

# SPOTLIGHT

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## ***'DON'T BE GAMMIN, Boney Head Mista!'***

This was one of the first statements tossed to me by a preschool student in my first week as Principal at Doomadgee State School back in 2001. I wasn't entirely certain what his expression meant (I did get the 'Boney Head' part) but in the context of the preceding light-hearted exchange about the artistic merits of his drawing, I did get the gist. Little did I know that this feedback from this young person would stick with me over the course of my entire career.

My 22-year journey in First Nations education has been one of personal transformation and continual learning. I have a deep dedication to understanding and improving the educational landscape for First Nations students in

Australia – one marked by numerous challenges, including cultural barriers, social inequities, and historical injustices. Reflection on my experiences at schools including Doomadgee, Townview State School in Mt Isa, Tara Shire State College, Clontarf Beach and Morayfield State High Schools, Petrie and Junction Park State Schools, the Aboriginal Australia Academy in Aurukun, Jabiru and Gunbalanya Schools in west Arnhem Land in the Northern Territory, and now at Dunwich State School on Minjerribah (North Stradbroke Island) might, I believe, yield valuable lessons for my fellow educators.

What I have learned most powerfully is the significance of silence and non-judgemental approaches to build

stronger connections and achieve positive learning outcomes for First Nations students.

## **The Crucial Role of Silence in First Nations Education**

At the core of my philosophy is the power of silence as a catalyst for profound learning and communication. I have been fortunate to have had patient First Nations colleagues in the communities I have lived and worked with. I have even been provided with feedback at times when I thought I didn't need it. 'I know this.' 'I'm the principal.' 'Really! Do you think you can get away with *that* in *my* school?' These are just a few of the declarations which proved just how unaware I was of the underlying

# *‘Safe, Calm and Connected’ is an Educational Silver Bullet.*

## *No Gammin!*

cultural beliefs and values I held, that were impeding my ability to see the potential in complex situations.

Listening attentively to Indigenous students and their communities fosters a deeper understanding of their needs and aspirations. Embracing silence allows educators to appreciate the significance of cultural nuances, thereby creating a more inclusive and respectful learning environment.

It is imperative to understand the importance of cultural respect in nurturing positive learning experiences. By relinquishing judgement and valuing the cultural heritage and knowledge of First Nations students, educators can create a safe space where students feel acknowledged and empowered to

embrace their identities. Taking the time to understand what community members are saying they want for their children can have remarkable impacts for a school.

### **The Influence of Community Engagement**

At Dunwich State School, we’ve embarked upon a journey to co-design a groundbreaking project rooted in the latest research on brain health and neuroplasticity. We call it ‘Safe, Calm and Connected’. It’s a direct response to our school community’s needs.

The aim is to adopt a neurological pedagogical approach to address regulation in children and foster a safe, calm, and connected learning

environment. By co-designing the initiative with the school community, stakeholders are able to play a pivotal role in shaping the project’s success, which aligns with the principle of collaborative and community-driven education.

### **The Background – ACEs and ERIC**

Millions of adults across Australia, Europe and North America live with a legacy of Adverse Childhood Experiences (ACEs). The latest research suggests that a 10% reduction in ACEs prevalence could equate to annual savings of \$105 billion (Adna, 2022). Programs to prevent ACEs and moderate their effects are available. Rebalancing expenditure towards ensuring safe and nurturing childhoods



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relieve pressures on health care systems.

Evidently, there's a disconcerting surge in the count of students within our educational institutions who grapple with the formidable challenges of emotional regulation and impulse control – formulated under the acronym ERIC. The undeniable truth emerges: A child's self-mastery delineates a path of profound impact on their future trajectory. Cortisol levels, elevated as early as age three, can remarkably foretell the course of the life ahead (Poulten, et al., 2022). But herein lies our beacon of hope: Delving into the intricate tapestry of neuroplasticity, we, as educators, possess the power to not only comprehend but to mend. In our grasp rests the potential to reshape destinies and chart a course beyond predictive confines.

The neurobiological basis of self-control lies in the healthy development of the prefrontal cortex which involves emotional regulation, response inhibition, and executive functions. The evidence from the second Dunedin Longitudinal Study (Moffitt, et al., 2011) showed that children's self-control has a linear relationship with life-outcomes even when controlled for IQ and class. Children with low self-control present as

adults at the age of 38 years with poorer health, more financial problems, more single-parent child rearing, and more criminal convictions. Children whose self-control increased with age tended to have better adult outcomes than initially predicted, showing that self-control abilities can change and yield desirable results.

### **Developing an Evidence-based Neurological Pedagogy**

Safe, Calm and Connected is a targeted pedagogical approach to support strong brain development of school-age children and a response to the impacts of childhood stress. Neurological developmental pathways and cortisol impacts are related to the sequenced development of abilities:

1. Calming the amygdala – ‘Safe’ or co-regulation.
2. Enhancing the prefrontal cortex – ‘Calm’ or emotional regulation.
3. Building the default mode network – ‘Connected’ or self-reflection and empathy (Tyrka, 2013).

This is a whole of school approach because like a rising tide that lifts all boats, all children – even those who already have above average self-control – could reap later in life rewards from the universal interventions designed to improve such skills across their cohort.

### **Community Co-design**

The Dunwich State School Parents and Citizens Association, Minjerribah Moorgumpin Elders-in-Council, and the Goori Perspectives Committee (First Nations school community members) have endorsed the Safe, Calm and Connected approach at Dunwich State School. Together with the school, these groups will ensure it has cultural contextualisation and a whole of school

and community approach.

This will involve four areas of curriculum development:

1. Physical exercise before class.
2. A play-based curriculum for Prep to Year 3.
3. An emotional regulation and impulse control curriculum.
4. A philosophical inquiry in education curriculum.

### **The Deliverables for Dunwich State School Students**

#### ***Physical exercise before class***

Physical exercise improves learning by increasing brain-derived neurotrophic factors which:

- improve brain functions including memory, concentration and learning
- increase neuroplasticity cell signalling, growth, and development, resulting in improved cognition
- reduce anxiety and depression (de Sousa Fernandes, et al., 2020).

This deliverable was a specific outcome from the co-design process.

#### ***A play-based curriculum for Prep to Year 3***

Collectively, educators understand the influence of play-based learning is profound and extends to the very core of emotional regulation, self-mastery, and interpersonal bonds. However, a disconcerting reality materialises: The gradual eclipse of this potent approach within our curriculum's fabric. This erosion, in turn, impacts the dwindling heights of numeracy and literacy achievements in the subsequent stages of learning.

Scientific inquiry has also underscored a crucial revelation: The fervent pursuit of intensified literacy instruction during the formative years yields a transient surge in scholastic prowess. Yet, a

paradoxical twist emerges, casting a shadow over the realm of mathematics and language proficiency in Years 3 to 6 – an unintended consequence that inadvertently dims the very torch it sought to kindle.

The Safe, Calm and Connected project will deliver learning meticulously tailored for early years classes. A play-based curriculum was one of the outcomes of the school's engagement with the Goori Perspectives Committee, in the co-design process.

### ***An emotional regulation and impulse control curriculum***

Children who develop stronger self-control have better education and life outcomes. As previously cited, adults with well-developed prefrontal cortexes enjoy better health, less financial problems, stronger relationships, and fewer criminal convictions.

### ***A philosophical inquiry in education curriculum***

Central to the Dunwich State School project is a systematic spotlight on the brain's default mode network, associated with emotion perception, empathy, theory of mind, the morality involved in the social understanding of others, as well as identity formation. Research shows that the medial prefrontal cortex plays a key role in:

- the social understanding of others
  - emotion engagement during social interactions
  - making self/other distinctions
  - the understanding of other's mental states
  - the transfer of information processing from automatic to cognitive processes, with an increase in the complexity of social interaction (Li, Mai & Liu, 2014).
- Safe, Calm and Connected leverages off the established Philosophy in Schools

pedagogy, employed in select Queensland schools for two decades, which combines inquiry with a form of peer-assisted learning which enhances metacognitive, self-regulatory behaviours, and empathy.

Philosophical inquiry in education involves:

- Self-conscious inquiry into the meaning of engaging ideas such as 'What does it mean to be fair?'
- Self-reflection and perspective taking (self and other).
- Use of logic, which includes critical thinking and reappraisal.

### ***Our Collaborators***

The Safe, Calm and Connected project is illuminated by expertise – we're working with the Australian Research Alliance for Children and Youth, Thriving Kids Queensland, and the National Brain Builders Alliance. These steadfast collaborators form the cornerstone, lending their insights to shape the co-design process alongside our community. Together, we will forge a neurodevelopmentally-informed pedagogy, one that nurtures young minds and safeguards them against the repercussions of childhood stress.

The heartbeat of the Safe, Calm and Connected co-design project resonates through five resolute groups:

1. Convening a Brain Institute-led academic roundtable, a crucible of intellectual prowess, to orchestrate the birth of neuroscience-infused pedagogy.
2. The School Community Leadership Group, stalwart sentinels of transformation,

lending voice to the very heart of our educational evolution.

3. The Safe, Calm and Connected Co-Design Project Development Team, architects of innovation, meticulously sculpting the landscape of learning.
4. The Early Adopters Interest Group, comprised of principals, school leaders, and teachers, pioneers who fearlessly embrace change and champion progress.
5. The Queensland Department of Education's Thought Leaders Group, luminaries guiding the trajectory of educational enlightenment.

By drawing on the latest research on brain health and neuroplasticity, and involving the school community in the co-design process, this innovative project offers valuable insights for principals and educators seeking to nurture the holistic development of their students. It's a promising avenue to create safe, calm, and connected learning environments that have the potential to create lasting and positive impacts on the lives of all young learners. No gammin!

*For a list of references, contact the Editor.*



#### **About the Author**

Since 1990, John Bray has worked in roles spanning primary, secondary, and P-10/12 schools. Beyond education, in the Northern Territory Department of Chief Minister and Cabinet, John played a pivotal role in transforming Jabiru in Kakadu National Park from a mining town into a community-controlled tourist destination. This experience deepened his commitment to community-centric decision-making. John remains a staunch advocate for First Nations education and champions neurological pedagogies for brain health, emphasising holistic learner wellbeing. Connect with John at [sbray13@eq.edu.au](mailto:sbray13@eq.edu.au)