

WA Education Awards - Brookman Primary School - Primary School of the Year 2018 Nomination

In 2018, there is a heightened sense of pride at Brookman Primary School (BPS). The school has progressed from a place of high social disadvantage with an ICSEA of 927 and struggling with behaviour management and low educational standards, to being acknowledged state-wide as a Teacher Development School (TDS) in both STEM and Languages. In 2017 Brookman was a Lead School in an innovative Digital Technologies (DT) Project in partnership with Datacom and Curtin University. Brookman has been presented with two 3D Printers as part of Western Power's 'Circuit Breakers' engineering outreach program and more recently partnered with 'Compu.Ed', a specialist educational robotics supplier whose principal focus is on the area of STEM education, in robot development. During 2016-17 Brookman worked closely with Statewide Services and the 'Innovation Unit' on STEM education practices and was acknowledged in this area as winner of the 2017 Governor's Primary Leadership STEM 'Meritorious Award'. The school is making a difference and has achieved excellence within its context.

Under the educational leadership of a sustained, devolved and stable team, a group who understand and apply the leadership of change, Brookman has progressed along a path of school improvement, highlighted with gains in student progress and achievement. The range of evidence collected across academic and social/emotional elements of student improvement has confirmed and validated the negotiated outcomes we have sought through the Business Plan and supporting Operational Plans. One example indicates 2017 Year 5 NAPLAN 'Level of Improvement from Years 3 to 5' in Mathematics greater progress and achievement for girls, Aboriginal students and EAL/D students. Additionally, the school finished 3rd in the statewide 'Have Sum Fun' Mathematics competition. The Brookman staff has striven to be student-centred, authentically inclusive and to establish quality relationships based on trust, empathy and mutual respect with families and the broader community. 'KidsMatter', 'Play Based Learning' in the ECE area and a 'KindiLink' program are three examples of existing proactive initiatives at the school resulting in Brookman now being generally a calm, well ordered and welcoming place to learn and teach. Brookman staff are committed to success for all students and this has differentiated Brookman from other like schools.

Brookman has a well understood, highly contextual and fully embraced school vision to have a Science, Technology, Engineering, Mathematics (STEM) focussed learning environment with engaged staff and students which builds student potential to become future innovative, creative thinkers, risk takers and problem solvers achieved through changed pedagogy and careful planning. While having STEM as a priority, there has been a demonstrated improvement across all Curriculum areas. Staff pride themselves on the deep interrogation of data through reflection and review to determine short medium and long-term priorities for Brookman students. School improvement processes are logical, strategic and result in quality plans for improvement across the school.

School management structures have been established to maximise the time teachers and those who support the work of teachers, to engage in upper level discussions about authentic learning, quality teaching and sound assessment. Resourcing these school improvement structures is a priority and reflected in annual school planning and our published planner. BPS has successfully developed a devolved Curriculum Leadership model by adopting evidence-based whole-school approaches reflective of 'best practice' in a contemporary educational learning environment. Over recent years, this strategy has enhanced strategic planning, made all meetings more targeted and purposeful and resulted in professional learning being targeted to the real needs of staff. Staff confirm they appreciate the mentoring and coaching culture and the opportunity to apply their contemporary professional knowledge. In achieving a long-term vision of having highly skilled leaders across the school, a wide range of coaching and professional development courses as well as 'Connect' sites have been utilised. Staff are passionate and excited about their work – they inspire and motivate each other. Every available opportunity is taken to affirm and celebrate the work of Brookman staff whether in the staffroom at morning tea, at a school assembly, via Instagram, at a school development activity or in a public forum, recognition of educational excellence is a priority. This strategy gained acknowledgement in the school's Independent Public School (IPS) Review for having achieved embedded educational change.

STEM project-based learning introduced from Kindergarten to Year 6, has provided fresh challenges for staff to use innovative cross-curricular planning and revitalized teaching approaches to value learning and solve real world problems. Collaborative discussions relate to how teaching strategies can be adjusted resulting in staff continually seeking ways to enhance student learning not only in STEM but across the Curriculum. For example, the Visual and Performing Arts specialist teachers have linked with classroom learning programs to become active in Science, Technology, Engineering, +Arts, Mathematics (STEAM) activities. Previously disengaged students have now become actively engaged, thriving on challenge-based learning activities. The specialist Visual and Performing Arts teachers collaborate with classroom teachers to link elements of the Arts into their planning. Further, Science and Maths specialists also mentor staff; create planning documents; introduce reflective practices; and opportunities to share and acknowledge achievements. This culture has inspired ongoing discussion and debate amongst staff and energised thinking. Staff universally share class experiences, planning ideas and discuss opportunities for future growth and development at regularly scheduled meetings. The feature of this work is the continuity of Curriculum delivery across the school. 'Partner Schools' have attended BPS sharing sessions to gain a broader understanding of STEM processes and application to their schools. Brookman proudly presented their educational journey to excellence at the 2017 STEM EXPO

Progress is impossible without change, and those who cannot change their minds cannot change anything. George Bernard Shaw

at the Crown conference venue which attracted 400 participants, has presented to Statewide Services and CEO of Scitech and again to Statewide Services and the Innovation Unit as part of the newly formed STEM Alumni.

Reflection and review sessions are driven by the collective belief that assessment for learning, of learning and as learning are integral to the achievement of high quality learning outcomes. Formative assessment undertaken by classroom teachers along with classroom observation sessions now focuses on the learning that is taking place for individuals, groups and cohorts. During school development and phase of learning sessions, staff have established reflective practices to ensure a common direction and drafted action plans which incorporate explicit links from the complexity of their tasks' strategies for the implementation of STEM approaches in the school. For the broader Curriculum, meetings discern the students requiring more explicit teaching, or particular interventions and how this can be achieved. In turn, this approach manifests itself in a different approach to resourcing interventions for students with particular needs. For example, the approach to student services has changed with a student who may require short term targeted funding, specialist equipment or more Education Assistant or Chaplain time.

A lead role in the Deeply Reflective Engagement and Mastery (DREAM) Project to implement the WA Digital Technologies (DT) curriculum across ten schools explored the role the DT curriculum plays in supporting problem solving and project-based learning. The project focussed on best practice, supported learning, collaborative practices and inquiry-based pedagogy. Our DREAM teacher also presented at the 2017 ECAWA Conference. Initiatives have been supported through targeted budgeting resulting in Interactive Whiteboards in all teaching areas, an extensive computer laboratory, over 100 iPads for student use, iPads provided to all teachers and the establishment of a 'maker space'. In acknowledging staff and student ICT skills would benefit from further development, a Digital Technologies Teacher was employed from mid-2016 to promote a collaborative approach with teachers and provided programs at point of need. This reflected the '*I do, We do, You do*' gradual release methodology evident at Brookman. Our teachers also gained added training on Digital Technologies Resource Kits, supplied by the Education Department. In the second half of the year our Digital Technologies specialist initiated the same devolved leadership model to work collaboratively with staff to introduce teaching, learning and assessment strategies including coding and robotics. In the initial stages this strategy allowed two teachers to work across each class to build DT skills. During 2017 the school looked to partner with a CSIRO/Compu.Ed engineer to trial a robot to support the teaching of English as an Additional Language/Dialect (EAL/D) Noongar. This is a key strategy to engage Aboriginal students and girls in particular as a STEM strategy.

The Brookman School Board provides effective governance and along with an equally active P and C Association promotes the school in the community. As a result, Brookman enjoys a commendable level of active engagement to support both the school generally and more specifically, its learning programs. This is reflected in the number of family representatives increasingly participating on school-based committees and in classroom programs. Staff have actively engaged parents in reporting student progress opportunities both formally and informally.

Inclusive of community feedback, surveys, anecdotal and social skills data indicate student interest in STEM activities has impacted on student interest in learning, improved problem-solving processes, increased student interest levels and built on self-esteem. Students and parents consistently report Brookman students want to apply their knowledge at home. Similar feedback is evident regarding the level of enrichment opportunities available to Brookman students such as Maths extension and visits from Bunnings staff for building, construction and gardening activities. Middle primary students also attend environmental extension programs at Lynwood SHS. Brookman school is certainly held in high esteem by the Langford community. Partnerships are valued by the school. As an example, the school for a number of years, has partnered with a large corporate company to volunteer its staff to assist with Breakfast Club. In addition, the staff has visited the company premises to observe STEM in the commercial environment, a sound two-way partnership.

Brookman offers a learning environment focussed on developing students' risk taking and problem-solving skills through tackling 'real world' problems. All those who support the work of teachers including the gardener, work towards building the best, most exciting and enticing learning environment possible. One of 54 schools Australia wide to successfully apply for a Federal Government '*Maker Space*' grant, Brookman developed an indoor open area '*Maker Space*' adjoining the Science Room. These interflowing spaces provide a large '*one stop shop*' for STEM materials, activities and workspace. An outdoor '*Maker Space*' to engage community members to work with boys' and girls' groups in hands-on experiences in practical aspects of design, technology, innovation and entrepreneurship has also been established. This is a key strategy to engage Aboriginal students and girls in particular as a STEM strategy. Brookman is proudly a leader in innovation and education.

Change will not come if we wait for some other person or some other time. We are the ones we've been waiting for. We are the change that we seek. Barack Obama