could be utilised in gauging student learning.

Improvement strategies

Implement assessment strategies to measure student learning through participation in the centre’s programs.

Collaborate with partners to optimise authentic data collection and inquiry processes.
3.7 Differentiated teaching and learning

Findings

The centre offers a range of unique programs taking the learning outdoors for visiting schools.

The centre has systems and processes established to ensure the curriculum is relevant and that it appropriately engages, challenges and extends learning for all students.

The pre-visit gives the centre’s teachers an idea of the visiting students’ backgrounds, current knowledge and ability levels and is an indicator as to the class teacher’s knowledge and engagement with the program.

Adjustments to teaching and the various learning environments are based around student needs across a broad range of ability levels.

Planning of lessons incorporates the different knowledge levels and experiences and provides multiple opportunities to learn.

Throughout the delivery of lessons, staff members utilise their awareness and personal judgement to respond to learning preferences displayed by individual students as identified by AusIDentities.

Differentiated teaching programs exist in relation to high achieving students. These include STEM Horizons for Years 5, 6, 7 and 9 and the Young Writers’ Workshop.

Improvement strategies

Ensure that access to the centre’s programs continues to reflect equity and diversity.

Continue working with AusIDentities to develop a strengths model approach with participants.
3.8 Effective pedagogical practices

Findings

The centre has a pedagogical framework that uses the metaphor of ‘Our Journeys across the Edge’ to describe the learning process.

All staff members have some understanding of the current pedagogical framework.

The teaching staff members draw on evidence-based principles of teaching and learning developed in the Learning Beyond the Classroom framework developed in an Australian Research Council (ARC) funded research project on the impact of student learning for sustainability with Queensland Outdoor Environmental Education Centres in 2008.

Teachers at the centre emphasise the importance of ‘hands-on learning’ and ‘learning by doing’ in their teaching with an emphasis on promoting critical thinking.

Teaching staff members are able to articulate how and why students learn in their programs.

There is not a shared common language or understanding of the centre’s core pedagogy underpinning the effective teaching of the centre.

In its current form, the pedagogical framework adopted by the centre does not draw on evidence-based theories or approaches to articulate how students learn in the centre’s programs or why the pedagogical approaches used are effective.

Centre teachers have a strong commitment to improving their teaching though evidence-based teaching strategies including critical thinking.

Improvement strategies

Revisit the pedagogical framework so that it articulates how evidence-based principles underpin and inform the way teachers teach and students learn in the centre’s programs.

Implement a principal led program of observation, support and feedback for centre teachers aligned with the revised pedagogical framework.

Ensure that PD plans are aligned with the EIA and the revised pedagogical framework.
3.9 School-community partnerships

Findings

The centre has a broad range of positive relationships across the region, schools, environmental and other community groups. The centre has established itself as the hub of community learning in the WMsea cluster and staff members enthusiastically report that it is a place where teachers engage in professional learning experiences where they can build capacity through partnerships established with local schools. The engagement with other professionals facilitates the sharing of expertise and ideas that enhance programming for student learning.

Positive partnerships have been formed with a significant number of visiting schools which is evidenced by the number of schools who visit annually and include the school’s program as an integral element of their annual school planning. There is extensive evidence of pre- and post-visit collaboration between centre staff members and visiting staff members to inform programming.

The centre connects with numerous organisations to support the learning outcomes for students participating in the various programs offered. Whilst it is clear that all of the partnerships are positive, it is not yet clear how much mutual benefit each of those partnerships provides, particularly with respect to the EIA.

Teachers emphasise the strength of the partnerships between the centre and their schools, and reference the impact that the Young Writers’ Program had on participant students and parents, and also prospective and existing students.

Staff members and teachers from participant schools report a strong link with the cultural officer from Minjerrribah Moorgumpin Elders-in-Council who helps embed Indigenous perspectives in programing and provides an authentic cultural experience for students.

The Principal Project Officer from the Indigenous Education Performance unit of the Department of Education speaks positively regarding the partnership that delivers the Solid Pathways program to high achieving Aboriginal and Torres Strait Islander students. The culturally inclusive web-conference lessons provide students with a connection to country. The essence of these lessons is to develop their capability and create critical and creative thinking.

The partnership with the QPWS has been long and outstanding with partner programs in history being conducted at Fort Lytton and St Helena Island. Rangers report that the partnership has evolved over the past 40 years, and it is now the strongest it has been in its entire history. This is attributed to the leadership of the principal, and commitment and expertise of teaching staff members who make the experience of learning, engaging and exciting for students.
An important partnership with Newstead House has been established. The Manager of Communications, Events and Programming at Newstead House, reports that the rich history of Newstead House which operates as a museum, provides students with an opportunity to role play the past versus present. Rebranding was identified as a necessity to make it sustainable and give Newstead House more credibility. This occurred through the formation of a partnership with the centre. The partnership programs provide students with an opportunity to connect with heritage, which over time and with continued bookings, aims to create ‘champions of heritage’. The expertise of centre teaching staff members is relied on by Newstead House to deliver the program.

This relationship with Newstead House, supported Bunya 2 the Bay, whereby three environmental education centres partner to deliver the eco adventure to 40, Year 10 and Year 11 students from across South East Queensland.

A partnership with the UQ resulted in participation in open days and provided an opportunity to showcase the centre’s boat and the activities offered on board. A strong and ongoing partnership with the Port of Brisbane Pty Ltd sees the centre staff members collaborate on programs for students.

Additional partners include MangroveWatch, ReefBlitz, Reef Check Australia, Griffith University and Marine Parks.

**Improvement strategies**

Evaluate the mutual benefits of all partnerships and relationships to the centre’s core business and align to the EIA.