

Excellence in Professional Practice Conference 2016

Collaboration for school improvement

Thursday, 19 May – Friday, 20 May

Bayview Eden 6 Queens Road, Melbourne VIC 3004 Australia

www.acer.edu.au/eppc



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Design by ACER Creative Services

ABN 19 004 398 145

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FOREWORD

Welcome to the fourth *Excellence in Professional Practice Conference* (EPPC). This year's topic – collaboration for school improvement – recognises that successful school change is dependent on a high level of collaboration among professionals. Research consistently shows that strong professional learning communities, school community-wide conversations and collaborative cultures are powerful drivers of improvement.

In a collaborative school culture, teachers question their beliefs about teaching and learning, engage in shared data analysis and learn and work together with their wider communities. Collaborations of this kind lead to high levels of trust and respect among colleagues and improved teaching practices and student outcomes that are sustained over time.

This conference provides a forum for educators to share the outcomes of their collaborations within a broader professional community. More than 130 delegates from around Australia and from Denmark, Hong Kong and New Zealand will be presenting their work. We encourage you to use this opportunity to develop wider collaborative networks, meet new people, question your and others' beliefs about teaching and learning and reflect on your professional practice.

We hope that you will continue your relationship with ACER and its mission to create and promote research-based knowledge, products and services to improve learning. Ways in which you can do this are through receiving and contributing to our *Teacher* magazine; participating in ACER events and courses and engaging with our products and services. Please consider submitting a proposal for next year's conference when submissions open in August.

Professor Geoff N Masters AO Chief Executive Officer, ACER

Self N Masters



Conference Timetable DAY I THURSDAY 19 MAY

8.00 am Registration and welcome, tea and coffee, exhibitors' expo

9.00-10.30 am Acknowledgement of Country

Conference opening
Associate Professor Pauline Taylor-Guy, Director, ACER Institute

Keynote 1: Planning to improve

Professor Geoff Masters AO, CEO, ACER

10.30–11.00 am Morning tea, networking, exhibitors' expo, poster presentations

	PARKSIDE 4	PARKSIDE 5	DAME NELLIE MELBA	LORD MELBOURNE	PARKSIDE 2	PARKSIDE 3
Session 1 Thursday 11.00 am– 12.30 pm	Collaborative learning partnerships: Better teachers, better students Alison Taylor, Pakuranga College, Auckland, New Zealand	Developing the capacity in our staff to effectively use data Denise Hayward, Tara Anglican School for Girls – Junior School, NSW	The Yiramalay/Wesley Studio School: A different model of school and catalyst for change Dr Helen Drennen AM, Wesley College, VIC; Ned McCord, Wesley Studio School, WA; Joe Ross, Wesley Studio School Foundation, WA	An enlightening journey: Revitalising senior school pastoral care Nicholas Brice, Pulteney Grammar School, SA; Dr Tom Nehmy, Clinical Psychologist, SA	Workshop (60 minutes) What works to promote classroom wellbeing and learning from the perspectives of children and young people? Dr Kevin Anthony Perry, University of Aalborg, Denmark (Limited places)	Workshop (60 minutes) Reframing the future for mathematics: Scaffolding numeracy in the middle years Praveen Krishna, Sarah Redfern High School, NSW (Limited places)
	Creating a culture of collaboration in a two-campus secondary school Michelle da Roza and Michael Lee, St Mary MacKillop College, ACT	Data interrogation: Building staff capacity, through the use of a continuum, to create a data-based decision- making culture Karen McMahon, Trinity College Blakeview, SA; Rick Jarman, Trinity College Gawler River, SA	Cully talk: Explicitly teaching vocabulary Cass Ahern and Dannika Davis, Charleville State School, QLD; Erin Orford, Department of Education and Training, QLD	A strategic approach to improving teachers' commitment to a school's pedagogical framework Dr Patsy Norton, Kim Wood and Angela Mason, Craigslea State High School, QLD		
	Building a high- performing team of educators Jason Borton, Richardson Primary School, ACT; Rochelle Jeffery, Edulnfluencers, NSW	Classroom profiling: A data-driven approach to creating positive, supportive classrooms Dominic Fecteau, Our Lady of the Sacred Heart Thamarrurr Catholic School, Wadeye, NT	Reading: Let's get it right to prevent failure Chris Eveans, Robina State School, QLD	Teachers talking teaching: Uniting teachers and building teacher efficacy in mathematical proficiencies through collaborative P-6 data professional learning teams		
				Amanda White and Jenny Fietz, Meridan State College, QLD; Rob Proffitt-White, Department of Education and Training, QLD		
12.30–1.30 pm				ators and researchers comm	nitted to creating the future of	schooling,

	PARKSIDE 4	PARKSIDE 5	DAME NELLIE MELBA	LORD MELBOURNE	PARKSIDE 2	PARKSIDE 3
Session 2 Thursday 1.30–3.00 pm	Improving spelling together: A whole- school approach using phonological awareness and phonics Clare lacono, Spensley Street Primary School, VIC	Leading integrated STEM for engagement Matt Scott, Judith Bertolin and Chad Bliss, The Canobolas Rural Technology High School, NSW	Meeting to learn: An innovative approach to learning at work Sacha Webster and Amy Tickle, Pittwater House, NSW	Numeracy contextualised: Initiating and sustaining numeracy transfer across a high school culture Brett Moffett and Andrew Walmsley, Hervey Bay State High School, QLD; Rob Proffitt-White, Department of Education and Training, QLD	Workshop (60 minutes) Decolonising the classroom: A youth-with-community arts-based collaborative approach to expansive learning Shelley Davidow, Noosa Pengari Steiner School, OLD; Alister Bartholomew, Department of Education and Training, OLD; Peter Muraay Djeripi Mulcahy, international accomplished fine artist and storyteller (Limited places)	Workshop (60 minutes) Small schools collaborating for maximum impact Melissa Wood, Chandler Public School, NSW and Ros Edwards, Snow Gums Learning Alliance, NSW (Limited places)
	PAT and school: How the Progressive Achievement Tests support transition Lucy D'Angelo and Robert Dullard, Penola College, VIC; Julia Inglis, ACER	Practitioner researchers at the chalk face: A case study in STEM Dr Nicole Archard, Wenona, NSW; Tiffany Roos and Dr Lesley Wright, Association of Independent Schools of NSW	Enhancing teacher wellbeing: A Northern Beaches Secondary College initiative Renata Grudic, Northern Beaches Secondary College, NSW	Four teachers and 120 learners: The shift to 'modern maths' Nikki Urlich, Campbells Bay School, New Zealand		
	Empowering local learners: A preschool to secondary project improving executive function skills through a numeracy lens Shane Loader, Port Augusta Secondary School, SA; Kristin Vonney and Deb Lasscock, Flinders Centre for Science Education in the 21st Century, Flinders University, SA	Making learning visible to promote change in pedagogical practice Melissa Carson, Nicholas Cook and Sandra Woodward, Oakhill College, NSW		Number sense: Collaborate to initiate Veronica Reid and Julie Henderson, Talara Primary College, QLD; Rob Proffitt-White, Department of Education and Training, QLD		
3.00–3.30 pm		ng, exhibitors' expo, poster				
Session 3 3.30–5.00 pm	Can teacher observations be an effective strategy for school improvement? Dr Bronte Nicholls and Jayne Heath, Australian Science and Mathematics School, SA	Consciously collaborating to shift the spotlight from teaching to learning Susan Paterson, Gatton State School, OLD; Tania Leach and Robyn Marsh, Department of Education and Training, QLD	Driving school performance via community sport Steven Harvey, Kalinda Primary School, VIC; Penny Carlson, Australian Sports Commission	Teaching and measuring collaboration and problem-solving in students Loren Clarke, Eltham High School, VIC	Workshop (60 minutes) Survive and thrive: Connecting with early career teachers through coaching Sheri Evans, The Institute for Professional Learning, WA (Limited places)	Workshop (60 minutes) From cooperation to collaboration: Tales from St Mary's, St Anthony's and St Gerard's (SMAG) Catholic Primary Schools cluster working together Greg White, St Mary's Catholic Primary School, VIC; Chris O'Connell, St Gerard's Primary School, VIC; Marg Batt, St Anthony's Primary School, VIC (Limited places)
	Classroom walkthroughs: Teachers and school leaders working to raise student achievement Mitch Bartholomew and Kristy Grady, Richardson Primary School, ACT	Applying quality teaching as a performance development framework to improve student attainment: A case study Brett Foster, Stella Maris College, NSW; David Roy, University of Newcastle, NSW	Reciprocal visits: Strengthening relationships for transition Darlene Leach and Rebecca Howell, Department of Education and Training, VIC	Lessons from trans- sectoral collaboration through school networking Timothy O'Leary, Wesley College, VIC; Anthony Jackson, Jackson School, VIC; Kasey Simpson, Tarneit P–9 College, VIC; Sarah-Jane Woodward, Staughton College, VIC		
	Building teacher critical friend coaching relationships in a New Zealand secondary school Philippa Mulqueen,	Discovering the student learning mindset (and telling everyone about it) Douglas Baxter, Stephen McGinley and Clare	Tracking young deaf children's language development: Collaboration across the bilingual team Erin West, Aurora School,	Changing a writing culture through a professional learning community Bernadette Hawker and Susan Evans,		
	Pakuranga College, Auckland, New Zealand	Tuohy, Beaconhills College, VIC	VIC	Goondiwindi State High School, QLD		
5.00–6.30 pm	Networking drinks, exhib	oitors' expo, poster present	tations			

Conference Timetable DAY 2 FRIDAY 20 MAY

PARKSIDE 4	PARKSIDE 5	DAME NELLIE MELBA	LORD MELBOURNE	PARKSIDE 2	PARKSIDE 3
Registration and welcom	e, tea and coffee, exhibito	rs' expo, poster presentati	ons		
Corporate collaboration for whole-school improvement Amadeo Ferra, McClelland College, VIC; Julie Kirk, Experian Australia, VIC	A framework for improving student outcomes through peer observation, collaboration and feedback Sheri Evans, The Institute for Professional Learning, WA	The Jetson's world: Online collaborative moderation between small, remote and metropolitan schools Alicia Hoddle, Leigh Creek Area School, SA; Leigh-Anne Williams, Unley High School, SA; Susanne Jones, Department for Education and Child Development, SA	Changing, the Sarah way: A successful middle school collaborative project Margaret Downey, Sarah Redfern High School, NSW	Workshop (60 minutes) 'You killed it, Miss!' Making sense of English in an Indigenous or multicultural classroom Margaret James, Honey Ant Readers, NT; Ailsa MacFie, Tiwi College, NT (Limited places)	Workshop (60 minutes) Faculty inquiry: Together, how will we do things differently? Vanessa Scott, Pakuranga College, Auckland, New Zealand (Limited places)
Provoking the data out of collaboration Dawn Boland, John Paul College, QLD	Snapshots: A collaborative approach to monitor students to improve academic achievement Lauren Brooks, Our Lady of Sacred Heart College, NT	Head teachers as leaders of learning: The strategic and explicit instruction of vocabulary Bohdan Balla-Gow, Auburn Girls High School, NSW	Effectiveness of therapy services using collaboration, co-teaching and consulting Dr Carl Parsons, Port Phillip Specialist School, VIC		
Self-improving schools: A collaborative success story from Queensland Josephine Wise and Michele Walliker, Independent Schools Queensland	K2OUT: Inspiring students to take their rightful place in the world of work Paul Gavin and Karen Endicott, Sarah Redfern High School, NSW	How strong is your school as a professional community? Prof Lawrence Ingvarson, ACER; Ed Roper, Brisbane Grammar School, QLD			
Morning tea, networking	, exhibitors' expo, poster p	presentations			
Destination collaboration: Building the classroom landscape Melanie Clark and Malena Cahill, Dardanup Primary School, WA	Soar into Bribie: Ensuring successful transitions to prep Rachel Roebuck and Karena Aczel, Bribie Island State School, QLD	Curiosity projects: Enabling curiosity and self-motivated learning in middle schools Greg Ladner, Hong Kong International School, Hong Kong	Aspire: A program of challenging tasks for students in Years 7 to 9 Jon Morley, Gisborne Secondary College, VIC	Unlocking the mystery of literacy for all Steven Capp and Sarah Asome, Bentleigh West Primary School, VIC (Limited places) ide for	Workshop (60 minutes) Struggling to be heard: Voice or voiceover? Zoe Jeckeln, Port Phillip Specialist School, VIC (Limited places)
Learning walks: The mental pictures that change practice Stuart Taylor, Riverside Christian College, QLD	Creating an early learning to Year 12 culture of thinking and deep learning Sophie Murphy and Meg Hansen, Westbourne Grammar School, VIC	Learning, respect, empowerment for disengaged young people Sandra Murphy, Andrea Thompson and Ciara Chaomhanach, Oakwood School, VIC	Development and evaluation of a sustainable district-wide engagement program for high-ability youth Bohdan Balla-Gow, Auburn Girls High School, NSW		
Gluing the house of cards: Teacher improvement that sticks	Increasing student voice and learning outcomes through questioning Androulla Vagnoni and	21st-century professional development for the 21st-century teacher Tamara Sullivan and	How do we improve morale and connectedness to school? By giving students a voice		
	Registration and welcom Corporate collaboration for whole-school improvement Amadeo Ferra, McClelland College, VIC; Julie Kirk, Experian Australia, VIC Provoking the data out of collaboration Dawn Boland, John Paul College, QLD Self-improving schools: A collaborative success story from Queensland Josephine Wise and Michele Walliker, Independent Schools Queensland Moming tea, networking Destination collaboration: Building the classroom landscape Melanie Clark and Malena Cahill, Dardanup Primary School, WA Learning walks: The mental pictures that change practice Stuart Taylor, Riverside Christian College, QLD Gluing the house of cards: Teacher	Registration and welcome, tea and coffee, exhibitor Corporate collaboration for whole-school improvement Amadeo Ferra, McClelland College, VIC; Julie Kirk, Experian Australia, VIC Provoking the data out of collaboration Dawn Boland, John Paul College, OLD Self-improving schools: A collaborative success story from Queensland Josephine Wise and Michele Walliker, Independent Schools Queensland Destination Collaboration: Building the classroom landscape Melanie Clark and Malena Cahill, Dardanup Primary School, WA Learning walks: The mental pictures that change practice Stuart Taylor, Riverside Christian College, QLD Ramework for improving student outcomes through peer observation, collaboration and feedback Sheri Evans, The Institute for Professional Learning, WA Snapshots: A collaborative approach to monitor students to improve academic achievement Lauren Brooks, Our Lady of Sacred Heart College, NT K2OUT: Inspiring students to take their rightful place in the world of work Paul Gavin and Karen Endicott, Sarah Redfern High School, NSW Moming tea, networking, exhibitors' expo, poster permandence of thinking and deep learning Soar into Bribie: Ensuring successful transitions to prep Rachel Roebuck and Karena Aczel, Bribie Island State School, QLD Creating an early learning to Year 12 culture of thinking and deep learning Sophie Minghy and Meg Hansen, Westbourne Grammar School, VIC	Corporate collaboration for whole-school improving student outcomes through peer observation, collaboration and feedback Australia, VIC Provoking the data out of collaboration and sollaboration Dawn Boland, John Paul College, QLD Self-improving schools: A collaborative approach to monitor students to improve academic achievement Lauren Brooks, Our Lady of Sacred Heart College, NT Self-improving schools: A collaborative approach to monitor students to improve academic achievement Lauren Brooks, Our Lady of Sacred Heart College, NT Self-improving schools: A collaborative approach to monitor students to improve academic achievement Lauren Brooks, Our Lady of Sacred Heart College, NT Self-improving schools: A collaborative approach to monitor students to monitor students to improve academic achievement Lauren Brooks, Our Lady of Sacred Heart College, NT Self-improving schools: A collaborative approach to monitor students to improve academic achievement Lauren Brooks, Our Lady of Sacred Heart College, NT Self-improving schools: A collaborative approach to monitor students to take their rightful place in the world of work Paul Gavin and Karen Heigh School, NSW Self-improving schools: Queensland Moming tea, networking, exhibitors' expo, poster presentations Soar into Bribie: Ensuring successful transitions to prep Rachel Roebuck and Karena Aczel, Bribie Island State School, QLD Moming tea, networking, exhibitors' expo, poster presentations Curiosity projects: Enabling curiosity and self-motivated learning in middle schools Greg Ladner, Hong Kong International School,	Corporate collaboration for whole-school improvement Amadeo Ferra, McClelland College, VIC, Julie Kirk, Experian Australia, VIC Provoking the data out of collaborative and Boland, John Paul College, QLD Provoking the data out of collaborative and methopolitan schools. 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	PARKSIDE 4	PARKSIDE 5	DAME NELLIE MELBA	PARKSIDE 2	PARKSIDE 3
Session 3	Collaboration: What	The Katandra	Collaborating for	Workshop (60 minutes)	Workshop (60 minutes)
Friday 1.15–2.15 pm	does it look like in effective schools? Robert Marshall, ACER; Anne Ryan and Prue Horan, Wagga Wagga Catholic Education Office, NSW	Project: Special and mainstream schools working together Bruce McPhate and Sally Moloney, Katandra School, VIC; Tracey Walker, Department of Education and Training, VIC	impact Cathy Henbest, Catholic Education Melbourne, VIC; Shane Crawford, St Bernards Catholic Primary School, VIC; Jenny Sesta, Corwin	Early career teacher mentoring: Collaborating for confidence Maria O'Donnell, St Mary MacKillop College, ACT (Limited places)	Collaborative uses for student data: School improvement begins in the classroom Bronwyn Jones and Patricia Simons, Willetton Primary School, WA; Dr Sandy Heldsinger, Brightpath Educational Assessment Software, WA; Rob Hassell, ACER (Limited places)
	Action learning, action research: Meaningful collaboration creating teacher change Belinda Holmes, St Andrews Lutheran College, QLD	The ISSLANDS program professional learning community: Intervention strategies and support for literacy and numeracy difficulties Gail Nelson, Canning Vale College, WA			
	Keynote 2: Partnerir	ng with Robotics			

Poster presentations

Working together to teach our kids 'both ways': Depicting meaningful collaboration through Aboriginal art

Margaret James, Honey Ant Readers, NT Trudy Inkamala, Western Arrernte Elder and traditional land owner Rhonda Inkamala, Western Arrernte Elder

The Australian Curriculum: From content to concepts

Tania Lattanzio, Innovative Global Education, Singapore Andrea Muller, Innovative Global Education, New Zealand

Closing the Gap in numeracy classrooms in remote Aboriginal communities Kim McHugh, Association of Independent Schools, WA Vondine Munday, Kulkarriya Community School, WA

KEYNOTE PRESENTATIONS

Day One Thursday 19 May Keynote 1 9.00 – 10.30 am Parkside 4

Keynote: Planning to improve



Professor Geoff N Masters AO, CEO, ACER

Abstract

From 1 January 2017 every school in Australia will be required to have a school improvement plan. But what is a school improvement plan? Is it different from the strategic plans that most schools already have?

This presentation will define school improvement as the process of changing school practices in ways that lead to better student outcomes. A school improvement plan is developed by the school community to make improvements to current school practices and thus student outcomes. It embodies a collaborative commitment to the rigorous, systematic investigation of specific improvement strategies.

Key steps in the development and implementation of a school improvement plan are: knowing where you are as a school; specifying the improvements you wish to see; designing and implementing an improvement strategy; measuring and monitoring improvements in outcomes; and reflecting on what has been learnt.

Professor Geoff N Masters AO is Chief Executive Officer and a member of the Board of the Australian Council for Educational Research (ACER) – roles he has held since 1998. Professor Masters also heads ACER's Centre for Assessment Reform and Innovation, which promotes a view of assessment as the process of establishing and understanding where students are in their learning and development at the time of assessment and of monitoring progress over time.

He has a PhD in educational measurement from the University of Chicago and has published widely in the fields of educational assessment and research.

Professor Masters has served on a range of bodies, including terms as President of the Australian College of Educators; founding President of the Asia-Pacific Educational Research Association; member of the Business Council of Australia's Education, Skills and Innovation Taskforce; member of the Australian National Commission for UNESCO; and member of the International Baccalaureate Research Committee. He is currently a member of the Advisory Board for the Science of Learning Research Centre, the ABC Digital Education Advisory Group and the national Board of Life Education Australia.

He has conducted a number of reviews for governments, including a review of examination procedures in the NSW Higher School Certificate (2002); an investigation of options for the introduction of an Australian Certificate of Education (2005); a national review of options for reporting and comparing school performances (2008); and reviews of strategies for improving literacy and numeracy learning in government schools in Queensland (2009) and the Northern Territory (2011). He is currently undertaking a review of senior secondary assessment and tertiary entrance procedures in Queensland.

Professor Masters is an adjunct professor in the Queensland Brain Institute. His contributions to education have been recognised through the award of the Australian College of Educators' Medal in 2009 and his appointment as an Officer of the Order of Australia in 2014.

Day Two Friday 20 May Keynote 2 2.25 – 3.00 pm Parkside 4

Keynote: Partnering with robotics



Dr Christina Chalmers, Queensland University of Technology

Abstract

Robotics@QUT

Robotics@QUT is a Queensland University of Technology outreach program supporting teachers and students from more than 50 schools from low socioeconomic status areas in North Brisbane. The aim of the program is to foster partnerships between local schools and the university with the overall goal of building school students' aspirations to pursue further education in areas of science, technology, engineering and mathematics (STEM). The Robotics@QUT project supports teachers and engages school students in robotics-based activities and develops school-based learning opportunities for QUT pre-service teachers. Focusing on teacher professional development, the program enhances the school curriculum and helps form stronger links between the university and the schools involved. The program provides: robotics loan kits to local schools; free professional development workshops for teachers; curriculum support for teachers designing robotics-based STEM activities for their students; schoolbased experience for pre-service teachers supporting teachers delivering robotics activities in the classroom; oncampus community fun days; and sponsorship for robotics competitions for school teams.

Nao robots in the Australian Curriculum

The Nao Robot Project is a partnership between the Association of Independent Schools of South Australia (AISSA) and researchers at Queensland University of Technology, University of Queensland and Swinburne University. AISSA has purchased two autonomous, programmable, humanoid Nao robots. Schools can submit expressions of interest to use the robots for a term, and for teachers to receive two days in-service training. This training supports teachers learning to program the Nao robots and to consider the pedagogical and teaching strategies they use. The research partners aim to evaluate AISSA's approach to the introduction of the robots to primary and secondary school classrooms, and to provide

guidance on the integration of humanoid robots into student learning and curriculum areas. The project team will also report on the pedagogical approaches and teaching strategies that are most effective when using humanoid robots in the classroom.

Robotics Social Clubs

The Robotics Social Clubs project is a collaboration between QUT, the Cooperative Research Centre for Living with Autism (Autism CRC) and Brisbane Catholic Education. Robotics Social Clubs were initiated to address the issues associated with building the pro-social learning skills of students verified as having autism spectrum disorders. Robotics Social Clubs are organised after school to support students (aged 12-13 years) to work on robotics challenges across 12 one-hour sessions (once a week). The project partners will evaluate how the Robotics Social Clubs promote learning of the personal and social capabilities within the Australian National Curriculum and promote peer relationships and academic engagement for children with autism spectrum disorders. The project partners are developing project guides and resources to support the Robotics Social Clubs. These guides and resources will be available for schools to access online.

Dr Christina Chalmers is a lecturer in Mathematics and Technologies Education in the School of Curriculum at Queensland University of Technology (QUT). Chris currently leads the Robotics@QUT project, which is a support network developed to assist teachers and students from more than 50 schools in low socioeconomic areas, engaging in robotics-based science, technology, engineering and mathematics (STEM) activities. Chris is involved in research projects focusing on technology, robotics, social skills, computational thinking, and STEM. These projects are with a number of key partners, including the Cooperative Research Centre for Autism, Brisbane Catholic Education, the Association of Independent Schools of South Australia and researchers from the University of Queensland and Swinburne University. Chris has been involved in a large research project, General Technology Teacher Training in China, working with 420 teachers from 32 provinces to engage them in furthering their knowledge and understanding of how to integrate robotics into their technology lessons.

PAPER PRESENTATIONS

Collaborative learning partnerships: Better teachers, better students



Alison Taylor, Pakuranga College, Auckland, New Zealand

Abstract

Pakuranga College has worked to develop a rigorous culture of inquiry, analysing student achievement data to inform teacher change and improvement. We realised, however, that teachers were the 'leaders of learning' and student perceptions of effective teaching and learning were not explored. The problem was how to develop and extend teacher pedagogical responsiveness to students' diverse learning needs. Initial student feedback provided a clear profile of what students saw as effective teacher characteristics.

We built the notion of teacher and student learning partnerships into our school-wide teacher professional learning structure. We established the conditions, systems and processes for teachers to collaborate with their students. All teachers collected student feedback about the effectiveness of their teaching and adapted their teaching in response to student feedback and feedforward.

Student and teacher feedback indicates that collaboration improves student engagement and motivation and builds student ownership of their learning. Student participation in teacher inquiry is giving students ownership, helping them to feel more engaged and connected to the school and giving them an understanding of teachers, teaching and learning. Student voice is influencing teachers to modify their teaching practice. Transfer of effective teacher practice to other teachers is another consequence of collaboration between teachers and students and the public sharing of inquiries by students and teachers.

Pakuranga College has developed a culture of 'learning partnerships' in which students are able to give feedback about what makes teachers and their teaching effective and what teachers can do differently to better engage, motivate and grow student understanding. This type of teacher and student agency has developed because the school has a strong whole-school professional learning culture; a culture of trust, openness and curiosity, with the structures and spaces for teachers to build their collective knowledge and reflective capacity, and a culture of data analysis to support inquiry.

Creating a culture of collaboration in a two-campus secondary school



Michelle da Roza and Michael Lee, St Mary MacKillop College, ACT

Abstract

St Mary MacKillop College is a large, coeducational, two-campus, Catholic systemic Years 7 to 12 school in the ACT. There are many individual action research and other projects running in the college. These projects include partnerships with other schools, both primary and secondary, to provide enrichment experiences; a partnership with the Australian Catholic University, which provides a Master of Teaching course on-site at the college; sporting partnerships; mentoring programs; wellbeing projects; professional learning communities and networks; and classroom-based interventions. Our problem was how to manage the change from a series of isolated projects to a culture of collaboration that guided staff members in their work in these partnerships. The answer was for a team to create a model that provided guidance to teachers in developing their skills in working in teams, developing partnerships inside and outside of the school, and building capacity in themselves and others to lead change. While the journey is still taking place for us, there are emerging data from school enrolments, retention of staff, classroom observations, survey data, data from formal and informal research and evaluations of projects and partnerships that point to a change in the culture of the school, and in the confidence of our teachers. Similarly, student data from school and external testing, classroom observations and satisfaction surveys support the view that change is occurring, and gives direction for the future. By creating a model that guides collaborative actions, we have made it easier for teachers to engage with each other across the school, the system and beyond. As a result, both the number and quality of collaborative projects have increased. Other schools may find our model and the process of developing the model useful in making practical steps towards using collaboration as a lever for change.

Building a high-performing team of educators





Jason Borton, Richardson Primary School, ACT Rochelle Jeffery, Edulnfluencers, NSW

Abstract

Schools are complex places with a variety of team structures in place. At Richardson Primary School there was a culture of privatised practice, limited collaboration, competition between teachers, a lack of shared vision, and low levels of professional trust. Annual surveys of staff satisfaction demonstrated that less than 60 per cent of teachers were feeling supported in their roles and satisfied with the level of team collaboration. Staff absences were high, with an average of 13.5 personal days per year being taken by teaching staff in 2013 and 11.5 in 2014.

Our theory of action is that high-performing teams support improved teacher practice and result in enhanced student learning achievement.

The first focus of our approach was a series of workshops based on *The Five Dysfunctions of a Team* by Patrick Lencioni, which addressed the fundamental aspects of a high-performing team and led to a greater understanding of the impact our behaviour was having on our ability to collaborate.

The second focus was the Healthier Workplace Initiative in partnership with the ACT Health Directorate. This involved developing and implementing an action plan that focused on staff wellbeing to enhance professional satisfaction.

We gathered a range of relevant data on the impact of our approach, including staff absence and satisfaction data, student achievement data and return on investment figures.

While the achievements have been pleasing and measurable, there is still some work to do. To ensure a sustained approach to building a high-performing team and enhancing staff wellbeing, we would consider a strengths-based approach. This involves a series of workshops designed to reflect upon and develop aspects of our modes of operating as a group and individually, focusing on areas such as social resources, redefining leadership, professional motivation, authenticity, sense of self and leadership identity.

Developing the capacity in our staff to effectively use data



Denise Hayward, Tara Anglican School for Girls – Junior School, NSW

Abstract

The last three years in the Tara Anglican School for Girls - Junior School have been a period of great change and innovation as the school has moved to an International Baccalaureate Primary Years Programme. Alongside this change has been the systematic gathering of data to track academic progress. To move our school forward in collecting and using data to raise achievement we have established a more cohesive leadership team. We have begun to develop capacity in our leaders in understanding data to enable them to upskill their own teams. We have structured the school day and professional learning opportunities to enable a more collaborative approach to planning, teaching and reviewing student achievement. Through these approaches, staff members are becoming more familiar with the data available and are beginning to use data as a focus for future planning. The workshop will provide an insight into the approaches we use at Tara and how we have developed a collaborative learning community.

At Tara, staff members are beginning to shift their thinking from gathering data to making connections between data and the instructional decision needed to raise academic standards. We are developing collaborative processes for teachers to make more reliable, valid and objective judgements about the actual progress students are making based on reliable evidence of what students know and are ready to learn next.

Through developing and building leadership, a collaborative learning community, trust and a shared vision of change there is greater ownership and a more collective sense of responsibility for student learning at Tara.

Data interrogation: Building staff capacity, through the use of a continuum, to create a data-based decision-making culture



Karen McMahon, Trinity College Blakeview School, SA Rick Jarman, Trinity College Gawler River School, SA

Abstract

In 2015, the principals of Trinity College Blakeview School and Trinity College Gawler River School desired to enhance the skill set of their respective staff, empowering them to be part of effective data-based decision-making professional learning teams (PLTs). We wished to find a way to use data as a flashlight, not a hammer. Working with Katherine Zollo from the Association of Independent Schools of South Australia, and responding to our individual school goals through the National School Improvement Tool and Trinity College Strategic Plan, staff collaborated together towards this aim throughout 2015. The goals were to create continua for teachers and PLTs and to develop leadership capacity. Collaboration between our two schools involved two half-day professional development sessions, PLT opportunities on both sites, and ongoing planning meetings between Katherine Zollo (AIS), Rick Jarman (Gawler River) and Karen McMahon (Blakeview). Guiding data principles and an action plan were created collaboratively. Teacher, PLT and leadership continua were produced for use in PLTs back at each school site. Staff plotted their zones of actual and proximal development, and set SMART goals using the continua to improve their skill set. This enabled PLTs to support and challenge each other, made for professional conversations about student achievement, and narrowed the gap between potential and actual achievement for students from early years to Year 10. This process has been a powerful way to use the size of the Trinity College system, with two Trinity Schools working collaboratively and strengthening staff partnerships. The continua produced have allowed us to move towards developing a data-based decision-making policy outline for all our R-10 schools. In 2016, the goal is the creation of similar continua for students and parents.

Classroom profiling: A data-driven approach to creating positive, supportive classrooms



Dominic Fecteau, Our Lady of the Sacred Heart Thamarrurr Catholic School, Wadeye, NT

Abstract

Our Lady of the Sacred Heart Thamarrurr Catholic School is a P–12 school located in Wadeye, Northern Territory. In 2013, the school identified that there was a trend of aggressive, violent and disruptive behaviour from students, leading to a large increase of in-school and out-of-school suspensions. The school also identified that teachers were spending the majority of their classroom teaching time (around 60 per cent) managing behaviour rather than delivering curriculum and learning opportunities.

After much research, the school decided to embark on becoming a classroom profiling school. Classroom profiling is a process whereby a trained observer makes detailed observations of teacher–student interactions and provides constructive feedback to the teacher. This is done in a confidential, supportive and non-judgemental manner. A coaching methodology is employed based on principles of the essential skills of classroom management. After profiling a class, the data from that profile is then added to a central database to allow school-wide analysis of trends and patterns in teacher practice.

After the school undertook the training and implemented the skills, there was a marked shift in the behaviour within classrooms. The occurrence of aggressive or violent behaviour went down to one occurrence every 29 minutes. The use of emotive strategies was completely eliminated from the school during the profiling period. Teachers reported through surveys that they felt much more confident in managing their class and felt their classroom was a more positive and 'fun' learning environment.

Classroom profiling has shifted the entire mindset of the school from one where teachers are planning around behaviour to one where teachers are now planning around curriculum and learning. Allowing teachers to reflect on their classroom practice using a non-judgemental, confidential tool has led to a safe and positive learning environment where the focus of teachers is learning, not behaviour.

The Yiramalay/Wesley Studio School: A different model of school and catalyst for change



Dr Helen Drennen AM, Wesley College, VIC Ned McCord, Wesley Studio School, WA Joe Ross, Wesley Studio School Foundation, WA

Abstract

In November 2004, the Bunuba people of the Fitzroy Valley entered into an educational partnership with Wesley College, Melbourne. Like Bunuba, Wesley College, Melbourne shares a deep commitment to learning and to growing. The partnership promotes real-life experience for students and staff, learning about the culture and languages of Australia's Aboriginal first peoples and the history of our great land. The partnership has resulted in the creation of the Yiramalay/Wesley College Studio School, a model of schooling to cross the cultural divide. This model has involved multiple levels of collaboration between students, teachers, communities, state and federal governments and industry. Through this collaboration there has been measurable improvement in student attendance compared with attendance at previous schools. There has been a demonstrated readiness to learn and to engage in two-way learning, and an improvement in student health. The positive impact is shown through the post-graduation destinations of Yiramalay students. This presentation will provide a reflection upon the full journey from conception through implementation, and share valuable lessons for anyone thinking about undertaking large-scale collaboration within the educational sphere. The session will identify the scope of the project, detail the nature of collaborations, celebrate successes, outline the impacts and learnings of the collaboration to date, and consider implications for others.

Cully talk: Explicitly teaching vocabulary



Cass Ahern and Dannika Davis, Charleville State School, QLD

Erin Orford, Department of Education and Training, QLD

Abstract

Standardised testing provided by schools within our cluster revealed a common trend of students performing poorly due to restricted vocabulary. Professional discussions with teachers about current vocabulary instruction indicated that minimal deliberate teaching of vocabulary was occurring.

Explicit instruction of vocabulary became a cluster priority. The collaboration between the speech pathologist and pedagogy coach was an integral part of this project, to initiate building capacity in teachers in delivering explicit vocabulary instruction.

We selected two trial schools with a high percentage of Indigenous enrolments. Many of the students in these schools do not speak Standard Australian English. The speech pathologist and pedagogy coach trained staff in explicitly teaching vocabulary using the STRIVE (Structured Tier-Two Robust Instruction of Vocabulary Experiences) method. This provided the platform to select a lead cohort of teachers to participate in the project. The next phase was to collaboratively plan with teachers and collect baseline data regarding their current pedagogy. The speech pathologist modelled lessons and provided planning support. Coaching and feedback was then provided by both the speech pathologist and the pedagogy coach.

After the trial period, the data identified there were significant improvements to teacher practice. Data obtained from pre- and post-trial surveys indicated that 100 per cent of teachers reported an increase in their performance abilities (as per teacher self-evaluation) across a number of areas. All teachers reported an improvement in vocabulary choices of students. Members of our lead cohort reported that they now feel comfortable with completing this process for the next unit without support, and most reported they possess the necessary skills to support colleagues.

The trial schools are located in a rural context, with young staff and high Indigenous enrolments. We have been able to create a sustainable project that allows teachers to participate in a collaborative learning process to improve their practice of explicitly teaching vocabulary.

Reading: Let's get it right to prevent failure



Chris Eveans, Robina State School, QLD

Abstract

This session will explore a study of cultivating a collaborative culture to improve the teaching of reading to prevent reading failure. Robina State School identified a problem: there were too many children in Prep and Year 1 below an acceptable standard in reading. This problem had occurred because teachers did not know how to implement proven, research-based methods to prevent reading failure, and because resources for early identification and preventative instruction had not been allocated effectively. The method used to address the problem was to focus on what research over the past three decades told us about reading, learning to read and how to prevent reading failure. The goal set was that all children would be able to read by the end of the third year of schooling or be on an evidence-based intervention program.

We developed a change management strategy, which we titled the Early, Early Strategy: it consisted of early identification, early assessment and early intervention. The approach necessitated building a culture of growth, learning leadership, capacity building and collaboration. We needed to build new knowledge about the use of an evidence-based approach to teaching reading that was explicit, systematic, structured and multi-sensory. This involved developing precision in the pedagogy of teaching reading; incorporating proven instructional methods and elements that help to prevent reading difficulties in young children; and shifting teacher practice through capacity building. It necessitated implementation of robust internal accountability through data collection to monitor children's acquisition of accurate and fluent word identification skills. The project is in progress and preliminary results, as evidenced by the 2015 Prep and Year 1 reading data, support the importance of using the right drivers for change, focusing direction, cultivating collaborative cultures, deepening learning and securing accountability.

An enlightening journey: Revitalising senior school pastoral care



Nicholas Brice, Pulteney Grammar School, SA Dr Tom Nehmy, Clinical Psychologist, SA

Abstract

Effective pastoral care at senior school level has the potential to transform students' academic outcomes and wellbeing. At Pulteney Grammar School, the incoming head of an independent senior school campus conducted a review and overhaul of the pastoral care approach after perceiving the need for a greater level of proactive pastoral care initiatives. The review involved collaboration between senior school leadership, teaching staff, students, and a researcher in the area of school-based wellbeing and preventive psychology, who acted as a consultant. Review outcomes were the product of a data-driven process that confirmed the need for renewal. The review collected survey and interview data from staff and students about senior school pastoral care needs, and input provided by the consultant considered scientific, epidemiological data from the research literature into adolescent wellbeing. This combination of scientific, anecdotal and qualitative observational data suggested the need for reform. Data collection and consultation with the researcher informed the planning and implementation of new pastoral care initiatives. This presentation will report on post-implementation survey data from stakeholders within the school and outcome studies relating to the new initiatives. While pastoral care revitalisation is an ongoing and aspirational process, this session will share the achievements resulting from the early-phase implementation of the resulting plan, including new staff training and student and parent initiatives. Specific core initiatives addressed in the review include teaching psychological knowledge and skills for mental health and resilience, addressing perfectionism at senior school level, increasing school connectedness, and referral pathways and procedures.

A strategic approach to improving teachers' commitment to a school's pedagogical framework



Dr Patsy Norton, Kim Wood and Angela Mason, Craigslea State High School, QLD

Abstract

Classroom observation, as well as lack of significant change in national and state test results, identified the level of teachers' commitment to a whole school approach to pedagogy as a needed focus of school improvement for a large metropolitan secondary school in Brisbane. The strategic approach to addressing the level of commitment, seen as critical to ongoing progress, was to form peer learning groups or professional learning communities, within which members worked collaboratively to address the classroom impact of one group-selected strategy from the school's pedagogical framework. This reflected a regional and state goal of reduced variability in teaching and learning between classrooms to achieve consistent practices.

The collaboration took the form of group meetings, classroom observation, discussions, written reflections and evaluation. It was supported by a facilitator and a base level of professional development time provided by the school leaders. Organisation and documentation of the process were rigorous. (Sample documents used in the process will be available for participants.) The approach reflected an awareness that collaboration required more than just 'putting well-meaning individuals together and expecting them to collaborate' (Thessin & Starr, 2011, Supporting the growth of effective professional learning communities, *Phi Delta Kappan*, 92 [6], p. 51).

To evaluate the effectiveness of the strategic approach, the facilitator undertook research to identify (a) the number and type of the strategies selected, (b) the nature of teachers' learning in the context of the Australian standards, and (c) issues arising that could inform future professional development. A formal case study report represents the reflective evaluation of the school's approach. It is not necessarily generalisable, but provides both theoretical and practical evidence of how a school can use professional learning communities to improve consistency in classroom pedagogy within a whole-school framework.

Teachers talking teaching: Uniting teachers and building teacher efficacy in mathematical proficiencies through collaborative P–6 data professional learning teams



Amanda White and Jenny Fietz, Meridan State College, QLD Rob Proffitt-White, Department of Education and Training, QLD

Abstract

School data at Meridan State College had identified that, despite improving results in numeracy, there were inconsistencies between the intended and implemented curriculums. Previous investment in commercial resources were not having the desired effect as teacher mindsets, beliefs and values were not always aligning to the pedagogies needed for effective delivery or understanding of student responses. The administration decided to commit and invest in ongoing, expert regional support.

A key expert team was selected comprising connectionist and transmission orientations. Regional diagnostic tools were created and verified to support teachers in understanding how their students learn and which interventions and pedagogies would be needed to support or extend their knowledge. This was supported by prioritising staff meetings so each week all teachers could share best practice and build a repertoire of targeted teaching interventions and familiarise themselves with the proficiencies. Teachers then created annotated samples of students' work so teachers and students could become assessment capable and literate. This included the design of resources to create a culture of reasoning, growth mindset and high expectations. Our teachers created, owned and united behind teacher-led policies to empower the trust and a strong leadership.

The model was showcased across the state and has initiated more schools to invest in this inter-regional state-run program. This commitment to teacher growth and ongoing investment to create a supportive school culture won Meridan State College Queensland School of the Year in November. Our model is regarded as cost-effective and viable across schools wanting to unite their teachers and align school culture, assessment, resources and pedagogies to promote mathematical proficiency, numeracy capabilities and create confident communicators of mathematics.

Workshop: What works to promote classroom wellbeing and learning from the perspectives of children and young people?



Dr Kevin Anthony Perry, University of Aalborg, Denmark

Abstract

This workshop takes its point of departure in the recent findings from the first two research phases of a collaborative research project between the Municipality of Greve and the University of Aalborg, in Denmark. The aim of the workshop is twofold. Firstly, to unpack the research findings and give participants backstage insights about what students perceive promotes (or hinders) classroom wellbeing and learning, thereby giving participants new ideas that could be applied in their settings. Secondly, the presenter will gain insights from Australian practitioners concerning the findings and their usability and transferability. Since September 2012, the majority of children with special educational needs in the municipality of Greve (Denmark) have been placed in mainstream school classes with some in-class support. However, there is a lack of evidence-based data concerning the impact that this new practice has on the overall classroom wellbeing and the learning environment. The aim of this project is to help fill this knowledge gap by investigating what impact this new practice has on classroom wellbeing and learning from the perspectives of students. The study takes place in 10 local authority-run schools and contributes towards understanding the micro-processes at play that either promote or obstruct classroom wellbeing and learning. The workshop draws on data gathered through 30 focus-group interviews with children across the school age spectrum as well as classroom observations in five classes across first, fourth and seventh years. The data show that students view their relationships with teachers and other students as the most important factors to both promoting and inhibiting learning and class wellbeing. The workshop aims to present themes that illustrate student perspectives on what promotes and what inhibits classroom wellbeing and learning.

Workshop: Reframing the future for mathematics: Scaffolding numeracy in the middle years



Praveen Krishna, Sarah Redfern High School, NSW

Abstract

Sarah Redfern High School was part of a nationwide project called Reframing Mathematical Futures with RMIT University in partnership with the Australian Association of Mathematics Teachers. This project is designed to be used in middle schools to build learning and teaching resources to support mathematical reasoning. Materials from the earlier Scaffolding Numeracy in the Middle Years project help us to identify student learning needs; deepen teacher knowledge in this domain; and improve teacher responsiveness to student learning needs. We also used the Learning and Assessment Framework for Multiplicative Thinking, a hierarchy of key ideas and strategies developed as part of the scaffolding numeracy project.

This project has provided students with personalised learning plans and has allowed students to take control of the pace of their learning. As students complete the activities and gain confidence, they progress to the next level on the Learning Assessment Framework, which increases in difficulty as students develop skills. At any time, students may choose to either move up or down the framework, depending on their confidence to tackle the activities.

The achievement of students was outstanding. Some students jumped levels, while some moved within the level. Students had fun and enjoyed doing activities using concrete materials which gave them deeper and more meaningful understanding. Teachers were introduced to Top Drawer, which is an online resource bank created by the Australian Association of Mathematics Teachers to support and enhance the teaching and learning of mathematics.

The presentation will be a showcase on how we implemented the project and what results we achieved. Three activities will be presented to the audience to give them an insight of how these activities can help students learn mathematics in a more engaging way.

Improving spelling together: A wholeschool approach using phonological awareness and phonics



Clare Iacono, Spensley Street Primary School, VIC

Abstract

In a multi-age, open-plan, inner-city school, diagnostic and standardised spelling tests were given to all students from Grades 1 to 6. A disproportionately large number of students across all year levels were identified as being below the expected standards. These results were presented to all teaching staff. Staff members were made aware that limited intervention resources meant that most of the underachieving students would not receive additional literacy support. The school introduced the Response to Intervention (RTI) model and professional development to support teachers in collaborative planning. The project aimed to improve spelling results across the school. Collaboration between classroom teachers and the literacy support teacher was formally set up through regular planning meetings with teaching teams. The English subject committee produced a whole-school spelling planning document. The school purchased resources to support implementation. Speakers stressed the importance of phonological awareness, sequential teaching of phonics, the link between decoding (reading) and encoding (spelling) and the features of learning difficulties. The intervention teacher modelled spelling lessons in all classes and lesson plans were shared. Diagnostic and standardised tests were re-administered and progress measured. Teachers completed a questionnaire examining their current knowledge of learning difficulties and how to teach spelling. Responses were collated and presented to staff to help plan for further professional development.

Explicit teaching of spelling is now timetabled in all classes. Teachers are using the diagnostic information from students' individual tests and the school spelling document to plan for spelling. Teachers are aware of the linguistic features of English that are part of a phonics program and teach them explicitly. Spelling is regularly on the planning meeting agendas and resources purchased are being used. Next year the school has decided to make spelling the focus of the professional learning teams.

PAT and school: How the Progressive Achievement Tests support transition



Julia Inglis, Australian Council for Educational Research Lucy D'Angelo and Robert Dullard, Penola College, VIC

Abstract

ACER's approach to assessment for teaching and learning is informed by a growth mindset – tailoring teaching to the needs of the individual learner to advance the progress of every student.

Results from the Progressive Achievement Tests (PAT) provide teachers with a starting point for action; measuring the progress of the individual learner, providing feedback, and allowing teachers to address the current learning needs of their students. By understanding the learning needs of each student, teachers can also identify the best steps they can take in their teaching to ensure that students are progressing, developing and growing on their individual learning journey.

Educators from Penola College will share their experience in using PAT data to implement and promote a collaborative approach with their feeder schools to improve the transition process.

Empowering local learners: A preschool to secondary project improving executive function skills through a numeracy lens



Shane Loader, Port Augusta Secondary School, SA Kristin Vonney and Deb Lasscock, Flinders Centre for Science Education in the 21st Century, Flinders University, SA

Abstract

Educational neuroscience has established the important link between executive functioning and student achievement. Analysis of results from the National Assessment Program – Literacy and Numeracy and the Progressive Achievement Tests in Mathematics showed that students had most difficulty with mathematical questions requiring problemsolving and reasoning. We identified a need to move teaching practices from a narrow focus on fluency to one emphasising the development of students' executive functions, as these underpin students' problem-solving and reasoning skills.

The Empowering Local Learners Project is an innovative collaboration between the partnership of 16 public schools and preschools in Port Augusta and Quorn and the Flinders University Centre for Science Education in the 21st Century. Academics and teacher researchers from Flinders University work with focus teachers from each site to translate the theory into effective classroom practice. The model incorporates professional learning, classroom modelling, reflection, collaborative planning and teacher research. The focus teachers implement the learning in their own classes and share their learning with colleagues.

The project has shown a significant shift in practice for the focus teachers. Work samples show successful integration of instructional practices that require quality questioning and task design. Student perception data show that students are more engaged and are increasingly rating mathematics as their favourite subject. Student achievement data show increasing levels of problemsolving ability and greater levels of growth for students who have had the greatest exposure to these practices.

A project evaluation has shown that this partnership approach is responsive to the diverse range of educational contexts from birth to Year 12. We have learnt that the transmission of this pedagogy to other subject areas is also occurring. Observation of modelled lessons has been an

effective method for acquiring familiarity with the practices, however systematic and deeper planning for instruction using executive functions has been vital for embedding these practices long-term.

Leading integrated STEM for engagement



Matt Scott, Judith Bertolin and Chad Bliss, The Canobolas Rural Technology High School, NSW

Abstract

At the Canobolas Rural Technology High School, project-based learning has successfully engaged students in technology and engineering courses over many years. Authentic engagement in the classroom was not as evident in science and mathematics. Data from the National Assessment Program – Literacy and Numeracy indicate that many of our students have been performing at or below National Minimum Standard state average levels in literacy and numeracy, contributing to reduced performance in all external testing. Projects in the fields of science, technology, engineering and mathematics (STEM) were recognised as a way of providing students with a stimulating environment to apply literacy and numeracy skills while completing problem-solving activities around a scientific concept.

In 2015, the school trialled a cross-curricular STEM unit of learning with the view of increasing engagement in science and mathematics. Teachers from STEM-related faculties collaborated to develop and deliver the integrated unit centred around a project-based problem-solving activity applying science and mathematics concepts. Staff also collaborated with an engineering professor from Charles Sturt University, providing a relevant real-world context and a strong link to future work and tertiary study.

This project had some enlightening results. Evidence of engagement was obvious through student participation, questioning and reduced behaviour issues. As a result, science teachers began to incorporate project-based activities into lesson plans for all classes and observed increased engagement as the year progressed. The 2015 Science Validation of Assessment for Learning and Individual Development (VALID) testing indicated growth in results for 88 per cent of students from Year 8 to Year 10, including significant growth for 57 per cent of students. Evaluation of the project and its mode of delivery led the school's curriculum team to endorse this delivery of STEM education. Integrated STEM learning is now included in the curriculum for all Years 7 and 8 students.

This workshop will discuss the process we have taken to embed STEM education into our school and the ensuing collaborative relationships which have been developed across key learning areas and other schools as a result of this initiative.

Practitioner researchers at the chalk face: A case study in STEM





Dr Nicole Archard, Wenona, NSW
Tiffany Roos and Dr Lesley Wright, Association of Independent Schools of NSW

Abstract

The value of practitioner research has long been acknowledged. As early as the 1920s, educational reformer John Dewey recognised teacher contributions to the body of knowledge as an 'unworked mine'. Providing opportunities to engage in research may capitalise on this unworked mine and provide contextualised research of greater relevance to educators' daily practice.

In recognition of this, the Association of Independent Schools of NSW has developed an initiative to fund and support schools to undertake contextualised school-based research. The aim of this is to promote research engagement by educators (as both practice and as part of educator professional learning), bridge the research-practice gap, encourage the translation of research into improved teacher practice, and exemplify the value of having research conducted by structurally and culturally embedded practitioner researchers.

To illustrate the capacity of educators to conduct research, and the value that embedded practitioner research can add to the sector, we will discuss the research of a currently funded project undertaken by Wenona School in girls and STEM. We will outline the project, discuss preliminary data and results, and reflect on the nature of an embedded research process and the value of contextually cognisant research. In this discussion we will surface both advantages and challenges that come with conducting research from such an embedded positionality, and highlight the value that this kind of research can add to the education sector. We will illustrate the value of the embedded practitioner researcher as a rich source of experience and expertise, situated at the chalk-face of dynamic educational change.

Making learning visible to promote change in pedagogical practice



Melissa Carson, Nicholas Cook and Sandra Woodward, Oakhill College, NSW

Abstract

In 2013, data from the National Assessment Program – Literacy and Numeracy suggested a gradual decline in writing ability in students at Oakhill College, particularly in Year 9 results over time. Higher School Certificate results showed a similar decline in students accessing the top band, where the capacity for students to represent deep understanding, critical thinking and transference of skills is essential.

Considering possible interventions, an investigation into the learning landscape of Oakhill College began with a small team. The team's research highlighted high levels of fear and resistance to the integration of technology among staff, increasing student disengagement with material they perceived as irrelevant, and increasing student 'passivity' in a landscape that was encouraging highly teacher-centred instruction. Additionally, there was an identified level of inconsistency in the learning design behind the curriculum for our students. Subsequently, a series of recommendations was offered to the college leadership, which culminated in a pilot program known as REAL (Relevant, Engaged, Active Learning), whereby the entire Year 7 curriculum was placed online, visible to all students, teachers and parents, in some cases in a lesson by lesson format. A pedagogical shift towards increased student-centred learning was also actively promoted and supported through the professional development of the Year 7 teaching cohort. Lessons in this year group were observed, and breakdowns of timing and types of learning activity were recorded. This pilot program led to funding from the Association of Independent Schools of NSW for a research project across 2015 and 2016.

Studying the impact of this transparent, declared curriculum, we have observed an improved collaborative environment for staff, the public nature of a declared curriculum having forced open the once-closed doors of our classrooms, requiring and enabling empowered dialogue among staff, and leading to a more cohesive, considered curriculum. Early data on the impact for students is encouraging, with our first demonstration of growth in writing results in a cohort in six years. We believe this application of a transparent curriculum has considerable implications for all schools looking to break down the silos of staffrooms and reconstruct practice for a modernised, more-enabled learning community.

Meeting to learn: An innovative approach to learning at work



Sacha Webster and Amy Tickle, Pittwater House, NSW

Abstract

Under the guidance of Harvard Graduate School of Education, the coordinator team at Pittwater House commenced an action research project. Through analysis of personal practice and professional reading, it emerged that staff meetings in our context were a missed learning opportunity. In order to collect further evidence to support our assumptions, direct feedback was sought from teachers, the results of which were gathered and analysed to guide further action.

Our project was to transform the existing staff meeting structure into a collaborative learning opportunity. Of utmost importance to both the coordinator team that instigated the project and the school at large was to ensure that this undertaking was well supported by research, was a shared initiative among staff, and would assist the development of a culture of collaborative learning. We replaced our out-dated, autocratic meeting style with an innovative meeting format in which teachers learnt from each other. Meeting to Learn, or M2L, sessions established a climate of trust in which every staff member had the opportunity, and obligation, to contribute their knowledge and understandings to benefit their colleagues.

Throughout the establishment and implementation of M2L sessions, data has been gathered and used to ensure that our meeting format continually develops. Importantly, evidence has also been collected to indicate the extent to which staff members implement suggestions put forth in M2L sessions and the impact this may be having on student outcomes. The most noted implication of this initiative has been the improvement of the culture of collaborative learning within our school. Staff morale, confidence and professional learning have been enhanced significantly through engagement in M2L sessions.

Enhancing teacher wellbeing: A Northern Beaches Secondary College initiative



Renata Grudic, Northern Beaches Secondary College, NSW

Abstract

Teacher wellbeing plays a key role in a teacher's ability to contribute to a positive, supportive environment that allows students to thrive by delivering high-quality learning experiences. At Northern Beaches Secondary College, collective professional learning priorities over the past three years have focused on positive psychology related to student wellbeing. Staff feedback (surveys and focus group discussions) indicated a high interest in extending the learning to staff wellbeing. Current research identifies that the quality of relationships in a school impacts on teachers' wellbeing and ability to cope well with the many

Current research identifies that the quality of relationships in a school impacts on teachers' wellbeing and ability to cope well with the many and varied stresses that are the hallmarks of the profession. Work health and safety data from NSW Department of Education show that the highest reported incidences of workplace stress are from secondary school teachers. As an organisation embracing positive psychology, Northern Beaches Secondary College commenced investigating what was working well to support teacher wellbeing across all five campuses. A partnership was established with Macquarie University's psychology faculty to assist with the investigation.

The first phase of the project has involved investigating teacher wellbeing. The aim has been to identify positive psychology strategies to maximise wellbeing, especially through the development of positive teacher-student interactions. It has included interviewing teachers across all five campuses. The interviews revealed that 34 per cent of teachers identified positive relationships as key to their subjective wellbeing, while 24 per cent of teachers identified work-life balance as important. This qualitative evidence identified what the college does best and how it does it.

Benefits of the collaboration with Macquarie University's psychology students included: assistance in preparing reports based on current research; recommendations aligned to positive psychology interventions, strategies and empirical evidence; and an independent team conducting interviews and data analysis. The students developed an understanding of positive psychology and practiced interviewing techniques.

This has laid the foundation for the second phase of the initiative. The Northern Beaches Secondary College Management Team is currently determining which strategies will be developed and the means of delivery for Phase 2 in 2016. This includes considering possible psychometric measures to be used to evaluate changes in wellbeing and the usefulness of strategies. Reports, processes and resources produced in this initiative will be shared through NSW Department of Education.

Numeracy contextualised: Initiating and sustaining numeracy transfer across a high school culture



Brett Moffett and Andrew Walmsley, Hervey Bay State High School, QLD

Rob Proffitt-White, Department of Education and Training, QLD

Abstract

In January 2015, Hervey Bay State High School committed to join a regional state program that was successfully aligning pedagogies and mindsets and building teacher capacity and efficacy in numeracy capabilities. This presentation will clearly describe the process, the findings, and the viability and scalability of such an approach.

Stage 1: An expert team within the mathematics faculty designed rigorous, diagnostic tasks to be administered each term to track key numeracy concepts. These were trialled, edited and moderated, resulting in a five-point marking scale so both students and teachers could become assessment literate and assessment capable. The maths department allocates time each term to diagnose, intervene and evaluate the data to identify best practice.

Stage 2: Tasks were designed to activate thinking, promote mathematical proficiencies and engage all students. The investment in our teachers to create these tasks assured the intent matched the implementation as they were used and valued in the context they were created. Our teachers' resources were acknowledged on a visit from Peter Sullivan, lead writer of the Australian Curriculum: Mathematics, as one of the most practical and comprehensive set of supports for curriculum implementation that he has seen.

Stage 3: Whole-staff meetings, teacher questionnaires and workshops facilitated a consistent and shared sense of urgency that numeracy is everyone's business. Faculties have now started working alongside the mathematics department to create timely, contextualised numeracy moments that promote critical thinking and numeracy transfer. Teachers have seen a change in students' mindset and willingness to transfer numeracy skills across other faculties.

The ongoing investment in our teachers, student feedback and trusting and timely use of resources is seeing a sustainable and passionate change in the valuing, understanding and belief in numeracy across the school. We will continue to invest in this cultural change to provide our students with the critical orientation to become successful, numerate citizens.

Four teachers and 120 learners: The shift to 'modern maths'



Nikki Urlich, Campbells Bay School, New Zealand

Abstract

Four teachers move into a new Innovative Learning Environment (ILE), an open-plan learning environment the equivalent of four traditional classroom spaces. Here, 120 nine-year-old learners work together with the team of four teachers. What happens is magic.

The team at Campbells Bay School started a collaborative project called Modern Maths, to present mathematics learning and teaching like it had never been seen before at our school. The change in our pedagogical practice in mathematics, we believe, is the reason for a recent significant shift in achievement. We went from one teacher teaching 30 students mathematics for a year and the 30 students learning only with each other, to four teachers working with 120 students and 120 students learning with each other. The systems and new prototype for mathematics we developed meant increased student ownership of learning goals and progressions, stronger peer learning, improved student self-direction and selfmotivation. It also meant greater choice for students and the development of the teacher as the facilitator in learning. The way we operated also meant more efficient use of human, digital and material resources.

Halfway through the previous year we had 22 per cent of these students not on track to meeting the National Standard for their age and we had 37 per cent of this cohort working well above the National Standard. After six months of the Modern Maths collaborative teaching project, we had 11 per cent of these students not on track to meet National Standard and 51 per cent well above: a significant change.

The presentation will describe how we do Modern Maths at Campbells Bay School. It will share the learning vision on which Modern Maths was based, the process we went through to implement it and the learning and mistakes we made along the way as educators.

Number sense: Collaborate to initiate



Veronica Reid and Julie Henderson, Talara Primary College, QLD

Rob Proffitt-White, Department of Education and Training, QLD

Abstract

This presentation will take delegates through the process of initiating a whole-school approach to numeracy through ongoing investment in teacher collaboration. Talara Primary College had identified that the intent of the Australian Curriculum's mathematical proficiencies was not reaching all our students, despite differentiation and delivery of resources taking place. Research informed us that a key factor in uniting a school behind valuing and understanding numeracy was to create a culture that fosters collaboration, moderation and development of rich tasks.

The school selected a key internal team to work with a regional expert three days each term over a year. An explicit improvement agenda then guaranteed ongoing funding, commitment and trust in a project that would align pedagogies, resources and teachers' mindsets.

Our approach targeted teachers' beliefs, values and working knowledge of the curriculum through in-house workshops. These workshops built our teachers' capacity to design activities promoting critical thinking, number sense and open-ended problem-solving tasks.

The investment in our teachers has created a passionate staff that are eagerly using school-designed resources and sharing their best practice to norm effective delivery. The ongoing enthusiasm for numeracy has seen our teachers design a Numerate Student Pathway that formatively assesses number facts and number sense. This has further strengthened our students' ability to engage with problemsolving.

Our work so far has empowered teachers to be active in their own learning; deepened differentiation from tokenistic to embedded; and developed positive dispositions in our teachers and students. Workshop: Decolonising the classroom: A youth-with-community arts-based collaborative approach to expansive learning



Shelley Davidow, Noosa Pengari Steiner School, QLD Alister Bartholomew, Department of Education and Training, QLD

Peter Muraay Djeripi Mulcahy, Gamilaroi man, professional artist and cultural educator

Abstract

Prior to a visit by Aboriginal elder Uncle Bob Randall in 2014, Noosa Pengari Steiner School's high school survey highlighted a significant disconnect between the (non-Indigenous) student population and Aboriginal and/or Torres Strait Islander (ATSI) people. Our 2014 surveys indicated that not one student had a strong connection to an ATSI person. A small proportion had an adequate understanding of the Stolen Generations (20 per cent) or had a strong interest in the lives of ATSI people (13 per cent). We therefore identified the need for an expansive, collaborative approach when embedding ATSI perspectives as mandated by the Australian Curriculum, Assessment and Reporting Authority.

Our project involved two full-day book-illustration workshops for stories written by Uncle Bob. The workshops were undertaken by high school students in Years 8 to 12, and led by Peter Muraay Djeripi Mulcahy and Jandamarra Cadd. Our aim was sweeping; embed Indigenous perspectives, facilitate community engagement and expand students' learning. The project resulted in a dramatic shift toward our aims.

After the two workshops, our surveys indicated that 70 per cent of students had improved understanding of the Stolen Generations. Interest in ATSI experience had risen from 13 per cent to 46 per cent and students were likely (73 per cent) to be proactive about issues affecting ATSI people. Most significantly, after the workshops, authentic connections had developed between students and local ATSI community members. Pre-workshop no student had strong connections with the ATSI community. Postworkshop a majority of students indicated that they now had a moderate to strong connection, remarkable after just two days.

The book illustration project led to an increase in empathy, historical knowledge and progress in all areas outlined in

the Australian general capabilities framework and crosscurriculum priorities of the Australian Curriculum. The project is also transferable. As a relational, experientialbased learning journey, it has tremendous implications for future positive relationships between Indigenous and non-Indigenous Australia.

In this workshop, participants will be given an introduction and overview of the learning journey taken by the Noosa Pengari Steiner School, by teacher Shelley Davidow, cultural educator and artist Peter Muraay Djeripi Mulcahy and QLD Department of Education and Training Community Partnerships Officer, Alister Bartholomew. The workshop will provide a guided artistic experience for participants raising some important questions, such as: what is a 'decolonial' approach to learning? The artistic workshop activity will echo the project and enable participants to experience illustration led by ATSI cultural guides as a way of engaging with history, a way of developing empathy and as a result, deep learning of the realities of Australia past and present. Participants will also be included in a short two-part survey. In groups of two, participants will be handed an unpublished short story written by the late Uncle Bob Randall, elder, traditional owner of Uluru and a child of the Stolen Generations and guided through an illustration process. The groups will have the opportunity to illustrate specific pages as Peter and Alister share knowledge and talk about the Australia that so many of us do not see. At the end, participants will be asked to respond to the survey questions again, to ascertain if a one-hour workshop can result in a shift in perspective and be a catalyst for change.

Workshop: Small schools collaborating for maximum impact

Melissa Wood, Chandler Public School, NSW Ros Edwards, Snow Gums Learning Alliance, NSW

Abstract

The implementation of new syllabus documents has created a huge work load in many small schools. Five small schools in New South Wales worked together to form the Snow Gums Learning Alliance. This alliance allowed the schools and teachers involved to develop collaborative scope and sequences and units of work. Analysis of assessment data indicated that across the alliance, working mathematically was an area in need of development. Teachers undertook professional learning together, and devised a maths challenge. The alliance has expanded to include collaborative professional learning and an alliance-wide learning support team.

The alliance has been supported by the NSW Department of Education Rural and Remote Education Advisory Group. We have developed an online learning environment where students from across the schools work collaboratively in a variety of activities. The collaboration offers students from each school the opportunity to work with peers of similar ability, giving them a larger cohort to work with while still enjoying the benefits offered by a small-school education.

Collective assessment tasks have been developed, and assessment data are analysed across the alliance. Using John Hattie's research, our alliance measures growth in achievement to analyse effectiveness and effect sizes. Data from the National Assessment Program – Literacy and Numeracy are analysed not only on a school-by-school basis, but also collectively across the alliance. Alliance schools all share one collective strategic direction in their school plan, which is analysed to determine if we are meeting milestones on a five-weekly basis.

Working as an alliance, we have been able to offer students opportunities to which they previously were unable to gain access. The students are working collaboratively with a large cohort, developing strong problem-solving and communication skills. Teachers have seen an increase in professional learning opportunities, and now have a collegial network previously unavailable in a one-teacher school. While developing our network, we have maintained the individual identities and cultures of our schools. The Australian College of Educators awarded the 2015 HTB Harris Award of a Significant Educational Program to the principals and staff of the five schools of the Snow Gums Learning Alliance: Bald Blair, Ben Lomond, Black Mountain, Chandler and Ebor Public Schools.

Can teacher observations be an effective strategy for school improvement?



Dr Bronte Nicholls and Jayne Heath, Australian Science and Mathematics School, SA

Abstract

At the Australian Science and Mathematics School, student perception data collected via a survey administered to students at the end of Term 1 2014 showed that approximately 25 per cent of students in the Years 10/11 cohort reported that their teacher talked to them rarely (every couple of weeks) and only 14 per cent reported that their teacher talked to them at least once in every lesson. This raised concerns that a significant group of students may not be receiving appropriate feedback about their learning. Our school has open-space learning environments where it is common practice for teachers to work in teams to design, facilitate and assess students learning. Therefore, a collaborative approach was essential in order to improve the effectiveness of our pedagogical practices.

In dedicated professional learning time, teaching teams were asked to design an action learning plan to develop promising practices for supporting students in seeking, accessing and using feedback. This presentation will focus on the work of one team of eight teachers who had an interest in exploring a new model of teacher observations. In this model, the observation teams included Year 12 students. Collaboration is an essential feature of the model as it involves using non-judgemental peer and student observation techniques, using set protocols for debriefing and professional dialogue and establishing agreed action plans for improving professional practices.

Data collected about the effectiveness of these practices indicate that the new model of teacher observations involving Year 12 students has potential. As a result, we have adjusted the model and will attend to the resourcing required for this to be more effective, namely providing more time and building teacher and student confidence in using the process.

Classroom walkthroughs: Teachers and school leaders working to raise student achievement



Mitch Bartholomew and Kristy Grady, Richardson Primary School, ACT

Abstract

Richardson Primary School is a small school located in the south of Canberra. We have a population of 220 students from Preschool to Year 6. We have a high Indigenous population and a significant number of students from backgrounds in which English is an additional language or dialect (EALD). Early entry data indicate that our students begin school with achievement levels significantly below the average for the Australian Capital Territory. This highlighted the crucial need for a systematic approach to implementing instructional practices across the school that would have a high impact on student learning.

Using the research and evidence from experts such as Dylan William, John Hattie, Jim Knight and Spencer Kagan, staff worked collaboratively to develop a set of four statements which describe what high-impact classroom instruction looks like. These statements became known as our 'scoreboard statements' and became the tool to keep teachers collectively accountable to our agreed goals.

Classroom walkthroughs were implemented to measure ourselves against our agreed statements. Teachers engaged in the walkthrough process and tallied observations of the agreed practices across the school. The walkthroughs enabled us to track how often our agreed practices were being implemented in our classrooms. We were able to meet as a whole staff to discuss and analyse the data, to celebrate our achievements and identify areas for improvement.

The staff became collectively accountable as teachers became aware of effective strategies and were committed to implementing and identifying them in the classroom. Data from sources such as the Performance Indicators in Primary School Assessment, Who am I developmental assessment, Progressive Achievement Tests in Maths and Reading and the National Assessment Program – Literacy and Numeracy all indicate a significant improvement in student learning. In particular, student achievement in reading, writing and numeracy demonstrated above-average growth compared to other schools in our area and the rest of the ACT. The collaboration associated with implementing classroom walkthroughs has raised collective accountability and increased student achievement.

Building teacher critical friend coaching relationships in a New Zealand secondary school



Philippa Mulqueen, Pakuranga College, Auckland, New Zealand

Abstract

The challenge for teachers is how to develop teacher pedagogical responsiveness to meet the diverse learning needs of students. In our secondary school, teachers recognised that some students were poorly engaged, unmotivated, and were not making the expected progress. To support teacher change, the school created the opportunities for critical friends to help colleagues inquire into the effect of their teaching on student learning. This had the advantage of overcoming teachers' reluctance to ask for help and be observed by their peers.

The project gave all teachers of Year 10 core classes the chance to nominate the students who were poorly engaged in learning and demonstrated persistent off-task behaviours. Over a period of six weeks, a critical friend 'coach' for each teacher completed three classroom observations and met three times with the teacher. The purposes of the observation were to look at the teacher's pedagogy and the effect on the students and to help the teacher reflect on how they could do things differently to better engage the identified students in learning.

The results of the project indicate changed teacher practice in the classroom. The targeted students' engagement, motivation and achievement showed improvement in cases in which the teacher was coached compared to the classes in which the teacher was not coached.

This initiative contributed to the development of a wholeschool professional learning culture of trust, openness, and curiosity.

Consciously collaborating to shift the spotlight from teaching to learning



Susan Paterson, Gatton State School, QLD
Tania Leach and Robyn Marsh, Department of Education and Training, QLD

Abstract

The Department of Education and Training in Queensland identified a need for collaboration within and across schools in the Darling Downs South West region. A regional school survey and scan of schools found that while many schools did provide time for teachers to meet together, school leaders had limited knowledge of how to implement collaborative practices. A subsequent teacher survey within targeted schools identified that 80 per cent of teachers believed that networking was the key activity of collaboration. Regional project officers were tasked with supporting schools to implement collaborative, evidence-based practices to maximise learning in classrooms.

Partnerships were formed between the regional project officers, online state projects, national and international lead researchers and schools. The initiative included developing a suite of multimodal lead models for collaboration, establishing partnerships with lead researchers and linking directly with teachers across the state. Three case-study schools were involved in an interregional action research project to examine the implementation of collaborative practices.

Qualitative and quantitative tools measured teachers' understanding of how collaboration influenced personal constructs of effective practice and improved student learning. Teachers identified that the use of collaborative thinking processes assisted them to unlock tacit knowledge to inform and improve student learning. Leaders identified increased participation and commitment to improvement processes. Most teachers (90 per cent) reported that collaborative data-focused conversations had shifted focus from the delivery of pre-planned lessons to differentiated teaching based on student learning needs.

Pre- and post-implementation student assessment and classroom observation measured the impact of collaboration on students.

Almost all students (98 per cent) showed improvement in achievement, engagement and disposition towards learning.

Sustained change in collaborative practice within and across schools is a result of:

- an understanding of the intent of collaboration
- a clear plan for implementation of collaborative practices
- intentionally building teacher capacity and ownership
- active learning and reflection cycles.

Applying quality teaching as a performance development framework to improve student attainment: A case study



Brett Foster, Stella Maris College, NSW David Roy, University of Newcastle, NSW

Abstract

Stella Maris College is an independent Catholic school. Stella Maris College achieves strong student results; however, we recognised that student potential has not always translated into top bands in the Higher School Certificate (HSC).

The Australian Teacher Performance and Development Framework requires that by 2017 every teacher, every year, in every school receives regular, effective and constructive feedback on their performance, as well as opportunities to identify areas for further development. It was decided to use an evidence-based reflective teaching framework to identify and discuss current strengths and weaknesses in teaching practice to increase opportunities for student achievement.

The knowledge and experience of the staff of Stella Maris College is invaluable. For any professional learning program to have an impact on current practice, it needs to be relevant, ongoing and evidence-based, so that all teachers can embrace and use it on a daily basis. The NSW Quality Teaching Model was chosen due to its adoption across the state and its success in raising attainment. In addition the language of the framework was already embedded in Stella Maris College Learning Framework. This model provides a lens through which to comprehensively notice and assess what is happening in any lesson – both for the teacher and for the students. It is a tool for the systematic and specific analysis of lesson quality with a focus on the lesson rather than the individual teacher. It is a framework from which to commence important conversations not only about the specific lesson observed but also about teaching in general.

All teachers in the school are undertaking the process of classroom observation and assessment review using the Quality Teaching framework. We use additional data from the National Assessment Program – Literacy and Numeracy and Higher School Certificate results to develop teaching quality. The data collected from observations help to identify strengths and areas of focus for improvement in classroom teaching. Coded observations have demonstrated areas of strength and common areas for improvement that are not being addressed, but that research demonstrates have a significant impact on high student achievement. This session will present these data and discuss the strategies being implemented at Stella Maris College.

Discovering the student learning mindset (and telling everyone about it)



Douglas Baxter, Stephen McGinley and Clare Tuohy, Beaconhills College, VIC

Abstract

Beaconhills College is a Kindergarten to Year 12 school with more than 3000 students spread out over nine sub-schools, including an Early Learning Centre. Student tracking was traditionally done by a range of groups within our leadership team. It was apparent, however, that we faced two major challenges: Were we collecting the data we really needed? And how could we ensure data was processed in a timely way? These questions sparked our staff teams to investigate the learning that matters to our students.

We needed to know about our students' mindsets about their learning throughout the semester. A number of leadership committees with different foci were established to investigate the way forward for the school. This included looking into the works of John Hattie and Carol Dweck, among others.

From these reflections, Beaconhills College proposed a student learning mindset, to encapsulate what attitudes, approaches and beliefs we would like to provide feedback on to inform students' reflections about their learning. As well, work has started on measuring progress for individual students, rather than measuring achievement against set standards. Although at this stage our work centres on students in Years 5 to 12, work has already started to include the Kindergarten to Year 4 sections of the school.

There continues to be planning around the type of data we collect and the efficiency of data dissemination to relevant staff members for meaningful analysis and intervention. We have developed a rubric for our teachers and our students to reflect on the student learning mindset. In addition, we continue to develop new processes to ensure the timely dissemination of information to key staff to allow us to track and support our students' progress.

Driving school performance via community sport



Steven Harvey, Kalinda Primary School, VIC Penny Carlson, Australian Sports Commission

Abstract

In Australia, only one-third of children undertake the recommended 60 minutes of exercise a day, with one in four Australian children classified as overweight or obese. Around 77 per cent of children say they spend their spare time in front of screens. Kalinda Primary School identified that students were struggling to meet minimum physical activity requirements, and so began a collaborative relationship that aimed to proactively change student attitudes and behaviours to sport and physical activity.

To do this, Kalinda Primary School participates in the Australian Sports Commission's Sporting Schools program, accessing federal government funding. The Sporting Schools program has partnered with 32 national sporting organisations, enabling schools to run organisationendorsed sports programs, delivered by local coaches before or after school, as well as during school breaks to complement the school's existing Health and Physical Education curriculum. This collaboration enables the curriculum at Kalinda Primary School to incorporate links to the community and provide pathways for students into local sports clubs.

Teachers have reported increased enthusiasm among their students, particularly in relation to sport participation and a reduction in misbehaviour and playground injury. There has been improvement in students' fundamental movement skills and a potential correlation between increased physical activity levels and increased performance in English and subjects in the science, technology engineering and mathematics fields. Many parents now actively engage with the school through their participation with local sporting clubs as coaches or volunteers. This has helped to develop a shared culture across the school and support the alignment of values across the whole school community. Parent engagement has increased and students' attitudes to physical activity and sport are changing. This presentation will demonstrate how you can make changes to students' attitudes to physical activity and make a difference in the health and wellbeing of your students through successful community collaboration.

Reciprocal visits: Strengthening relationships for transition



Darlene Leach and Rebecca Howell, Department of Education and Training, VIC

Abstract

This presentation will discuss practical strategies for establishing a reciprocal visiting and professional learning program in your local early childhood network. This presentation will be delivered by senior policy officers from the Victorian Department of Education and Training and practitioners involved in recent projects, who will explain how to implement a reciprocal visiting program in a network, discuss the benefits of transdisciplinary practices, and explore policy rationale and project logic.

In 2009, the University of Melbourne's Centre for Program Evaluation investigated transition to school pilot programs in Victoria. This evaluation identified a range of promising practices, including reciprocal visits, in which early childhood educators and prep teachers visited each other's environments to participate in meetings, joint teaching and learning, and transition planning. Reciprocal visits enhanced professional relationships and improved continuity of children's learning and transitions into school.

To build on this finding, the Victorian Department of Education and Training's Supporting Reciprocal Visits project facilitated joint professional learning between early childhood educators and primary school educators on topics relevant to transition to school. These professional learning sessions were combined with reciprocal visits to each setting, which deepened mutual understanding of the context and pedagogical practices across settings.

The sites involved in the project have all reported strengthened relationships and mutual understanding of pedagogy and practice in early childhood and school settings. Transition action plans were developed in some sites that articulate the annual process these sites will undertake as they transition children into school.

The outcomes of this project included:

- shared knowledge and a deeper understanding of pedagogy, language, environments and local situations
- re-appraisal of current practices in the context of shared priorities for children and families through critical reflection
- shared events and the opportunity to contribute to community activities
- action plans to support ongoing opportunities to continue the project
- understanding of the progression and continuity of learning.

Tracking young deaf children's language development: Collaboration across the bilingual team



Erin West, Aurora School, VIC

Abstract

Aurora School is a bilingual setting with both Auslan and English used as part of an intensive language learning program for deaf and hard of hearing children. We lacked any data around the children's language acquisition and wanted evidence of their ongoing language improvement. In 2008, we began using the Sunshine Cottage Acquisition Scales for Listening, Language and Speech (CASLLS) to track student development in English. In 2014, trials began on tracking the language development of children in Auslan, as well as English, as part of a joint project with the Victorian Deaf Education Institute. This resulted in the development of an innovative new method to record Auslan language samples and a unique program of collaborative practice. Language samples are gathered by Auslan assistants and then taken by the teachers of the deaf to joint meetings with a speech pathologist, who supports each teacher to complete both the CASLLS and Auslan checklists.

From 2015 onwards, all children in the school's early education program are being tracked for both their English and Auslan development to give a more accurate representation of their language skills over time. We are able to assess the language of the children within our program based upon language samples in functional contexts, resulting in a more accurate reflection of language abilities. The results of the assessment inform teaching practice in the selection of developmentally appropriate language goals and also allow for the identification of children who are making slower-than-expected progress. This system would be effective in cases in which teachers have limited access to a speech pathologist, as in the majority of schools. This system allows for teachers and education assistants to gather the data to allow for joint analysis with a speech pathologist, making analysis more accurate and time-effective.

Teaching and measuring collaboration and problem-solving in students



Loren Clarke, Eltham High School, VIC

Abstract

Eltham High School is committed to teaching 21st-century skills, including collaboration and problem-solving. These skills are embedded throughout the curriculum and in specific interdisciplinary subjects, including a Year 7 integrated studies program and Year 9 cornerstone electives. The school has identified anecdotal evidence of success with these programs; however, it was interested in a more objective, consistent measure of students' collaborative problem-solving development.

The school approached the Assessment and Teaching of 21st Century Skills (ATC21S) team at The University of Melbourne, and began using the ATC21S collaborative problem-solving assessment tool in 2014. Year 7 students participate in a teamtaught inquiry-based program, which is an ideal environment for implementing the ATC21S assessment tool. In 2015, the assessment program extended to Years 8 and 9, to track the longitudinal development of 21st-century skills throughout the curriculum. The availability of individual student, class level and cohort data enables staff to analyse how collaborative problem-solving is embedded within the curriculum and pedagogy.

The tool involves pairs of students working online to solve a problem. Each partner has different information on their screen and they need to communicate and share information in order to solve a problem. They communicate via a chat box and they may need to adjust their language and communication style so that they can work effectively as a pair. Through partnership with the University of Melbourne, the assessment tool provides greater access for students through the online platform, allows students to work at their own pace and be tested in larger groups. This has expanded the initiative across the school, now encompassing approximately 600 students in Years 7 to 9.

Data from the assessment tool capture the sequences of actions and chat, allowing observations to be made while students are working together online. The data are summarised into a social and a cognitive report for each student and provide information such as who initiates conversations, whether students negotiate and whether they work through the problem systematically. Teachers are also given a report for the whole class, which provides guidance about how to cluster the class for future teaching. Through undertaking the assessment, students are encouraged to consider how they think, not simply what they know.

Lessons from trans-sectoral collaboration through school networking



Timothy O'Leary, Wesley College, VIC Anthony Jackson, Jackson School, VIC Kasey Simpson, Tarneit P–9 College, VIC Sarah-Jane Woodward, Staughton College, VIC

Abstract

In 2013, The University of Melbourne advertised for its inaugural Network of Schools. The purpose of this network was to bring together a broad range of schools to collectively and collaboratively learn about the theory and implementation of current best practices in education. The network is supported by veteran academics from The University of Melbourne, including Professors John Hattie, Patrick Griffin and Steve Dinham, and is under the guidance of the Melbourne Graduate School of Education's Katherine Henderson. The network has toiled to improve the capacity of each of the 17 member schools to operate as evidence-and impact-focused organisations.

This presentation focuses upon the experience of one of the most eclectic groups of schools ever to come together and collaborate. This group, the Evidence-Informed Practice Group, includes schools from each of the primary, middle, and secondary schools settings, as well as from the government, independent and Catholic sectors. Additionally, this focus group includes high- and low-socioeconomic-status schools, as well as catering for both mainstream and learning support students. Each of these schools has faced its own issues relating to the use of evidence and data. Issues included having too much data, not having enough, and not knowing how to best use the data they did have. There was room for improvement across the board. This presentation will cover the collective journey of these schools in coming together and learning collaboratively from each other in the pursuit of improved learning for all students. Focal points will include how this collaboration has unfolded, how we have measured success, how we have worked together and lessons for the future.

Changing a writing culture through a professional learning community





Bernadette Hawker and Susan Evans, Goondiwindi State High School, QLD

Abstract

At Goondiwindi State High School, STEAM stands for Smart Teachers Enthusiastically Achieving More. Our professional learning community adopted the name STEAM team to emphasise the focus of our work: together improving the writing abilities of the students we teach.

Our data from the National Achievement Program – Literacy and Numeracy suggested our students' writing skills were below the national average and had declined longitudinally. Initial interviews indicated that Year 8 teachers had a lack of confidence, knowledge and skills to adequately teach writing in their subject areas. We identified the need for collaborative processes and evidence-based teaching practices with an initial focus on paragraphing, to support sustained improvement and achievement within writing across all core subjects.

The professional learning community enabled us to develop shared understandings and ensure ownership. We used a shared pedagogical approach, teaching strategies and metalanguage for writing, with a focus on how we teach and talk about teaching. Teachers used classroom modelling, peer teaching, check-in meetings and skills sessions to support their pedagogical changes. The professional learning community developed resources that helped students to know the focus was paragraphing, determine their current skills and ascertain what they should concentrate on to improve.

Data collection related to teaching practice and student achievement, included pre- and post-writing sample comparisons, A-to-E data and a survey on attitudes to writing. Our findings were:

- Year 8 cohort writing, self-perception and confidence improved.
- Teachers used new knowledge and skills in all subject areas
- Teachers included regular writing opportunities and celebrated successes with their students.
- Collaboration between teachers included sharing, analysing and reflecting on cohort data to ensure student learning.

The establishment of the professional learning community as a vehicle for effective cultural change has resulted in 100 per cent of teachers agreeing that it is everyone's responsibility to teach writing, which in turn has improved student achievement. Future implications indicate that strong consistent processes, leadership involvement and the development of trust are imperative to effectively implement professional learning communities for cultural change and collaboration.

Workshop: Survive and thrive: Connecting with early career teachers through coaching



Sheri Evans, Institute for Professional Learning, WA

Abstract

The Institute for Professional Learning in WA delivers a Graduate Teacher Induction Program to all graduate teachers in public schools. The program supports beginning teachers to make the transition from graduate teachers to effective and proficient classroom educators.

The Graduate Teacher Induction Program was established in 2006 in response to extremely high attrition rates of graduate teachers. Between 50 and 60 per cent of early career teachers in WA schools were leaving the system within their first five years of teaching. Further to this issue, WA faces a teacher shortage, a growing student population, an ageing teacher workforce and a level of remoteness not experienced anywhere else in Australia. Developing the effectiveness of WA early career teachers is essential to meeting these current and future challenges. Therefore, the Graduate Teacher Induction Program aims to increase early career teacher effectiveness and improve retention rates.

In-class specialist coaching offered to graduates is a standout feature of the program. The program provides access to 10 to 15 hours of individual support for graduate teachers in their first and second years of teaching.

Trained teacher coaches, referred to as advocates, make regular school and in-class visits aimed at accelerating professional growth. Coaches work along a continuum of interaction, switching between coaching, collaborating and consulting, to facilitate learning-focused conversations with opportunities to reflect against the Australian Professional Teaching Standards and set future goals. The coaching sessions are also supported with classroom observation and feedback sessions that provide non-judgemental frequency data on what is working well and where to next.

The confidential and non-evaluative nature of the coaching support is seen as a key strength of the collaboration between expert and novice teachers. This is particularly valued by graduates in rural and remote schools who face extra challenges of isolation, culture shock and limited access to both physical and pedagogical resources. Anecdotal data have also shown that graduate teachers appreciated the external, non-judgemental and confidential

support which enabled them to talk freely about their aspirations and goals. They believed that their advocate empowered them by building their understanding of the different opportunities of teaching in a variety of schools, developing strategies for building relationships with students, parents and staff and supporting their understanding of processes to help them transition from a graduate to proficient level on the Australian Professional Teaching Standards.

Research and data collected about the program by Social Ventures Australia show that specialist coaching in the first two years has increased retention rates by 23 per cent. Retaining teachers via specialist coaching is significantly more cost-effective than recruiting brand-new teachers. It is estimated that this saves WA taxpayers about \$9 million over five years.

This specialist coaching service shows that a relatively small amount of support and collaboration with early career teachers can yield large positive results to retention rates and effectiveness. This program leads the way in developing collaborative relationships with early career teachers that significantly impact on their wellbeing, pedagogical understanding and commitment to public education.

Workshop: From cooperation to collaboration: Tales from St Mary's, St Anthony's and St Gerard's (SMAG) Catholic Primary Schools cluster working together



Greg White, St Mary's Catholic Primary School, VIC Chris O'Connell, St Gerard's Primary School, VIC Marg Batt, St Anthony's Primary School, VIC

Abstract

This workshop will showcase the experience of three Catholic primary schools in the City of Greater Dandenong, the most culturally diverse and disadvantaged municipality in Victoria. The schools involved are St Mary's Dandenong, St Anthony's Noble Park and St Gerard's Dandenong North (SMAG). The SMAG schools formed a cluster at the end of 2013.

The SMAG cluster formed through the relationships, trust and shared vision of the three principals. This relational trust has facilitated the establishment of a shared vision across a range of networks and collaborations within the cluster and the service system in the local area.

The cluster has a strong vision to build authentic collaboration to develop social capital and in turn increase student and community outcomes. The principals invest in the cluster, jointly employ a cluster engagement leader and provide regular opportunities for all staff to meet. The willingness and commitment of the principals to be involved is an essential element of the cluster's success.

The cluster has partnerships with more than 50 local organisations, which provide services, supports and targeted interventions in the schools. These partnerships provide school staff with opportunities to develop skills and experience in collaborating with community partners.

This cross-school collaboration provides formal and informal opportunities for teachers from across the cluster to learn from each other, and it develops partnerships across the municipality. The result is increased trust and dialogue between schools, families and the community. Teacher and parent involvement have improved at each school. In addition, the cluster has established a partnership with Deakin University to measure the impact of collaboration from a community development perspective.

This presentation will unpack and discuss the

characteristics of partnerships along the continuum from cooperation to collaboration. We will illustrate these characteristics with examples from within schools, between schools and across the wider community. The presentation will involve a joint presentation from the SMAG principals, three short case examples of teacher collaboration, and an outline of the range of community partnerships that have been developed.

Corporate collaboration for wholeschool improvement



Amadeo Ferra, McClelland College, VIC Julie Kirk, Experian Australia, VIC

Abstract

This presentation will discuss McClelland College's participation in the Business Class program run through the Australian Business and Community Network and Schools Connect. The program matches businesses with schools in disadvantaged communities for structured, three-year partnership programs. Through the program, McClelland College was partnered with Experian Australia, a provider of information, analytical and marketing services.

The priority areas for the partnership were determined through a detailed needs assessment and the project was co-designed with global data analytics company Experian. Through this process and the use of school data, it was determined that the partnership would focus on two key areas: 1) capacity building for the leadership team, staff retention and training, and 2) aspirations and employability skills of students.

In the first project, capacity building for the school principal and broader leadership team included ongoing professional mentoring between the principal and Experian's human resources director, as well as focused professional development, school council representation and professional shadowing.

The second project aimed to raise the aspirations, innovation and employability of high-potential Year 9 and 10 students. This has involved creative challenges and mentoring relationships developed through a range of activities. Data to demonstrate the significant impact that the partnership is having on the school have been collected and tools and frameworks have been developed in collaboration with the University of Melbourne's Centre for Program Evaluation. Data collected through these tools demonstrates the significant impact that the partnership is having on the school, including improvement in students' personal management skills, learning and work skills, and career building and readiness. The data also suggest a significant impact on leadership capacity and satisfaction of senior school staff.

This partnership highlights the potential impact of corporate sector involvement in public education. Experian is now present in the day-to-day function of the school. This is a major contributor to the long-term direction of the school, and directly relates to strategies for improving student outcomes. It is important to note that this is a mutually beneficial partnership and is highly valued by Experian.

Provoking the data out of collaboration



Dawn Boland, John Paul College, QLD

Abstract

How might we gather consistent evidence about students' cognitive processes in a collaborative setting? How might we use formative and diagnostic observations to facilitate a personalised learning journey for the student and continuous reporting for our parents and school strategic planning?

There is a 'gap' in our ability to make judgements about student thinking and understanding when working collaboratively in groups. While engaging in conversations with colleagues surrounding soft, anecdotal data, I realised we needed a continuum to guide conversations and to create opportunities for student improvement.

By creating a continuum to describe collaboration, we have encouraged teachers to observe and form judgements based on how students interact and collaborate within a group. This matrix is linked to the thinking and processing taxonomies and the language we use to describe our thinking and learning.

Teachers are empowered to create conversations not only about quantifiable data such as grades, but also qualitative evidence about how a student is progressing in their thinking and their ability to collaborate within groups. When observing small groups, teachers can ascertain where a student sits on the continuum based on the students' interactions with their peers and with school work.

In my classes, I observe there are many factors that impact upon an individual's ability to learn, interact with new knowledge and translate and apply understanding. A student may achieve a passing grade, but using the continuum, I can observe that the student may be operating at a higher level of understanding. I can now create opportunities to embed strategies for that student to show their understanding to improve their results.

The continuum allows teachers to observe potential indicators to make valid and reliable judgements about cognitive processes and student collaboration. Teachers are able to inspire students to improve in areas that previously have not been so easily measurable. The continuum provides a common vocabulary and dialogue prompts that can be used consistently by teachers throughout all disciplines for meaningful conversations with students, colleagues and parents.

Self-improving schools: A collaborative success story from Queensland





Josephine Wise and Michele Walliker, Independent Schools Queensland

Abstract

Independent Schools Queensland has worked collaboratively with Queensland independent schools since 1968. We understand that schools need to shape their own future by driving change that is relevant to their context and unique characteristics. The Self-Improving Schools program empowers schools to sustainably plan, implement and evaluate evidence-based strategies for improvement. The program was developed in 2012 in response to research linking collaboration to successful school improvement. Collaboration is therefore at the heart of the program, with each school forming a special committee to drive the improvement process. Each school committee is chaired by the principal, and includes board members, senior staff, teachers, parents and carers.

Each committee is supported by a facilitator to conduct a school-wide review to identify perceived strengths and focus areas for improvement. The committee then gathers and analyses data to 'prove' the focus areas are indeed improvement priorities. Action plans are then collaboratively developed, implemented and evaluated based on improvement targets set by the committee.

Professor Brian Caldwell has led a continuous, independent evaluation of Self-Improving Schools since its inception. In the 2014 evaluation survey, more than one-third of respondents reported that interventions implemented as part of the program had contributed to improvements in measurable student outcomes. Almost 70 per cent of respondents reported the program had facilitated changes in structures and processes that have improved the leadership and management of school review and school improvement activities.

Self-Improving Schools is providing the framework, tools and support for almost half of all Queensland independent schools to successfully and continuously improve. Engaging staff at all levels in the change process is ensuring shared responsibility and distributed leadership. Independent Schools Queensland's approach to promoting school-wide improvement that is driven by schools may be of relevance to other jurisdictions in the context of a rapidly changing education environment characterised by increased school autonomy and a greater focus on student outcomes.

A framework for improving student outcomes through peer observation, collaboration and feedback



Sheri Evans, The Institute for Professional Learning, WA

Abstract

Educational research shows that more-effective teachers are the key to producing higher performing students. Conservative estimates suggest that students with a highly effective teacher learn twice as much as students with a less effective teacher. Therefore improving teacher effectiveness is by far the most important focus of the 21st-century educator.

Opportunities for teachers to collaborate through observation and feedback can increase teacher effectiveness by as much 30 per cent. However, in the absence of a strategic and carefully considered structure, observation and feedback systems in schools can have the 'orange wallpaper effect'. Teachers may like the day; enjoy being in someone else's classroom, but leave with their next step being to use the same lovely orange wallpaper the teacher has on their bulletin board. This appears to be the case: nearly half of all teachers in Australia report that feedback has had little impact on the way they teach, according to the recent Teaching and Learning International Survey (2013).

As a result of this ongoing inquiry and reflection, a framework of questions has been developed to help school teams identify their strengths and next steps. More than 90 primary and secondary schools across WA and 250 members of school leadership teams have now engaged with this framework and a process of reflection. An average of 95 per cent of participants reported that using this approach has increased their knowledge of key factors that support collaboration, such as using observation and feedback, and that this approach results in improved student outcomes.

During this presentation, participants will have the opportunity to explore the complex but rewarding process of building an effective collaboration culture that harnesses the power of peer observation and feedback. They will hear how leadership teams from across WA have engaged in a process of reflection to consider the key factors in establishing collaborative relationships between teachers that impact positively on student outcomes.

Snapshots: A collaborative approach to monitor students to improve academic achievement



Lauren Brooks, Our Lady of Sacred Heart College, NT

Abstract

Successful schools collect and use data to inform, measure and guide their practice. Salisbury High School is a low-socioeconomic-status school in an area of strong social disadvantage. Five years ago, the school cohort had low academic success and a history of poor results. Over time, Salisbury High School developed a monitoring system entitled Snapshot. The implementation of this process allowed the school to become data-rich, with highly structured procedures for data-driven improvement. The leadership team works collaboratively with students, staff and parents to establish a culture of high expectations, inclusivity and continuous improvement. Every five weeks the school diagnoses strengths and weaknesses in all subject areas, across all year levels, to track individual students and identify school-wide improvements.

Our Lady of the Sacred Heart Catholic College in Alice Springs found itself in a similar position to Salisbury High School one year ago. The college identified that more accurate and timely data would facilitate tracking of academic progress more effectively than traditional reporting cycles. After trying manual and time-consuming approaches, we learned about the sophisticated method of Snapshot at Salisbury and were fortunately provided an opportunity to collaborate with them and adapt the process to fit our school's vision.

Snapshot was implemented at Our Lady of the Sacred Heart Catholic College in 2015 for our Year 12 students and they experienced immediate success. Data triggered early intervention so that no student was left behind in their learning. A strong focus on high achievement for all permeated the school culture. The evidence of the impact was directly substantiated through more rich and powerful conversations between students, subject teachers and parents, promoting self-directed learning and self-evaluation. Students identified their current level of achievement, as compared to their expected level, which led to discussions focused on reducing that gap. In a very short time, we have seen significant improvements in student completion of the SA Certificate of Education, an increase in the number of As and Bs achieved in classwork, and a decrease in the number of Ds and Es attained by our 2015 graduating cohort.

K2OUT: Inspiring students to take their rightful place in the world of work



Paul Gavin and Karen Endicott, Sarah Redfern High School, NSW

Abstract

Over the period 2001 to 2009, the retention rate for students at Sarah Redfern High School from Years 10 to 12 was on average 52 per cent, while the state average was 61 per cent. Only a handful of students applied for university. School data indicated that more students had the skills and ability, but not the desire. Very few, if any, had a parent or sibling that had attended university.

In 2009, Sarah Redfern High School collaborated with the University of Western Sydney in a mutually beneficial program to give students (and their parents) information about the options available at university and experience of a university setting.

This Fast Forward program was implemented across Years 9 to 12, with a new cohort starting each year. Fifteen students participated in workshops conducted by students, lecturers and project workers at the school and university. Parents were invited to attend university events.

The collaboration with the University of Western Sydney led to the establishment of a program for high-achieving students at Sarah Redfern High School. The school also collaborated with the Australian Business and Community Network in 2013, in a program through which students engage with and are mentored by employees from corporate businesses such as American Express, Citibank, JP Morgan, Optus and CSR. This allowed students to experience a world far removed from their local community.

Through these and other programs, students gain an understanding of the relationship between school, university and the world of work, and develop a picture of where they can take their rightful place. Two students from the 2009 cohort were offered university placements in 2013, and 13 students from each of the 2010 and 2011 cohorts were offered placements in 2014 and 2015.

The success of the collaborations has resulted in students being offered work placement opportunities, receiving scholarships to complete their secondary education, increasing numbers of students wanting to go to university and increasing student enrolments into the school.

The Jetson's world: Online collaborative moderation between small, remote and metropolitan schools



Alicia Hoddle, Leigh Creek Area School, SA Susanne Jones, Department for Education and Child Development, SA

Leigh-Anne Williams, Unley High School, SA

Abstract

Observations during moderation work in the South Australian Department for Education and Child Development over the last two years have shown that while there has been increased teacher capacity in developing consistent teacher judgements, interpreting and understanding Australian Curriculum achievement standards and recognising the need for improving assessment practices, there is considerable ground still to be made.

Teachers in small and remote schools have additional ongoing difficulties in gaining access to wider collegiate support and influence, such as organising and participating in face-to-face meetings with colleagues for collaborative moderation. They are less able to validate their judgements around student achievement. Leaders in isolated schools are looking for validation of grades in their schools consistent with large metropolitan schools.

To address these difficulties, a collaborative project was established between small, remote and metropolitan schools in SA in 2015. The project provided opportunities for Year 7 and Year 8 teachers of History and Geography to collaborate across schools using online moderation meetings. The aim was to facilitate understandings and effective practice around synchronous collaborative moderation and quality assessment. The intended long-term outcome of the project is to improve consistency of teacher judgement and improve student achievement through a focus on collaboration between metropolitan and country teachers.

The impact of the project was measured in terms of teacher progress along a continuum. The continuum described teachers' levels of understanding and practice of collaborative moderation. Teachers self-reported their location on the continuum at the beginning and end of the project. Teachers reported on the worth of involvement in the project, challenges and advantages of conferencing technology, confidence and use of the Australian Curriculum achievement standards and impact on student achievement. The workshop will present these data, and discuss the change in teacher assessment practice, implications and suggested actions for future developmental work.

Head teachers as leaders of learning: The strategic and explicit instruction of vocabulary



Bohdan Balla-Gow, Auburn Girls High School, NSW

Abstract

In 2015, approximately 98 per cent of students at Auburn Girls High School were from language backgrounds other than English. Data from the National Assessment Program – Literacy and Numeracy in 2015 indicated that, compared to the state norms, significantly more Years 7 and 9 students at the school achieved results below the national minimum standard in literacy (reading, writing, spelling, grammar and punctuation).

To address this issue, the school implemented an innovative collaboration to inspire and empower head teachers to lead their faculties in the strategic and explicit teaching of vocabulary to Stage 4 English as an additional language or dialect across key learning areas (English, History, Science, Geography, Technological and Applied Studies and Personal Development, Health and Physical Education).

Head teachers participated in professional learning workshops on best practice in explicit instruction of vocabulary. They used the literacy continuum and School Measurement, Assessment and Reporting Toolkit data to identify targeted literacy strategies in order to lead their faculties in professional learning and the implementation of the project. The project incorporated team teaching, lesson observations with feedback and sharing resources and project outcomes with school staff, along with the collaborative development of a school policy on explicit instruction of vocabulary.

Evaluation included pre-testing and post-testing of student knowledge of subject-specific vocabulary and surveys of staff (teachers and head teachers) and students involved in the program. The data indicated that there was a high degree of staff and student satisfaction with all aspects of the program. Pre- and post-testing showed the majority of students improved their knowledge of subject-specific vocabulary, and 74 per cent of students claimed they learnt more as a result of the program.

This pilot study showed the efficacy of a strategic and explicit approach to teaching subject-specific vocabulary for students from language backgrounds other than English. Workshop participants will be given an overview of the program to enable duplication to other school settings. Resources will be available for workshop participants, and further details of the project will be available on request.

How strong is your school as a professional community?



Prof Lawrence Ingvarson, Australian Council for Educational Research

Ed Roper, Brisbane Grammar School, QLD

Abstract

Research indicates that it is primarily by building a strong professional community that school leaders improve the quality of teaching and learning in their schools. This session describes a confidential online staff survey that school leaders can use to gain reliable data about the strength of their school's professional community. The session will also discuss how one school used the results from the survey to target improvement.

The ACER Professional Community Framework describes the five domains that characterise schools with strong professional culture, as defined by the Australian Professional Standard for Principals and the Australian Teacher Performance and Development Framework, together with key elements, indicators and rubrics.

The Professional Community Questionnaire provides a confidential online survey of all teaching staff in a school, based on the framework. Initial trials indicate that the questionnaire has high levels of internal reliability.

Participating schools receive a comprehensive report based on the survey results. This session will show how school leaders can use the ACER Professional Community Framework and Questionnaire to identify key areas for action and measure changes over time.

Changing, the Sarah way: A successful middle school collaborative project



Margaret Downey, Sarah Redfern High School, NSW

Abstract

Data from Sarah Redfern High School identified low student engagement and self-esteem, poor transitioning from Stage 3 to Stage 4, drastically declining enrolments and a negative perception of who we were within the community both by residents and feeder primary schools. The data highlighted a need for collaboration and school improvement. Sarah Redfern High School recognised the need to work together to improve practice and form strong links within our community of schools. There was particular need to support Stage 3 and Stage 4 teachers.

The project undertaken by Sarah Redfern High School was to form a middle school. We regularly collaborated with our community of schools to share our concerns, issues and ideas. Collaboration included the opportunity for professional dialogue and the exchange of ideas encompassing programs, scope and sequence, assessments, student behaviour management systems and classroom practices.

School data and student, parent and staff surveys show significant positive improvement in all areas of identified concerns. There has been an increase in enrolments, an increase in student attendance and a decrease in negative student behaviour. We have increased enrolment by 45 per cent. This clearly shows a cultural community change in attitude which includes embracing the middle school. Data show substantial continued improvement in results from the National Assessment Program – Literacy and Numeracy and Validation of Assessment for Learning and Individual Development. Observations now clearly show settled and calm classrooms and closer teacher-student relationships.

Many NSW and interstate schools have visited for discussion and consultation on our practices around middle school and community of schools collaboration, with the intention of modelling our successes. We have been awarded a NSW Director's Choice Award for our Community Schools project and continue to receive recognition within and outside the NSW Department of Education.

Effectiveness of therapy services using collaboration, co-teaching and consulting



Dr Carl Parsons, Port Phillip Specialist School, VIC

Abstract

In 1999, Port Phillip Specialist School had about 150 students with intellectual disabilities and various other co-morbid conditions. The school had an occupational therapist, a physiotherapist and a speech therapist, each working part-time. The primary mode of service delivery was a 1:1 withdrawal model, which meant that only a small number of students were able to be seen for services. There were a number of complaints by families who felt their children should also be receiving services.

The school wanted to increase therapy services to students but the budgetary constraints did not allow this. The school began a review of various service delivery models and agreed that a new model of service delivery needed to be employed. All teachers, specialists, therapists and education support staff collaborated in the review through a series of workshops. They decided that there should be a shift away from direct service delivery towards an integrated service delivery model. Integrated services meant that therapy had to be embedded into all activities. It also meant that teachers and therapists would have to change their way of thinking about roles, responsibilities and the delivery of programs.

A collaborative model of teaching was trialled. This required a change in roles, responsibilities and attitudes. A review of therapy services showed that 75 per cent of teachers routinely and consistently embedded a range of appropriate and effective therapy practices into teaching programs.

This session will outline some of the processes and collaborations involved. It will highlight the advantages to all students and to the whole school, and explain the benefits for transitioning from early years to secondary components. Other schools can benefit from using similar models.

Workshop: 'You killed it, Miss!' Making sense of English in an Indigenous or multicultural classroom



Margaret James, Honey Ant Readers, NT Ailsa MacFie, Tiwi College, NT

Abstract

This workshop will explore the linguistic and cultural aspects of Standard Australian English language acquisition in an Indigenous setting, and also has applicability to multicultural classrooms. The workshop will introduce the collaborative project between Margaret James, author of Honey Ant Readers, and Ailsa MacFie, Assistant Principal of Tiwi College, before using activities, games and discussions to explore how teachers can better understand the learning processes and needs of students of English as an additional language or dialect backgrounds.

Margaret has a long history of collaborative projects, having worked closely with Indigenous elders to develop a series of culturally and linguistically appropriate student reading books for Aboriginal English speakers, and accompanying professional development for teachers.

Since 2012, there has been ongoing collaboration between Margaret and Tiwi College to provide training for teaching staff in basic linguistics and language acquisition, with a specific practical focus on teaching print literacy to speakers of Aboriginal languages. Training also aims to provide teachers with an understanding of their students' language, as inaccurate perceptions lead to lower teacher expectations and diminished student performance.

Tiwi College is a very small school of five teachers. Therefore, data regarding the effectiveness of the collaboration are qualitative, based on anecdotal evidence, interviews and examples of practice. We are seeing a positive effect on student engagement. Increasing teachers' understanding of second language acquisition, English syntax and terminology allows teachers to better diagnose student language needs and explain language use to students. Teachers have greater awareness of linguistic challenges facing Indigenous students in code-switching between their first language and Standard Australian English, including non-verbal and cultural elements. Students' successes in reading increase their engagement with and access to other subjects.

Join Ailsa and Margaret in a practical workshop to learn more about how a deeper knowledge of your student's language and culture can improve your teaching and their learning.

Workshop: Faculty inquiry: Together, how will we do things differently?



Vanessa Scott, Pakuranga College, Auckland, New Zealand

Abstract

Pakuranga College has clear targets for improving student achievement and a common vision of working collaboratively to share ideas within our classroom practices. The college's English faculty uses the inquiry process to encourage teachers to be adaptive experts who are pedagogically responsive to students' diverse learning needs

Each teacher formulates a deep inquiry into the learning needs of each of their classes by completing inquiry templates that identify learning needs and explore strategies to meet them. As a team, we identify commonalities, culminating in a strategic plan for the faculty. Teachers experiment with strategies and discuss their progress, keeping the inquiry model alive as an iterative process.

This process has created a strong sense of collegiality within the faculty. Achievement data show improvement in student outcomes. Students report increased confidence in the learning of key skills.

The faculty's culture of inquiry has helped us build a collaborative team that shares ideas, takes risks, celebrates success and learns from failure. Teachers take responsibility for the learning that goes on in their classrooms, rather than blaming a myriad of unknown variables for a lack of student achievement or engagement.

The workshop will be divided into three parts. Part 1 will focus on formulating an inquiry. Participants will use hypothetical data to formulate an inquiry into the diverse learning needs of this group of students. Participants will work together using critical questioning to formulate a meaningful, deep inquiry. Part 2 will focus on identifying commonalities. Participants will work collaboratively to identify key learning needs and formulate strategies to meet the identified needs. Part 3 will explore next steps and questions about the approach.

Destination collaboration: Building the classroom landscape



Melanie Clark and Malena Cahill, Dardanup Primary School, WA

Abstract

As collaborators we looked at obstacles to student achievement in our local network of schools: class sizes, socioeconomic status, curriculum understandings and expectations and what they mean for our particular context. The schools had students who were underachieving. Some barriers seemed insurmountable.

Our action was to create an understanding of what assessment means in our schools. We agreed that for assessment to contribute to learning, it should take place during the learning rather than after the learning has occurred. The project involved teachers trialling lessons that involved students in the assessment process. Teachers shared clear learning destinations and used samples to help students understand quality and development. Teachers engaged students in co-constructing criteria and in self- and peer-assessment to increase learning across curriculum areas.

Learning walks: The mental pictures that change practice



Stuart Taylor, Riverside Christian College, QLD

Abstract

Riverside Christian College comes from a community experiencing the second-highest levels of disadvantage in Queensland. The literacy levels in the community are very low. To address this problem, the college embarked on a worldwide investigation of possible solutions. We selected the 'breakthrough' model developed by educational reformers Michael Fullan, Peter Hill and Carmel Crevola, as practiced in Ontario, Canada.

Implementing this reform hinges upon collaborative action between staff members. It involves all staff members in adopting high expectations of students, themselves and others. It has a focus on teachers knowing precisely the needs of each student and personalising instruction to facilitate each student's next-step learning. This is achieved through a form of jobembedded professional learning where the learning is the work.

The two most powerful strategies have been professional learning communities and Learning Walks. American philosopher John Searle convinced us: 'If you can't say it clearly, you don't understand it yourself.' We would add that if you can't write a clear description, you don't understand it yourself, and if you can't picture it, you don't know what it is. It is important to develop a mental picture of great learning in action in order to bring about change. Deep understanding of our school reform and the embedded learning framework is developed by walking through classrooms in pairs or threes looking at the learning (not the teaching). Teachers reflect on how the students answer questions to articulate the phases of their learning: 'Where are you going?' (the 'I know' phase), 'How are you going?' (the 'I can' phase), and 'Where to next?' (the 'I will' phase). The Learning Walks have made 'real' the dialogue and development in professional learning communities.

Since the college implemented the model, anecdotal data show an increase in teacher capacity to understand and deliver next-step learning, with teachers better able to articulate what they do and why they do it. Benchmark data from the Developmental Reading Assessment and the National Assessment Program – Literacy and Numeracy show literacy results are improving. Moderated Queensland Curriculum and Assessment Authority senior folios show over-representation in the Very High Achievement and High Achievement bands. The gains for the past two years are noteworthy and have ridden on the back of collaborative professional practice.

Gluing the house of cards: Teacher improvement that sticks



Bo George, Mercy College Mackay, QLD

Abstract

The key challenge schools face in school improvement is building sustainability, or 'making improvement stick'. This presentation offers solutions to this challenge.

Using the principles of the Australian Teacher Performance and Development Framework developed by the Australian Institute for Teaching and School Leadership, Mercy College cultivated a model for systematic whole-school improvement. The model was developed, refined and successfully embedded into the annual operational processes of the school. This model for improvement involves an ongoing cycle of reflection and goal-setting, professional practice and learning, and feedback and review. The model includes the collaboration of all stakeholders, including students, teachers, parents and the governing body of the school.

The National School Improvement Tool, developed by the Australian Council for Educational Research, is used to gather benchmark performance data (via online opinion surveys) at a whole-school level. This evidence is used to identify improvement priorities, which are agreed upon through collaboration. Each member of staff then develops a professional learning plan with a focus on two goals: one targeting an identified whole-school priority and one for their own professional development (identified through self-reflection processes). Professional coaching processes, using Fire-Up Coaching programs, support and monitor the achievement of these two goals. The success of each staff member's professional learning plan is validated by a member of the senior leadership team at the end of the cycle.

At the curriculum development level, improvement processes are built into the model. These processes involve peer teaching observations for professional feedback and unit evaluations provided by students. The model includes release time for subject departments to reflect upon the feedback, review curriculum units and refine where needed. Teachers implement the explicit-instruction model as part of the lesson-by-lesson cycle of effective classroom pedagogy.

This presentation will share and discuss in detail the complete model for systematic improvement processes, including the keys to sustainability and success. Collaboration creates a culture of improvement, and driven by data collection, success becomes measurable, manageable and sustainable.

Soar into Bribie: Ensuring successful transitions to prep



Rachel Roebuck and Karena Aczel, Bribie Island State School, QLD

Abstract

Effective transitions to primary school provide students with increased opportunities for learning success. Valuing the importance of education in the early years, Bribie Island State School is committed to building effective partnerships with local early education providers, parents and the wider community. The Soar into Bribie transition program is multifaceted, providing future students with a variety of opportunities to experience school life and familiarise themselves with the school setting. The program includes pre-prep playgroup, regular communication between the school and feeder kindergartens/centres, launch day, 10-weekly school visits, opportunities for ongoing parent training, invitations to school events, transition meetings, shared professional development opportunities and enrolment interviews.

Responding to enrolment, attendance, school opinion survey and academic achievement data, the Soar into Bribie transition program was developed to increase community engagement and support successful transitions to prep. Bribie Island State School is located in close proximity to four early education providers. Our explicit efforts have allowed us to form strong relationships with these educators, resulting in smoother transitions, and a collaborative responsibility for students' learning. Now in its fourth year of operation, Soar into Bribie has been trialled, reviewed and enhanced. Current enrolments, attendance, school opinion surveys, community feedback and academic achievements all show that Soar into Bribie is successful in assisting students with transition to school, and mutually beneficial across sectors.

Feedback on the program is largely anecdotal with school staff, kindergarten teachers and parents all agreeing that Soar into Bribie assists children in preparing to start school, offers a range of activities to promote both academic and social and emotional development and strengthens community partnerships. Soar into Bribie has been recognised at both district and regional level as an example of best practice. The workshop will involve information about each aspect of the program, a review of associated data and support materials.

Creating an early learning to Year 12 culture of thinking and deep learning





Sophie Murphy and Meg Hansen, Westbourne Grammar School, VIC

Abstract

Westbourne Grammar School identified that all of our learners would benefit from a more-connective and common language of learning across the whole school, from our Early Learning Centre to Year 12 (ELC–12). The language would need to be underpinned by the school vision and values in order to create deep-level learning for all students and consistency across the school.

We created a learning toolkit that focused on bringing together the different teaching and learning experiences across the school and identified essential elements that needed to be developed and become a part of the school's ELC–12 language of learning. The toolkit includes the Structure of Observed Learning Outcome (SOLO) taxonomy developed by Australian educational psychologist John Biggs, which provides a framework of deep-level learning to ensure that all children have the opportunities to move from surface to deep-level learners. The toolkit also includes restorative practice, continuous online reporting, formative assessment, thinking routines, collaborative learning and curriculum mapping using the Understanding by Design framework.

The common language of learning around the toolkit has brought together a common understanding between the teachers, students and community. We have collated surveys from students, staff and parents that highlight the benefits of a common language to know where you are, where you need to go and how you are going to get there. The level of coherence and moral purpose has been highly successful and positive. Professional development in the school is centred around the toolkit, and teachers are developing and sharing a rich understanding.

Increasing student voice and learning outcomes through questioning



Androulla Vagnoni and Belinda Robertson, East Adelaide School. SA

Abstract

This presentation will focus on a collaboration to develop teacher and student questioning skills in mathematics and reading comprehension to increase student engagement, deepen critical thinking and improve learning outcomes. The collaboration involved teachers from East Adelaide School in an action research project directed by Yvonne Zeegers from the University of South Australia and Katrina Elliot from the South Australian Department for Education and Child Development.

Their aim was to increase student engagement and critical thinking through strengthening student voice and teacher questioning, thereby improving student results in Progressive Achievement Tests in reading comprehension and mathematics.

In collaboration with colleagues, teachers identified learning areas in which to develop both their own questioning skills and those of the students. They monitored how this could increase student voice, engagement and intellectual stretch through collection of data. They met regularly over the year (2015) to share, reflect and improve on their practice.

The teachers collected a range of qualitative and quantitative data, including videos, photos, work samples, surveys, interviews, diagnostic and summative assessments.

By the end of 2015, the teachers involved had identified several areas of student growth. Most notably, teachers identified a significant increase in student engagement across a range of learning areas. Students began using higher order thinking skills to develop rich questions and showed a deeper understanding of content, topics, strategies and issues. They demonstrated how metacognition, or thinking about their thinking, enabled them to comprehend meaning and gain deeper insight. Teachers also identified improvement in their own questioning skills and were using a broader range of question types to enhance student thinking and problem-solving.

In 2016, these teachers are continuing this learning journey, so as to further embed these new practices and to share their learning within their professional learning communities.

Curiosity projects: Enabling curiosity and self-motivated learning in middle schools



Greg Ladner, Hong Kong International School, Hong Kong

Abstract

In recent years there has been much discussion and movement in education to allow students the opportunity to take control of their learning, and the freedom to pursue topics of their own interest that may be outside of the prescribed curriculum. The curiosity projects, quest, genius hour, and Google's '20 per cent time' philosophy are some of the names used for such initiatives, which involve setting aside time for students' self-directed learning.

In 2013, one of the Social Studies teachers at Hong Kong International School wished to provide an opportunity to trial a genius hour project for his Years 7 and 8 students over a period of 10 weeks. One of the challenges for the teacher was how to find the time to fit this in and still complete the required curriculum. The success of this initial project – seen through anecdotal, reflective qualitative data via student and parent surveys – prompted our desire to make this project an integral part of learning for all students in Years 7 and 8. Achieving this goal required an intentional collaborative process involving all teachers and administration. Subsequently we now have all students engaged in a 10-week self-motivated learning project, with the time shared equally by the four core learning areas of Social Studies, Language Arts, Science and Maths.

Our success indicators for this emerge from the school's strategic objectives and include observations of students' levels of creativity, collaboration and resilience. This is definitely a work in progress, but what we have done provides a case study for other schools as they seek their own collaborative pathway to providing students the opportunity to engage in learning born of a self-chosen curiosity.

Learning, respect, empowerment for disengaged young people



Sandra Murphy, Andrea Thompson and Ciara Chaomhanach, Oakwood School, VIC

Abstract

Oakwood School was established in 2011 to provide the opportunity for young people to reconnect with learning, as articulated in our intent of 'learning, respect and empowerment'. This opportunity is offered to young people for whom all other viable education options have been exhausted, and for whom reintegration into a school environment is no longer feasible. We believe that all students would like to attend school and learn. We have a further strong belief that 'students will give the best that they have got'. In other words, if they could do better at school, they would.

Students at Oakwood School are or have been experiencing significant trauma in their lives. Violence, family breakdown and associated mental health issues prevent our students from engaging in learning and can result in chronic anxiety, with specific learning and language difficulties. Many come with poor perceptions of themselves as learners and a key part of our work is to help our students feel successful and gain a sense of achievement, often for the first time in years. Our students confirm the genuine care our teachers show for their learning and wellbeing makes a difference and they like the structured predictable routine we offer. Overlaying all of this is trust: trust that we are not going to make them feel stupid; trust that we are not going to expose their inadequacies, but rather help them make progress; and trust that we will not give up on them when they are really struggling with learning.

This presentation will detail the collaborative work of the teaching team as the school has progressed from one to five campuses. It will highlight the development of a highly structured approach to teaching and learning that enables explicit and targeted teaching of skills. We will also demonstrate the innovative individual learning maps that are the centre of our classroom practice.

21st-century professional development for the 21st-century teacher



Tamara Sullivan and Brett Webster, Ormiston College, QLD

Abstract

In a complex and changing world, teachers require more than just attending one-off workshops or isolated classroom practice. It is essential that professional development is focused on improving student outcomes, is embedded in teacher practice, is collaborative and reflective, and is ongoing and supported within the school culture

In 2015, a key initiative at Ormiston College was to provide teachers with active learning: professional learning in an environment more consistent with effective pedagogy. A whole-school professional development course was created by teacher leaders using the 21st Century Learning Design. The course aimed to assist staff to evaluate, design and redesign learning activities that support learners to develop 21st-century skills. The course was delivered in a blended learning environment, which included online modules, workshops and online collaboration.

The introduction to the 21st Century Learning Design was completed via online modules in lieu of attending after-school professional development. Following the initial modules, staff workshops were organised to identify key ideas from the online discussions, and selected staff presented exemplar units with explicit links to identified 21st-century skills. All staff coded activities to see how deeply they embedded the 21st-century skills, and collaborated on strategies for future opportunities in each dimension. This approach capitalised on the teachers already having a basic understanding of the 21st Century Learning Design, and therefore the college could devote more time for integrating, applying and consolidating their knowledge and understanding.

Staff completed a feedback survey to reflect on the format of the professional development. Data from the survey indicated that using a blended approach to undertake professional development increased teachers' understanding of the 21st Century Learning Design and supported their understanding of the framework through collective and dialogic practice. This approach allowed teachers more time to process thoughts, ideas and critical reflections that would not have been possible in a traditional face-to-face staff meeting.

This presentation will outline implications of the study for school leaders. The focus will be on continued evaluation, improvement and duplication to other school contexts. Resources will be available for workshop participants, and further details of the project will be available on request.

Aspire: A program of challenging tasks for students in Years 7 to 9



Jon Morley, Gisborne Secondary College, VIC

Abstract

School data at Gisborne Secondary College revealed that we were not extending or developing our top-performing students from Years 7 to 9. In effect, these students were cruising. In response to these data, we invited teachers across all learning areas to collaborate in developing a program of challenging tasks.

The program took the form of a booklet entitled Aspire I. Students from Years 7 to 9 were invited to complete one or more tasks over the term, and then present their projects to a panel for feedback and evaluation. Participation was voluntary. We launched the project and introduced the tasks at student assemblies and promoted the program to parents via the website and newsletter.

Observation and feedback from staff, students and parents revealed great excitement about the project. More than 60 students expressed interest and began work on a task. Twenty-five students completed and presented their projects to a panel, which included leadership personnel and a teacher from the relevant learning area. Students who completed tasks successfully were celebrated at a presentation evening attended by more than 100 parents, and received badges and certificates.

The program differs from other accelerated or advanced programs, in that we don't select the students: they select themselves. After observing the talent evident in the completed projects, teachers have become much more aware of the potential capacity of our junior students, and are questioning how stimulating and challenging our regular curriculum is. Teachers have also developed a clearer understanding about the nature of a challenging task by using a set of criteria drawn from Bloom's revised taxonomy and Webb's Depth of Knowledge guidelines.

Overall, we received very positive feedback from the parent community about how engaging the program was, and how rewarding it was to mentor their children in tasks. The program has blossomed beyond our expectations and will continue to grow in 2016 as we launch Aspire II.

Development and evaluation of a sustainable district-wide engagement program for high-ability youth



Bohdan Balla-Gow, Auburn Girls High School, NSW

Abstract

Recent evidence suggests that Australia's most able students are underperforming compared to similar students internationally. With the dismantling of the Gifted and Talented Unit at the NSW Department of Education office, there was a need within the state to build collaborative networks and provide professional support to schools, teachers and parents to cater for the needs of their most able students.

This session provides details of a collaborative study of high-ability students from a partially selective NSW government high school and its five feeder public primary schools. The main goals of the program, now in its fourth year, were to:

- cater for the needs of high-ability youth in the district
- engage and showcase student potential in core subjects
- facilitate networking of executive staff, teachers, parents and students across the schools within the district
- encourage student engagement, mentoring, leadership and transition into high school
- increase enrolments of high-ability students into the local public high school
- ensure the sustainability of the program.

Best practice in gifted education was incorporated into the development and implementation of the program with teachers and students. This included staff development, peer support and mentoring, and showcasing of student outcomes of the program. Three years of student and parent surveys, along with student focus groups, were used to evaluate the efficacy of the program.

The presentation will outline implications of the study for all key stakeholders. There will be a focus on continued evaluation, improvement and sustainability. Presentation participants will be given an overview of the development of the program, which will enable duplication in other school settings. Key program development resources will be provided.

How do we improve morale and connectedness to school? By giving students a voice



Hayley Dureau, Mount Waverley Secondary College, VIC

Abstract

Mount Waverley Secondary College is a large, coeducational state school with impressive academic results; however, for some time our Attitudes to School survey data showed that students have low levels of morale and connectedness to school. The data showed that students were increasingly motivated to learn, but not connected to their peers, community or staff.

Passionate about working with students to drive improvement and positive change, in 2014 Hayley Dureau created the Year 10 student leadership team. Student leaders worked together to engage students in college and community activities including those offered by Rotary, Lions, United Nations Youth and World Vision. In 2015, student leadership teams were introduced at Years 9, 10 and 11. The teams collaborate to improve relationships between students in different year levels, and between teachers and students.

Student leaders regularly survey and represent students at college council and staff meetings. A sub-group of the leadership teams, the Teach the Teacher committee, surveyed hundreds of students and more than 100 teachers, and after analysing the data they decided to focus on how students give teachers feedback. The students ran professional learning sessions for staff and are documenting their progress (work that has been recognised by Professor John Hattie). The support of our principal and campus principal, as well as staff across both campuses, has been paramount in recognising the power of genuine and meaningful student voice in school improvement.

As well as increased student participation and engagement, we have seen a decline in student management issues. Students now know there is a forum to express their opinions and an opportunity for them to connect with peers, teachers and their community. Staff, students and parents can see and feel significant positive changes in our college climate – and this has been reflected by pleasing improvements in the school's survey data.

Workshop: Structured language: Unlocking the mystery of literacy for all



Steven Capp and Sarah Asome, Bentleigh West Primary School, VIC

Abstract

Staff at a Victorian government primary school observed an increasing number of students from Years 3 to 5 who were below the national standard in literacy. Students who had received intervention in Year 1 were still performing at below the expected level, with some even dropping back after the support ceased. There was an effect on both behaviour and self-esteem for these students performing below the expected level. The school adopted the pedagogy of Multisensory Structured Language with an emphasis on explicit and structured teaching across the school.

Collaboration across year-level teams ensured class teachers were reinforcing what was happening in the support sessions, and collaboration in data analysis and moderation at a whole-school level informed future planning. All students were profiled in the year prior to starting school to establish conversation and relationships with parents. Phonemic awareness was screened for all Foundation students to indicate any red-flag areas for reading success. Students across the school who were experiencing difficulty were profiled for instruction in order for the learning support teachers to set specific Individual Learning Plan targets in collaboration with class teachers. Results of the collaboration included Foundation students with gaps and weaknesses in phonemic awareness achieving 50 per cent growth within the first six months of school. All students who attended the full year of Foundation are reading at level, with 66 per cent of the Foundation students performing six months or more ahead in reading. Fifty per cent of students are performing six months ahead or more in writing.

Parents have reported children's confidence and selfesteem have improved, and the culture of school has become more inclusive for students, particularly those with dyslexia or reading difficulties. Teacher content knowledge and understanding of learning differences has increased, and Individual Learning Plans are explicit and created in collaboration with all. This workshop will provide an interactive opportunity to learn about how Multi-Sensory Structured Language works at a whole-school level. It will highlight resources to support implementation, including apps and assistive technology.

Workshop: Struggling to be heard: Voice or voiceover?



Zoe Jeckeln, Port Phillip Specialist School, VIC

Abstract

What do you do when you open your mouth but the words don't come out? When you're desperate to say yes or no but don't know the word? When you're tired, sick or hungry and need help? Numerous students with disabilities present with this problem with communication. At one English specialist school, out of 30 students in the senior school, five had major problems with communication and required alternative means to communicate. Assigned to teach these students, I had to learn, understand how to teach these students and how to ensure they could communicate to me about what they were learning.

This collaboration was about helping to learn about communication technology that would assist in teaching my newly assigned students, and working as part of a team including two specialists in augmentative and alternative communication, one network manager and a speech pathologist. A timetable was devised that provided these students with an augmentative and alternative communication specialist in each lesson to support them and the rest of the class.

Students showed immediate success, and goals were adapted to include the use of their communication devices to better meet their needs. Emotional concerns were addressed, with students feeling supported, included and valued. Social events became a joyful experience for these students. Students could access exams using their method of communication and achieved outstanding results.

This collaboration built my knowledge and skills and those of the team of assistants that were regularly working with these students. Confidence and awareness was raised and enthusiasm continued among staff to assist students to communicate. This workshop will provide detailed case studies showcasing the success of the intervention. The workshop will include time to explore the software used. Participants will use scenario cards for hands-on work.

Collaboration: What does it look like in effective schools?



Robert Marshall, Australian Council for Educational Research

Anne Ryan and Prue Horan, Wagga Wagga Catholic Education Office, NSW

Abstract

For the past two years, a team of consultants from the Australian Council for Educational Research led by Robert Marshall has conducted reviews across Australia using the National School Improvement Tool. ACER consultants have observed the tool's usefulness in a variety of contexts and settings. The tool assists to set a baseline of current practice on which to build capacity for improvement, wherever that baseline may be.

ACER has collected and collated the data from many schools and identified trends and patterns in school practice. This session will share some of these data collated and analysed by ACER. The focus will be on collaboration. The presentation will highlight the collaborative behaviours which support effective teaching and learning, as well as identify some common behaviours schools demonstrate which inhibit effective practice.

The session will discuss implications for policy and practice in schools and provide specific examples of collaborative practice in schools that make a difference to teaching and learning.

Action learning, action research: Meaningful collaboration creating teacher change



Belinda Holmes, St Andrews Lutheran College, QLD

Abstract

Collaboration underpinned three complex research projects targeting specific concerns at St Andrews Lutheran College from 2012 to 2015. The projects were funded through grants from Independent Schools Queensland, which requested that the research team adopt the Action Learning, Action Research methodology. Data were collected using a mixed-method approach. Teachers were provided with intensive differentiated professional learning experiences, opportunities to collaborate across year levels, and access to specialist teachers. Teachers were encouraged to share and reflect on their teaching practice with others.

The Meaningful Collaboration for Teacher Change Framework was developed and refined over the three projects based on the goals of the teachers, members of the senior leadership team and collaborators from Independent Schools Queensland. The framework uses collaboration as the vehicle to harness the strengths and shared knowledge of the teachers. This theoretical framework focuses on and links the areas of knowledge creation (Nonaka & Takeuchi, 1996), Knoster's model of change (1991) and the sharing of teachers' 'sacred stories' (Clandinin & Connelly, 1999).

To demonstrate the development and use of the framework and its practical outcomes, one project will be discussed in depth, highlighting the successes and challenges faced by a teacher leader when using a collaborative approach to professional learning and school improvement. This specific project focused on meeting the concerns of teachers in understanding the issues relevant to teaching diverse learners.

The session will discuss key findings from the use of the framework. The focus will be on how the supporting factors needed for collaboration within the projects have led to school improvement on a number of levels: enhanced quality of teaching, improved student achievement and sustained change through the development of a collaborative learning culture.

The Katandra Project: Special and mainstream schools working together



Bruce McPhate and Sally Moloney, Katandra School, VIC Tracey Walker, Department of Education and Training, VIC

Abstract

While the majority of students with disabilities or additional learning needs attend mainstream schools, anecdotal evidence suggests that our specialist schools do not often provide, nor are approached to provide, advice and support to mainstream schools supporting students with additional learning needs. A pre-trial survey found that 86 per cent of schools agreed that they did not have the expertise or experience to fully support students with additional learning needs, and 93 per cent felt they could benefit from more support.

Katandra School, a special education setting for primary-aged students who have an intellectual disability, implemented a visiting coach program and resources to increase the confidence and capacity of teachers to support children with additional needs enrolled in mainstream schools. Katandra School teachers attended mainstream primary schools to work with classroom teachers.

Approaches included discussions, modelling and coaching. A Katandra School teacher observed each targeted student in the classroom and then suggested modification of goals, as well as modelling strategies with students and providing resources.

In addition to correspondence attesting to the value of the support, results from the post-trial survey found that 76 per cent of schools who used these services found them extremely helpful, 6 per cent found them very helpful and 6 per cent found them helpful. All schools (100 per cent) said they would recommend that other schools use this resource.

Using a coaching and mentoring approach, Katandra School staff members are sharing their extensive knowledge and experience with teachers at mainstream schools where students' intellectual disability, engagement difficulties and/ or behavioural concerns have been identified. The Katandra Project is an excellent example of teachers, principals, and schools working together to exchange knowledge and ideas, by developing and strengthening teaching and assessment approaches. The project builds a culture of collaboration and support, which other school networks are encouraged to discuss. The Katandra Project received the 2015 Victorian Education Excellence Award for Inclusive Education.

The ISSLANDS program professional learning community: Intervention strategies and support for literacy and numeracy difficulties



Gail Nelson, Canning Vale College, WA

Abstract

With the introduction of the Online Literacy and Numeracy Assessment as a prerequisite to secondary school graduation in WA, literacy and numeracy intervention and support programs are becoming increasingly popular. The challenge is to identify specific strategies which will improve literacy and numeracy with a diverse student cohort, across a range of primary and secondary schools settings. The ISSLANDS program was developed in response to these concerns.

Through the ISSLANDS program, feeder primary schools and secondary schools collaborate to provide all students with the opportunity to start their secondary education on a similar basis. The pilot study in 2015 was comprised of a three-tiered approach to intervention, structured around small group, mainstream class and staff professional development.

Formation of the ISSLANDS professional learning community provided opportunities for staff from Canning Vale College to collaborate with primary schools to develop a targeted approach to intervention with strategies, processes and timelines correlated across all schools. Liaison with Edith Cowan University and Curtin University enabled the latest research to be incorporated. The program received a grant through the Australian Government's More Support for Students with Disabilities initiative to provide resources and professional development.

The ISSLANDS Wiki, Tumblr blog and Facebook page were developed to engage student and parent interest. Longitudinal data using pre- and post-implementation of the Progressive Achievement Tests identified that all students in the pilot program showed improvement. Feedback from staff showed an improvement in results for class assessments. Pre- and post-implementation surveys also indicated an improvement in student engagement and parent satisfaction. Staff reported that they feel more supported with strategies to guide their learning programs.

The program has now rolled out for the 2016 school year, and shows positive indicators of further success.

Collaborating for impact

Cathy Henbest, Catholic Education Melbourne, VIC Shane Crawford, St Bernards Catholic Primary School, VIC Jenny Sesta, Corwin

Abstract

The Visible Learning plus Collaborative Impact Program is a professional learning and change program that supports systems to bring about ongoing and long-lasting improvement in school, classroom and student performance. Corwin, in partnership with Catholic Education Melbourne, has been working in collaboration with schools to build system, leader and teacher capabilities that improve student outcomes. During this presentation, we will share our journey as we embark on our second year of collaborating for impact.

Workshop: Early career teacher mentoring: Collaborating for confidence



Maria O'Donnell, St Mary MacKillop College, ACT

Abstract

St Mary MacKillop College is a large dual-campus comprehensive Years 7 to 12 school in the Tuggeranong Valley of Canberra. There are approximately 1900 students and 148 teaching staff. The school has a growing number of early career teachers on staff, and so our practice has evolved to meet their specific professional needs around classroom practice, pedagogy and student behaviour management.

As a response to educational changes, the principal created two teaching and learning positions. The school established a dedicated mentoring program for early career teachers to improve teacher quality and provide support for early career teachers. The resulting mentoring model drew on data from literature about teacher retention rates, best mentoring practice, observation of classroom practice, informal discussions and the surveyed needs of early career teachers. Teachers scheduled one-to-one mentoring with the two teaching and learning coordinators, who acted as professional mentors using lesson observations, team teaching, assistance for teachers to move to full registration, pedagogical instruction and coaching and just-in-time assistance.

The school expectations for the program have been successfully met. Analysis of the program's strengths, weaknesses, opportunities and threats, and anecdotal and survey data, individual lesson observation data and the record of professional conversation have provided essential feedback about the strengths and areas for potential development. Participation in the Australian Institute for Teaching and School Leadership Professional Conversations Project provided specific detailed data about the nature of conversations and collaboration at St Mary MacKillop College. All these forms of data point to improvement in practice and validate the collaborative nature of our mentoring program. We initiated a mentoring network in Catholic-system schools and shared our work in presentations at conferences. As a school we have stronger pedagogical practices, sharing of professional learning and a collaborative approach to building teacher capacity across the whole staff. Our early career teachers feel valued and confident and say they see a long career in education for themselves.

Workshop: Collaborative uses for student data: School improvement begins in the classroom



Bronwyn Jones and Patricia Simons, Willetton Primary School, WA

Dr Sandy Heldsinger, Brightpath Educational Assessment Software, WA

Rob Hassell, Australian Council for Educational Research

Abstract

Any effective school improvement begins in the classroom. Teachers can describe how learning occurs, but can that improvement be measured? Teachers and schools are now asked to validate improvements in student learning by producing specific data as evidence.

In Term 1 2016, Willetton Primary School participated in a workshop series. Initially, we analysed and discussed our school's standardised and classroom-based data. We investigated ways that we could improve student learning and collaborate using the data. Then we conducted an action research project to develop a classroom-based assessment on an aspect of learning designed to evaluate specific improvements in student learning. In the second workshop, we discussed the success of the classroom-based assessment and evaluated the quality of the assessment data and the resulting collaborations with students, other teachers and school leaders. We also discussed the next steps, including how to upscale this initiative and the impact of our findings on our school's assessment and curriculum plans.

This presentation will provide an overview of the two workshops we attended and the research underpinning the design of our classroom assessment and the action research project. We will present and discuss the school's action research project, including the classroom assessment, standardised assessments and the collaborations that were planned as an essential part of the project. The session will unpack the results of the action research and the data from the collaborations, to provide conclusions and reflections regarding the implications for the teachers who participated in the workshops, the other teachers and leaders who collaborated in the project at a school level and for all stakeholders, particularly students. We will also discuss the next steps, including the impact on the school's assessment and curriculum plans.

POSTER PRESENTATIONS

Working together to teach our kids 'both ways': Depicting meaningful collaboration through Aboriginal art



Margaret James, Honey Ant Readers, NT

Trudy Inkamala, Western Arrernte Elder and traditional land owner

Rhonda Inkamala, Western Arrernte Elder and experienced school teacher

Abstract

In order to address the disparity in literacy outcomes for Australian Aboriginal students compared with non-Aboriginal students, a true collaboration between educators and Elders was needed. All too often the outcome of 'collaboration' is slanted towards the mainstream. We saw a need to correct the balance by developing trusting relationships and honest, open communication before embarking on our collaborative work.

Trudy Inkamala, an Elder and traditional land owner, Rhonda Inkamala, a Western Arrernte Elder and experienced school teacher, and Margaret James, a non-Indigenous author and educator, worked together to develop a truly collaborative, 'both-ways' teaching resource which offers Aboriginal students with English as an additional language material they can relate to and engage with. Students from both Indigenous and non-Indigenous backgrounds gain insight into traditional stories and Aboriginal languages.

We have anecdotal evidence of Aboriginal students engaging with the material and to a greater extent, taking the lead in classroom discussions, compared with when they discuss other reading material. We have anecdotal evidence of an increase in understanding and awareness of Aboriginal languages and culture amongst non-Indigenous students, after reading the material.

We feel that only through trusting relationships can people truly collaborate. We feel that Aboriginal children become proud and engaged when presented with material they can relate to and feel ownership of. We feel it is vitally important to have Elders and communities collaborating meaningfully in the education of their children, and that involvement in resource development is a stimulating, powerful way of doing this. This benefits both the Elders and the collaborators, while the first-prize winners are the students.

The Australian Curriculum: From content to concepts





Tania Lattanzio, Innovative Global Education, Singapore Andrea Muller, Innovative Global Education, New Zealand

Abstract

Innovative Global Education's area of expertise is curriculum design and instructional development with a focus on conceptual curriculum. We undertook dialogue with leadership, planning processes, teacher reflection and classroom observations. The evidence gathered showed a need for models and structures to assist in the transition from a content-based curriculum to a conceptually driven curriculum.

Action taken was to collaborate with leaders and teachers on structures and approaches to manage this shift. Models were designed to support and sustain the understanding of concepts through a variety of professional learning approaches, such as team planning, mentoring, coaching, modelling and co-teaching.

To support the development of conceptual practice, a range of Innovative Global Education Models evolved. The models provided a shared conceptual approach to planning, teaching and assessment. These models were collaboratively piloted with leaders, teachers and students and continually reviewed and evaluated. The result of this process was *Taking the Complexity out of Concepts*, a practical resource to support a conceptually driven curriculum.

Observations and dialogue with students suggest that connecting students to concepts has enabled students to understand and access the conceptual ideas from the perspective of the unit and in the context of the world beyond school. Results of student assessment for understanding provided further evidence of student engagement with conceptual learning.

Teachers have frequently stated that explicit teaching of the instructional strategies documented in Taking the Complexity out of Concepts has improved the learning outcomes for students. By instructing students on what concepts are, how they work and why they are important, teachers are better able to support the development of each individual's conceptual framework.

Closing the Gap in numeracy classrooms in remote Aboriginal communities

Kim McHugh, Association of Independent Schools, WA Vondine Munday, Kulkarriya Community School, WA Interrogating numeracy portal data in independent schools in Western Australia identified two particular groups of students that required numeracy interventions. The first group were in classes where the majority of students were finally achieving at expected level, but there were students still performing up to two years behind the expected level. The second group were in classes where most students were lower than expected level, and some students were even further behind.

In many remote schools, teachers are predominantly young, inexperienced and unable to cater for such a diverse range. At the beginning of 2015, I suggested to the principal and curriculum leader at Kulkarriya Community School that we work together with the Aboriginal Education Workers to close the gap.

The aim of the collaboration was to increase teachers' confidence and understanding of maths. Funding allowed extra visits and resources to schools. Together, staff members from the Association of Independent Schools and Kulkarriya Community School worked through activities that teachers would use in coming weeks. Together we identified literacy issues and where and why students struggle. The school curriculum leader continued this between my visits. The principal expected Aboriginal Education Workers to attend sessions, value their tub of resources and engage in classroom activities. Teachers were expected to ensure Aboriginal Education Workers had opportunities to work with at-risk students.

Students have individual numeracy targets based on achievement data. Data entered onto the numeracy portal has a date assigned, making it possible to track the rate of progress for every student. Some students managed to catch up over one year.

We achieved many things this year. Aboriginal Education Workers saw how important a role they played in the process and came to value and confidently use resources in our meetings and the classroom. They know strategies and can explain them. They ask to work with students and the students benefit from one-on-one or small group attention. This is achieveable in any school where time and a small amount of funding are available. Teachers come and go; Aboriginal Education Workers are the constants in the school. Investing in Aboriginal Education Workers gives invaluable support in classrooms.

PRESENTER BIOGRAPHIES

Karena Aczel is an experienced primary school educator. She has more than 15 years of experience in classroom teaching and school leadership roles. Karena has a deep knowledge of curriculum, which she has used to develop and implement varied school programs. Karena is datadriven and collaborative in her pedagogical approach. She is Head of Curriculum/Librarian at Bribie Island State School.

Cass Ahern has worked as a classroom teacher and pedagogy coach in Queensland. As Cluster Head of Curriculum for the Department of Education and Training, Darling Downs and South West Region, she provides support to 13 schools with varying contexts, including small schools and Prep—Year 12 schools. Cass has a passion for working with educators – from graduate teachers to school leadership teams – to help build their capacity in systematic curriculum delivery, delivering contextualised explicit instruction and supporting regional projects.

Dr Nicole Archard is the Dean of Academic Studies at Wenona School, New South Wales. She has presented at national and international conferences on the topics of women and leadership, and girls' education; and she has published numerous academic articles in these areas. Her qualifications include a Bachelor and Master of Arts, Diploma of Education, Master of Educational Leadership, Master of Theological Studies, and Doctor of Philosophy focused on girls' education, women and leadership. Her current research interests include girls and science, technology, engineering and mathematics (STEM) fields, particularly in relation to girls' identity, self-concept and efficacy.

Sarah Asome, a teacher at Bentleigh West Primary School, Victoria, has a passion for students who learn differently. She is trained in the Multisensory Structured Language approach and is an Associate Member of the Australian Dyslexia Association. Sarah appeared in Outside the Square, a DVD used for professional development in relation to dyslexia, and explicit literacy and language instruction. In her current role, she screens and provides intervention for students in their first year of school, and assists with dyslexia support groups and professional development for teachers. In 2015, she was named an Outstanding Primary Teacher at the Victorian Education Excellence Awards.

Bohdan Balla-Gow is a Head Teacher Teaching and Learning (Stage 5) who has been relieving as Deputy Principal for a year at a partially selective secondary school in Sydney. He led the network that developed and evaluated the sustainable district-wide engagement program for high-ability youth, which is now in its fourth year. Bohdan holds a Bachelor of Science with distinction, a Graduate Certificate in Outdoor Education, a Master of Teaching and a Master in Education (Gifted Education) through the University of New South Wales.

Alister Bartholomew is an educator who currently works in schools across Queensland as a community partnerships officer for the Queensland Department of Education and Training. His work enables him to share the inherent wisdom, stories and insights from his Torres Strait Island heritage in classrooms across the state. His work brings teachers and students from all cultural backgrounds together to connect and better understand one another as fellow human beings sharing a fragile planet.

Mitch Bartholomew is an Executive Teacher at Richardson Primary School, ACT. Mitch has been a teacher and school leader since 2010, and he is committed to focusing his leadership on instructional strategies that will have the greatest impact on student learning. His focus is on promoting collaboration, building teacher capacity and valuing the power of collective accountability. He is a passionate advocate for public education who works closely with staff, students and the community to provide meaningful and personalised learning experiences for all students.

Marg Batt is Principal at St Anthony's School in Noble Park, Victoria. Marg is a passionate advocate for the importance of a high-quality education for all children including those who are most disadvantaged. Marg promotes high expectations of teachers and students, and she has worked to build the school as a core social centre in the local community. Marg has developed partnerships with local services, agencies and other schools to increase access to services, programs and holistic support for children and families. Marg believes that schools have a pivotal role in building social capital in the community, and that social connectedness between families and communities supports children's development and educational outcomes.

Douglas Baxter is the Head of College Assessments and Reporting at Beaconhills College, Victoria. This role has been developed to explore how stakeholders access student information across both campuses of the College. Working with a number of leadership teams, the role has assisted in transforming the processes for staff and students to access useful data to inform teacher practice

with individual students. Douglas has a Master of Education in Information Technologies, and he is in the process of completing the ACER Graduate Certificate of Education (Assessment of Student Learning).

Judith Bertolin is the Deputy Principal, Teacher Quality at the Canobolas Rural Technology High School in Orange, New South Wales. She has extensive experience in implementing innovations in pedagogy and curriculum and currently drives improvements in quality teaching and learning at her school. Judith was the recipient of the NSW Department of Trade and Industry Scientist of the Year award in the education category in 2011 and a finalist in the National Prime Minister's Prizes for Excellence in Science and Science Teaching in 2012. Judith has qualifications in education and applied science.

Chad Bliss is Principal of the Canobolas Rural Technology High School in Orange, New South Wales. Chad has a passion for leading educational innovation and change. Over the past eight years, across three schools in New South Wales, Chad has led the school executive and teaching staff along a journey to deliver better outcomes and opportunities for students through innovation, collaboration, and a culture of high expectations and success. Chad has qualifications in education, health and physical education.

Dawn Boland is Head of Year 9 and an Exemplary Teacher from John Paul College in Daisy Hill, Queensland. She enjoys working in her role in pastoral care and supporting students, and is also passionate about creativity and design thinking in education. In 2015, Dawn was awarded the Cooper Hewitt Fellowship from the Queensland Government to spend three months studying in New York at the prestigious Cooper Hewitt, Smithsonian Design Museum where she researched curriculum design and design thinking.

Jason Borton has been an educator in the ACT public school system since 1996. During this time he has worked across a number of school settings as a classroom teacher. Since 2004, he has been a school leader in three different schools before being appointed the Principal of Richardson Primary School in 2012. For the past two years, Jason has been the President of the ACT Principals' Association and has represented the ACT at national level council meetings. Jason has also been a member of the Principals Australia Institute change team, which developed the principal certification initiative. He is a dynamic leader who is committed to implementing innovative practices catering for the needs of 21st-century learners.

Nicholas Brice is an enthusiastic educator and coordinator who holds a deep-seated passion for education. He has honed and used his organisational, collaborative and leadership skills at previous positions within both middle

and senior school at Mercedes College, Eynesbury College and Concordia College in South Australia. He is now enjoying his position as head of senior school at Pulteney Grammar School. Nicholas prides himself on being a teacher and manager who students and staff alike view as knowledgeable, fair, creative and open. His true passion lies in developing pastoral relationships and curriculum that ensure the health, wellbeing and safety of young people.

Lauren Brooks joined Our Lady of the Sacred Heart Catholic College, Alice Springs, in 2012 as the Head of Physical Education. In 2015, Lauren became Head of Senior Curriculum for Years 9–12. Updating the curriculum policy, implementing Visible Learning and exploring new ways to track students' academic progress were top priorities. Lauren holds a Bachelor of Education (Human Movement and Health Education) from the University of Sydney, and she is currently studying a Master in Educational Leadership with the Australian Catholic University.

Malena Cahill has worked in the public education system for the past 40 years, and she still loves teaching children and is always looking for the magic wand to unlock children's cognitive understanding. Malena has been an Australian Institute for Teaching and School Leadership trained assessor and level 3 classroom assessor for the past 14 years. She uses her experience as an assessor to mentor aspirants in both primary and secondary establishments. Malena is also co-author of 'Key Into Literacy' publications, drawing on her classroom experiences to share best practice; and was a literacy consultant for the Department of Education for three years. She is a grandmother to six children in primary school and takes a keen interest in their learning. Malena is currently Deputy Principal at Dardanup Primary School.

Steven Capp is Principal of Bentleigh West Primary School, Victoria. Steven has significant experience in leading pedagogical changes to cater for a diverse range of student needs. Steven started teaching in the primary sector and was recruited to McClelland Secondary College after completing a Master in School Leadership. As Assistant Principal at McClelland, he led teams in personalised learning in Years 7 to 9 and in the Victorian Certificate of Education; and he implemented pilot programs working with disengaged students, resulting in the establishment of an outreach educational arm to educate students in residential care.

Penny Carlson is a Project Specialist in the School Engagement and Partnerships portfolio at the Australian Sports Commission. This portfolio seeks to enhance the experience of sport in Australian schools, developing connections between the sport and education sectors. Prior to her current role, Penny worked on teacher professional learning and performance and development at the Australian Institute for Teaching and School Leadership. Penny is a former teacher whose experience includes a number of curriculum leadership roles. She has also worked in the not-for-profit sector, implementing wellbeing programs in schools nationally.

Melissa Carson is a secondary English teacher. As the Coordinator of Innovative Learning at Oakhill College, she is responsible for overseeing various projects to facilitate change. Melissa was awarded a research grant from the Association of Independent Schools, NSW, in 2014. She co-authored the article, 'Pulling no Punches: Change Management at Oakhill College', published in *The International Journal Of Educational Organization and Leadership*. Melissa is a recipient of a Leadership Award by the NSW branch of the Australian Council for Educational Leaders.

Dr Christina Chalmers is a lecturer in Mathematics and Technologies Education in the School of Curriculum at Queensland University of Technology (QUT). Chris currently leads the Robotics@QUT project, which is a support network developed to assist teachers and students from more than 50 schools in low socioeconomic areas, engaging in robotics-based science, technology, engineering and mathematics (STEM) activities. Chris is involved in research projects focusing on technology, robotics, social skills, computational thinking and STEM. Chris has been involved in a large research project, General Technology Teacher Training in China, working with 420 teachers from 32 provinces to engage the teacher in furthering their knowledge and understanding of how to integrate robotics into their technology lessons.

Ciara Chaomhanach is the Cross Campus Teaching and Learning Leader of Oakwood School. Ciara has worked as travelling teacher for Mansfield Autistic Centre, a sexuality and healthy relationships educator, and a teacher in a range of primary and secondary settings, in both state and independent sectors, in Australia and Ireland. Ciara holds a Graduate Diploma in Adolescent Health and Welfare, and she recently completed a Master of Education in Specific Learning Difficulties.

Melanie Clark is originally from Perth and has spent 25 years in Australian public, Catholic and international schools, including International School of Ulaanbaatar in Mongolia and St Patrick's Elementary School in Ontario, Canada. In 2014, Melanie moved to Bunbury, Western Australia, where she is the Principal of Dardanup Primary School and a member of the Collie-Preston Network of schools. Melanie is passionate about classroom teaching and learning, and is particularly focused on connected learning through the co-construction of criteria and gaining feedback with students to enhance student learning.

Loren Clarke is the Curriculum and Data Leader at Eltham High School. She oversees curriculum development and assessment practice at the school, including the development of assessment practices to understand the development of 21st-century skills in secondary education. Loren is also an English and Extended Investigation teacher. She has completed her Master of Teaching and Master of Education at the University of Melbourne. Loren is currently undertaking a PhD in Education at the University of Melbourne, focusing on the development of literacy in interdisciplinary subjects.

Nicholas Cook has been teaching secondary English in Sydney for 12 years, and is currently employed at Oakhill College, where he is the Assistant Coordinator of English. He has master's qualifications in education and English literature, focusing on constructivist theory and literary theory respectively, and sustains keen professional interests in change management and the impact of disruptive technology on education. Most recently he co-authored the article, 'Pulling no Punches: Change Management at Oakhill College', published in *The International Journal Of Educational Organization and Leadership*.

Michelle da Roza is Assistant Principal – Curriculum at St Mary MacKillop College in Canberra. She has extensive experience in teaching at Secondary level as an English and Ancient History teacher, English Coordinator, Literacy and Numeracy Coordinator, and Teaching and Learning Coordinator. She has presented at a number of national conferences in the areas of curriculum, mentoring and promoting collaboration between schools. Michelle is writing her doctoral thesis on the impact of large-scale standardised testing on teacher identity and pedagogy in ACT secondary schools.

Shelley Davidow is an award-winning international author of 40 books, including *Raising Stress-Proof Kids* (2014, 2015, AU, UK, USA, Poland). She is also an educator and researcher with a Master of Education and a Doctorate in Creative Arts. After 20 years of school teaching and seven years as head of secondary English at the Noosa Pengari Steiner School in Queensland, Shelley currently teaches creative writing at the University of the Sunshine Coast and runs professional development workshops nationwide.

Dannika Davis is a speech pathologist based in Queensland. She has worked with many schools to develop students' vocabulary through building teachers' capacity to deliver contextualised explicit vocabulary instruction. Dannika has a Bachelor in Health Science and a Master of Speech Pathology.

Margaret Downey is Head Teacher of the Middle School at Sarah Redfern High School, a position created as part

of the complex change occurring at the school. Margaret developed and led a team to build a unique middle schooling model and established strong partnerships with the Community of Schools, which was recognised with a Director's Choice Award. Margaret also has extensive experience at a regional level with the NSW Department of Education, consulting school communities on students with disabilities accessing the curriculum Kindergarten to Year 12. Margaret has received teaching awards and commendations for her valuable contribution to literacy and transition programs.

Dr Helen Drennen was appointed Principal of Wesley College, Victoria, in June 2003. She is the first female principal in the 149-year history of Wesley College. Throughout her career, Helen has had many educational leadership roles in Australia and overseas. Since 2003, Helen has overseen many new developments at Wesley College. She was a member of the International Baccalaureate Board of Governors from 2009 to 2015. She is currently a Trustee of the Shrine of Remembrance in Victoria, and a member of the Monash University Council. Helen is a Fellow of the Australian College of Educators and the Australian Council for Educational Leaders. This year, Helen was recognised in the Australia Day Honours list as a Member (AM) in the General Division of the Order of Australia.

Hayley Dureau is Head of Student Leadership and a mathematics teacher at Mount Waverley Secondary College, Victoria. Winner of the 2015 Victorian Student Representative Council Teacher Advisor Award, Hayley developed a college-wide student leadership program, and has shown how genuine student voice can be used to improve student morale and connectedness to school. Passionate about enhancing student learning by improving relationships between staff and students, Hayley introduced the Teach the Teacher program, giving students the opportunity to provide feedback and discuss their learning with their teachers. Hayley has presented to pre-service mathematics teachers at the University of Melbourne and Deakin University; and as a Texas Instruments Teacher Trainer, Hayley has presented at various mathematics conferences, including the 2015 MAV and MAWA conferences in Melbourne and Western Australia, and the 2015 T3IC conference in Dallas, Fort Worth.

Karen Endicott is Principal of Sarah Redfern High School (SRHS), New South Wales. Karen has been involved in education in a variety of leadership and management positions, including in policy, curriculum, professional development, human resources and VET at regional and state level. At SRHS, Karen designed innovative curriculum and management structures, and built a collaborative community of schools and strong partnerships with outside

organisations to enhance the educational outcomes for all students. The school has won numerous awards for its innovation. Karen was recognised for her innovation as a finalist in the prestigious NSW Telstra Business Women's Awards in 2015.

Sheri Evans has had extensive experience leading innovation in the areas of leadership and equity at a school, regional and state level. In her current role with the Institute for Professional Learning WA, she has dedicated herself to working with school leadership teams to develop professional learning communities focusing on improving student outcomes.

Susan Evans is an educator, Queensland Education Leadership Institute Coach and Regional Project Officer for the Darling Downs South-West Region of the Department of Education and Training, QLD. She is passionate about education and building the capability of others. Her skill lies in linking pedagogy to learning through the use of purposeful data and genuine collaboration. Susan has had various school experiences within Melbourne, London, Toowoomba and Stanthorpe. These diverse places introduced her to the importance of relationships, the diversity of individuals and their ideas and the power of communication. The one common feature has been to work with both children and adults to help them achieve their absolute best.

Christopher Eveans is the Principal of Robina State School, Queensland. He has been an employee of the Queensland Department of Education and Training since 1979, and has held principal roles since 1985. He was appointed to Robina State School in October 2012. Christopher is a Life Member of the Queensland Association of State School Principals.

Dominic Fecteau has worked as an educator in a variety of schools over his 10-year career. Currently he is working as a Years 5 and 6 Module Leader at Our Lady of the Sacred Heart Thamarrurr Catholic College in the remote Indigenous community of Wadeye, NT. Dominic is a Regional Classroom Profiling Trainer, certified by the Classroom Profiling Association. He has a particular passion for creating positive classroom environments and assisting teachers and students to achieve together.

Amadeo Ferra is Principal of McClelland College, a government school in a low-socioeconomic area of Frankston, in Victoria. Amadeo worked as a croupier and supervisor at Crown Casino's exclusive Mahogany Room before deciding that being a school teacher would be a far more fulfilling vocation. He is a fierce advocate for government school education, and in particular for his school community, where he currently has two of his four children attending.

Jenny Fietz is a foundation member of Meridan State College and Deputy Principal and Head of Learning Enhancement. She began her career as an early childhood teacher and has worked throughout all levels of education from kindergarten through to university students. Jenny passionately believes in assisting individuals, both students and staff, to realise and reach their potential throughout their learning journey in education. Jenny has particular interests in higher order thinking, and creative and innovative pedagogy. She has engaged within diverse teams of professionals in both the private and public education sectors.

Brett Foster is the Director of Innovative Learning at Stella Maris College. This role involves the strategic implementation of innovative learning, which encompasses technology to enhance pedagogy and 21st-century learning skills. He is a highly experienced educational leader who has held deputy principal positions in three states. He has had experience in public, Catholic and independent schools, and has worked in coeducational and single-sex schools (both boys and girls). Brett's role is to initiate, champion and implement change so that learning at the College is innovative, technology-rich, sustainable and progressive. He leads and supports teachers in the successful use of learning technologies and 21st-century learning skills aimed at improving student outcomes.

Paul Gavin is Manager of Strategic Planning at Sarah Redfern High School located in the socioeconomically disadvantaged New South Wales suburb of Minto. Paul was instrumental in the design and implementation of a program to support and promote high-achieving students at the school. Through forging strong collaborations with the University of Western Sydney and the Australian Business and Community Network, he has been able to provide opportunities for students to engage in real-life experiences beyond the classroom. These experiences have enabled students to make positive life-changing decisions about their future. Following a teaching career of some 37 years, in 2015 Paul was awarded the Pride of Australia Inspiration Medal as 'a role model whose compassion and wisdom while teaching, coaching and mentoring our youth has been truly inspiring'. Paul has a Master of Education (Practitioner Research).

Bo George is the Teaching and Learning Coordinator at Mercy College, Mackay. Bo has more than 20 years of experience in the education sector, including in specialist advisory and consultancy roles both in Australia and overseas. His career focus and passion is for developing sustainable whole-school improvement processes for the benefit of young people and staff. As a mixed martial artist and amateur cage-fighter, he has learned the importance of

strategic focus, resilience and disciplined effort to secure improvement and achieve success.

Kristy Grady is an Executive Teacher Professional Practice at Richardson Primary School. Kristy has been an educator in the ACT for 14 years. She is a dedicated and enthusiastic professional who seeks understanding of best-practice and high-impact strategies to improve learning outcomes for students. Kristy began teaching at Richardson Primary School in 2007, and in this time she has worked as a classroom teacher and a member of the leadership team. In her leadership role, she has used instructional coaching to improve classroom practice and to build the capacity of teachers at Richardson Primary School.

Renata Grudic is College Head Teacher (Teaching and Learning) at Northern Beaches Secondary College, New South Wales. Renata is a passionate social sciences teacher with more than 20 years' experience in a variety of educational settings and leadership roles. She creates and delivers engaging programs that enhance student learning and wellbeing. She supports colleagues in building their capabilities and wellbeing through the development, delivery and coordination of professional learning at Northern Beaches Secondary College, which has 340 staff. Renata is also a Positive Behaviour for Learners Coach, a resilience trainer (The Resilience Doughnut), and she has completed a Professional Certificate in Education (Positive Education) at the University of Melbourne.

Meg Hansen is the Principal of Westbourne Grammar School. She has held this position since 2010. Prior to that, Meg was Principal of Lauriston Girls' School in Melbourne for 10 years. Meg is deeply interested in and engaged with the development of thinking and learning for all students. Meg is currently the chair of the Victorian Ecumenical System of Schools, the director of the Invergowrie Foundation, a Fellow of the Australian Council for Educational Leaders and a member of the Australian Institute of Company Directors.

Steven Harvey is the teacher in charge of Kalinda Primary School's award-winning Sport and Physical Education program. He is also his school's Facilities Manager and a School Sport Victoria Division Coordinator. By supplementing his curriculum-based program with clinic sequences endorsed by state sporting associations, as well as Australian Sports Commission offerings like Sporting Schools, Steve repeatedly engineers 'win-win-win' relationships in which his school, his students and their families, and local community organisations all benefit.

Rob Hassell is a Research Fellow at the Australian Council for Educational Research. Rob has more than 40 years of school-teaching and leadership experience in government and independent schools in Victoria, South Australia and Western Australia. This experience includes 12 years in international schools in Asia and Western Australia. Rob's professional passion is sustained school improvement supported by research. This work includes the collaborative use of classroom-based student data to inform improvements in learning.

Bernadette Hawker is a senior teacher with more than 25 years of experience in individual and collaborative teaching practices. She is currently working as a Master Teacher at Goondiwindi State High School, Queensland. Bernadette is passionate about pedagogy, and she is committed to promoting teacher efficacy and school improvement through teacher engagement in professional learning communities. Her current work focuses on the utilisation of a professional learning community using consistent practices across all subject areas to improve writing. The 2012 Telstra white paper, 'Quality Teaching for Personalised Learning: Leveraging Technology for Exceptional Results', identified her Master Class of 21st-century Learning as one of 17 programs in the nation using a distributed leadership model in effecting profound change and improvement in teaching practices, describing it as 'a model for the nation'.

Denise Hayward is the Director of Teaching and Learning at Tara Anglican School for Girls – Junior School, North Parramatta, New South Wales. In 2015, Denise was awarded the Tara Threads Staff Scholarship. This provided an opportunity to research current theories and evidence underpinning the purposes and principles of assessment and feedback. Through undertaking the Australian Council for Educational Research's Graduate Certificate of Education (Assessment of Student Learning), attending conferences and working with colleagues from around the country, Denise aimed to transform assessment at Tara into a meaningful, relevant and accessible tool to enhance student learning.

Jayne Heath is the Director Professional Learning Services of the Australian Science and Mathematics School. She has qualifications in education and professional learning and has worked in secondary schools for more than 30 years. As Director Professional Learning Services, Jayne is responsible for designing the professional learning environment to support teachers to work in the internationally renowned Australian Science and Mathematics School. A key role has also been to build capacity for innovative approaches to science and mathematics education at a statewide level. Jayne has co-authored many nationally and internationally published articles on professional learning, and she is actively involved in collaborative national and international work focused on transforming schooling. As a school leader, Jayne is interested in factors of influence that afford development of professional capital and quality outcomes for all learners.

Dr Sandy Heldsinger is leading the introduction of the Brightpath assessment and reporting software in schools. Brightpath is an innovative approach to assessment and reporting, and is the result of over a decade of research at the University of Western Australia to find a way of obtaining reliable teacher judgements. Sandy coordinated the WA system-level assessments, has taught a master's level course in educational assessment for many years and has led the development of a range of resources, including reporting software, to support schools in using assessment to improve student performance. Sandy recently developed the central components of the Western Australian Curriculum Outline for Western Australia's School Curriculum and Standards Authority and the NAPLAN Assessment Frameworks for the Australian Curriculum, Assessment and Reporting Authority. Sandy co-authored What Teachers Need to Know About Assessment and Reporting, which was published by the Australian Council for Educational Research.

Julie Henderson is a Master Teacher at Talara Primary College. In this role, she has provided leadership in the enhancement of pedagogical practice through a focus on the school's Three Pillars of Numeracy. With more than 25 years' experience in learning support and education, Julie has improved the capacity of school teams to use evidence-based assessment to inform teaching and learning, and she has developed and established productive partnerships within and across schools. This has contributed to results that place Talara Primary College in the top improvers on the National Assessment Program for Numeracy.

Alicia Hoddle is Principal of Leigh Creek Area School, South Australia. After being raised in Adelaide's CBD, Alicia worked as an English teacher, firstly to Whyalla and then to Leigh Creek, in the outback of South Australia, where she met her future husband. After a short stint back in Adelaide, Alicia made her home in Leigh Creek and has worked in various roles at the school over the past 20 years.

Belinda Holmes is Student Services Coordinator at St Andrews Lutheran College, Queensland. She leads a team that provides holistic services, case management and support to junior school students in the areas of learning enrichment (gifted and talented), specific skill development and behaviour modification. As part of her role, Belinda is required to identify, design, present and facilitate high-quality professional learning opportunities to staff. Belinda has more than 15 years' experience in education and will complete her Doctorate of Philosophy at the University of Southern Queensland in 2016. Her research is focused on educational leadership, with a specific emphasis on school improvement.

Rebecca Howell is a Senior Policy Officer with the Victorian Department of Education and Training. She leads a range of programs and initiatives related to Transition to School and the Victorian Early Years Learning and Development Framework. With a background in psychology and a passion for children's development and education, Rebecca has extensive experience in a range of early childhood policy and program areas within both state and local government. Currently, she is leading a new phase of the Supporting Reciprocal Visits project in two areas of Victoria, with a focus on supporting Koorie children and families in transition to school.

Clare lacono's teaching career includes working in country schools, a special education setting and mainstream schools. She has taught all primary year levels. She currently runs the Literacy Support Program at Spensley Street Primary School, working with students from Prep to Year 6. Her role also involves working with staff to provide professional development and resources to help them cater for learning difficulties within their class programs. Clare has provided professional development for schools on positive behaviour management and teaching social skills, including in special education contexts. Clare enjoys working with both staff and students.

Julia Inglis is an Education Consultant with the Professional Resources division of the Australian Council for Educational Research. In this role with ACER, Julia has conducted many workshops related to literacy and numeracy assessments, with a special focus on the Progressive Achievement Tests. Julia provides advice to schools about the selection of ACER assessments and programs, attends key national and state conferences and liaises with prospective authors to facilitate the publication of resources for education professionals.

Professor Lawrence Ingvarson is a Principal Research Fellow at the Australian Council for Educational Research. His major research and policy interests include teacher education and professional development, teaching standards and professional certification systems, and performance-related pay for teachers. He is a Fellow of the Australian College of Educators and a recipient of the Distinguished Service Award from the Australian Science Teachers Association (2001). In 2014, Lawrence was awarded the Sir James Darling Medal for outstanding and sustained contribution to Victorian education by the Australian College of Educators. Recent books include Assessing Teachers for Professional Certification: The First Decade of the National Board for Professional Teaching Standards. The book brings together the rigorous research and development work conducted on teaching standards and performance assessments by the National Board for Professional Teaching Standards in the United States.

Rhonda Inkamala is a Western Arrernte Elder and experienced school teacher. She was previously the cultural principal of Yipirinya School, in the Northern Territory, supporting programs to maintain cultural heritage and identity. She is multilingual and multicultural, being fluent and literate in the Western Arrernte, Luritja and Pitjantjara languages. Rhonda is passionate about her languages, considering that they define her cultural identity, and works to raise awareness of the importance of Aboriginal languages.

Trudy Inkamala is a senior Western Arrernte Elder, traditional landowner, inspiring storyteller, mother, grandmother and great friend of the founder of Honey Ants Readers, Margaret James. These 'two nanas', as they refer to themselves, have yarned and worked together since the early beginnings of the Honey Ants Readers and continue to do so. Trudy passes on her language and culture to the next generations through her gift for animated storytelling, her knowledge of several traditional languages (as well as Aboriginal English), and her love and knowledge of the environment.

Anthony Jackson is an Assistant Principal in a Prep–Year 12 special school setting, with 291 students on roll, 44 full-time equivalent teaching staff and 32 full-time equivalent education support staff. Anthony holds specific responsibility for leading curriculum, data and achievement across the school, including timetabling and daily staff resourcing.

Margaret James, author of the Honey Ant Readers, is an outspoken Aboriginal English advocate and teacher of English as a second language. She has spent many happy years working in various fields of education. Margaret has a Master of Education (Teaching English to Speakers of Other Languages). Collaborating closely with Aboriginal Elders, her passions and training in early literacy, singing, second language acquisition and equal access to education found themselves a home in her innovative, culturally and linguistically appropriate series of learn-to-read books for Aboriginal children. These include a program of English songs and rhymes, teaching English as an additional language, with accompanying professional development for teachers. Margaret is currently working on government-sponsored Aboriginal education projects.

Rick Jarman is Principal of Trinity College Gawler River School, a position he has held since foundation of the school in 2000. He is an experienced educator who has worked in schools across government and independent sectors in South Australia. Rick has held a range of leadership roles and management positions, and he has a Master of Education (Leadership and Management) from Flinders University. Rick thrives on challenges and is constantly exploring ways to improve teaching and learning.

Zoe Jeckeln has a Bachelor in primary and special needs education. From 2011 to 2014, Zoe worked in a London-based special school for students with medical and physical disabilities, autism, and multiple learning and communication difficulties. She was a classroom teacher and ICT coordinator for the school. This role allowed her to work with students from ages four to 17 on a weekly basis, create policies and procedures, develop the curriculum on a three-year rolling plan and collaborate with AAC specialists. Zoe returned to Australia in 2014 to work at Port Phillip Specialist School as a teacher.

Rochelle Jeffery is the Director of EduInfluencers in Sydney. Rochelle has 15 years' experience in the education sector, and currently works with educators and schools to assist teachers and leaders develop their practice through self-reflection and behaviour change. Her background extends to the university sector, where she has been responsible for the management of leadership and executive programs, working alongside some of the most dynamic, talented aspiring and emerging leaders around the world. She also has extensive experience working with students and industry partners to facilitate and coordinate integrated learning programs, and has assisted in facilitating pathways for minority students into undergraduate and postgraduate programs. Rochelle is also the National President for JCI Australia, part of Junior Chamber International. This is the largest youth organisation in the world. It encourages 18- to 40-year-olds to become active citizens in their communities through professional development opportunities that empower people to engage.

Bronwyn Jones is a Deputy Principal at Willetton Primary School, Western Australia. She has been working in promotional positions for more than 14 years. She has a considerable amount of training and experience in instructional leadership in schools. She has a Master of Educational Leadership and has just commenced work on her Educational Doctorate at the University of Western Australia. She is very interested in the use of formative assessment and feedback in classrooms and schools. This is something she is leading her primary school in developing through a Visible Learning approach.

Susanne Jones is Project Officer, Secondary Learners Directorate in the Learning Improvement Division of the Department for Education and Child Development (DECD) in South Australia. For the last four years, she has been working with teachers across the state in understanding and using the Australian Curriculum achievements standards to design assessment, moderate student work and report student achievement. She has provided professional learning in moderation and assessment with teachers from Reception to Year 12 and has presented at

state, national and international conferences. Susanne has worked with leaders and teachers to develop resources and materials that support curriculum change and processes to improve student learning. She is secretary for The Council of Education Associations of South Australia and committee member of the History Teachers' Association of South Australia.

Julie Kirk is Experian Australia's Human Resources
Director for Australia and New Zealand and head of
Marketing Services in the Asia-Pacific region. Originally
from London, Julie has worked in human resources
functional roles across education, insurance and technology
sectors, and holds a wealth of knowledge and experience
garnered from the global markets. Outside of her corporate
role, Julie works with local communities co-running
diversity forums.

Praveen Krishna is a Head Teacher Stage 6 at Sarah Redfern High School, New South Wales. He oversees the day-to-day running of Stage 6 cohort, and works collectively and collaboratively with the senior executive to develop and implement strategies to improve student outcomes and build capacity for teachers to improve their teaching and learning.

Greg Ladner spent 25 years in Australian public and independent schools, including Immanuel College in Adelaide and Presbyterian Ladies' College in Perth. In 2002, Greg moved to Hong Kong, where he has been a mathematics teacher and counsellor, and is currently an Associate Principal of Hong Kong International School. Greg is passionate about service learning and he leads a service project in Cambodia.

Deb Lasscock is a primary school teacher who has worked in a range of schools across South Australia with learners from early education to Year 7. Currently Deb works as a Project Officer at the Flinders Centre for Science Education in the 21st Century (Science 21) at a range of sites to develop mathematics curriculum in a way that will enable students to improve their executive functions, which relate strongly to the proficiency strands of the mathematics curriculum

Tania Lattanzio is Director of Innovative Global Education. This role involves developing and conducting professional development, modelling pedagogy in classrooms, developing and designing curriculum for schools and working intensively with teaching teams, to improve planning, teaching and assessment. A passionate educator, Tania works closely with educational institutions to specifically meet their needs through supporting school reform, making significant shifts in pedagogy and curriculum in both local and international settings. Tania has co-written a book, *Taking the Complexity Out of Concepts*.

Darlene Leach leads a small, dedicated team within the Victorian Department of Education and Training responsible for redrafting and implementing the Transition to School initiative, and redrafting and implementing the Victorian Early Years Learning and Development Framework (in partnership with the Victorian Curriculum and Assessment Authority). As an experienced early childhood professional with a career spanning more than 30 years (teaching, advising and policy management), Darlene's experiences include teaching in a variety of early childhood settings including kindergarten programs, long day care and occasional childcare services, supporting family day-care service provision, playgroups and early intervention.

Tania Leach is a Regional Project Officer in the Darling Downs South West Region for Education Queensland and member of the Leadership Research International at the University of Southern Queensland. Tania's role has a strong focus on Educational Research. She has a Master in Curriculum and Pedagogy and is a current Doctoral Candidate with a focus on leadership roles promoting system coherence. She has taught students from Prep to Year 12, worked within the roles of Head of Department and Principal, and is guest lecturer at the University of Southern Queensland. Tania's current regional and interregional projects include 'Purposeful pedagogy: improving numeracy outcomes' and 'Collaboration at a system level – findings, possibilities and future implications'.

Michael Lee is Principal of St Mary MacKillop College. Previously he was Principal at Hennessy Catholic College and Mt Carmel School, and he has held curriculum leadership roles in New South Wales and Victoria. Michael was awarded the Gandel Scholarship for Holocaust Studies in 2014. He is a Fellow of the Australian Council for Educational Leaders and the Australian College of Educators; he has held executive positions with the Catholic Secondary Principals of Australia, the Archdiocese Principals Association of Canberra and Goulburn, and the English Teacher Association of New South Wales; and he is a current Board Member of the ACT Quality Teacher Institute.

Shane Loader is a Mathematics Coordinator who has been teaching in Port Augusta, South Australia, for the past 12 years. For the past four years, he has been a numeracy coach, first in Port Augusta Secondary School and now across the 17 schools and preschools that make up the Port Augusta/Quorn Partnership. A major part of Shane's role is managing the Empowering Local Learners Project, which aims to improve students' maths outcomes through a focus on improving executive functioning. Shane has a passion for ensuring that problem-solving and reasoning play a pivotal role in his students' mathematical development.

Ned McCord is the Executive Director of the Yiramalay/ Wesley Studio School. From 2003 to 2012 he was the Director and Business Coordinator of the Bunuba Cattle Company, Leopold Downs and Fairfield Station, and he has extensive experience in the management of broadacre cattle properties across northern Australia and the development of beef cattle herds suitable for the live export market. Ned is a former non-executive director of Livecorp and a member of the Live Export Research and Development Advisory Committee. Ned has worked collaboratively with Aboriginal pastoralists in both the Northern Territory and the Kimberley. He was a member of the Governing Council and Chair of Kimberley Training Institute from 2003 to 2012. The Teacher Registration Board of Western Australia recently granted Ned limited registration as a teacher.

Ailsa MacFie is Assistant Principal of Tiwi College in the Northern Territory, a weekly boarding school for students from remote communities on the Tiwi Islands. She has been working in the Northern Territory for four years, and is passionate about increasing students' access to education through improved literacy levels. Her teaching background also includes four years teaching at Scotch College in Victoria and two years of teaching English as a second language in Japan. She believes that all teachers can benefit from learning more about how language works and how their students use language.

Stephen McGinley is the Head of Education at Beaconhills College, Victoria. The Head of Education role works across two campuses with key members of the leadership teams to coordinate the college education strategic plan. This role involves overseeing e-learning, professional learning, curriculum design and development, and teaching and learning practices. One of the key initiatives as part of the college education strategic plan is the development of more effective assessment and reporting practices.

Karen McMahon is Principal of Trinity College Blakeview School. Previously, she has held a variety of roles within the school and college, most notably as Head of Junior School. Karen holds a Master of Education with a specific focus on gifted education, with graduate and postgraduate qualifications in psychology, education and distance education. Karen has been involved in education for 29 years. Her particular passions are the implications of neuroscience for effective and empowering educational practice, and the use of data-based decision-making.

Bruce McPhate is Principal at Katandra School, a primary special school for students with a mild intellectual disability. He has a Master of Education. Bruce has worked in secondary mainstream schools, special schools and mental health settings as well as in policy development in disability

services (Department of Health). He has presented on a number of educational issues.

Robyn Marsh is the Coordinator of the DDSW Project 600 team. This online project teaches Year 4 to Year 9 students in regional schools, delivering explicit lessons in reading and numeracy problem solving. The online Project 600 has been successfully operating in the region over the past four years, reaching students and teachers in many of the region's schools. Robyn has many years' experience teaching, having taught from Prep to Year 9. She is a senior teacher, who has worked as Head of Curriculum, and she has been teaching online with Project 600 since its inception in 2013. Robyn has worked collaboratively with Project 600 teams from Brisbane School of Distance Education, Central Queensland, Metro and South East Region. She is currently designing and presenting professional development programs on OneChannel around effective pedagogical change using problem-solving strategies.

Robert Marshall is Senior Project Director of School Improvement at the Australian Council for Educational Research. Robert's role is focused on using the National School Improvement Tool framework to assist schools to improve their performance and develop evidence-based school improvement plans. Prior to ACER, Robert worked primarily at independent schools, including as Director of Learning at Westbourne Grammar School, Head of the Clunes Campus at Wesley College, Head of Faculty at Caulfield Grammar School and Head of Boys' Boarding at Girton Grammar School.

Angela Mason has 13 years' teaching experience in both metropolitan and rural areas of Queensland, and is a senior English teacher at Craigslea State High School in north Brisbane. She is a member of the English panel overseeing moderation and verification of school-based assessment and she has expertise as an instructional coach. Angela's special interests are literacy and reading.

Professor Geoff N Masters AO is Chief Executive Officer and a member of the Board of the Australian Council for Educational Research – roles he has held since 1998. Professor Masters also heads ACER's Centre for Assessment Reform and Innovation, which promotes a view of assessment as the process of establishing and understanding where students are in their learning and development at the time of assessment and of monitoring progress over time.

Kim McHugh is a Numeracy Consultant for the Association of Independent Schools Western Australia.

Brett Moffett is Head of Mathematics at Hervey Bay State High School, Queensland. Brett is a mathematics and science teacher with 27 years' experience. Through his passion for teaching, teamwork, effective communication skills and initiative, he has been a Head of Department (Mathematics) for the past 18 years. Brett also has experience teaching various mathematics education subjects at the University of Southern Queensland since 2010.

Sally Moloney is an experienced special education teacher at Katandra School. Over the past two years, Sally has been sharing her extensive knowledge and experience with teachers at mainstream schools where students' intellectual disability, engagement difficulties and/or behavioural concerns have been identified. She provides a visiting 'coach' service and supports resources that increase the confidence and capacity of teachers to support children with additional needs enrolled in mainstream schools

Jon Morley is Assistant Principal at Gisborne Secondary College. His main focus is curriculum, teaching and learning. Before becoming an assistant principal, Jon taught English, literature and humanities. He still teaches senior literature at the College.

Andrea Muller is an experienced teacher, consultant and author. She works in a range of global settings. She is currently a consultant and Regional Director for Innovative Global Education, working extensively in schools to lead sustainable models for professional learning. These models involve developing and designing curriculum frameworks and working in partnership with teams to review and refine planning, teaching and assessment that support current and researched educational practices. Andrea is a co-author of the book *Taking the Complexity Out of Concepts*.

Philippa Mulqueen is a specialist classroom teacher at Pakuranga College, Auckland, New Zealand. Her role involves supporting the growth of beginning teachers through the implementation of an educative mentoring approach. In addition, she helps lead professional learning in the school and works as a learning coach with more experienced teachers. Her goal is to help teachers implement effective teaching practices and maintain a purposeful learning environment that engages students.

Vondine Munday is an Aboriginal Education Assistant from Kulkarriya School in Western Australia.

Peter Muraay Djeripi Mulcahy is a Gamilaroi man, professional artist and cultural educator. His work involves students from Prep to Year 12, adult personal development and speaking engagements, including at universities. The many and varied classes include: English (story writing, storytelling and Dreamtime roleplay); Aboriginal art and story; Indigenous Studies (history, culture, roles and responsibilities, spirit and beliefs, society, connection to country and true cultural and environmental sustainability);

History (understanding an Aboriginal perspective preand post-occupation); and Study of Religion (Aboriginal Spirituality and crossover understandings), with Christian and independent schools and with the University of the Sunshine Coast. He also works with solely Aboriginal groups and classes including weapon-making, with true process from tree to artefact, and men's yarning. Lastly, he is involved in cultural school camps for Indigenous students, covering identity, all aspects of culture, art, games, story and role-play. He says, 'I am beyond passionate for what I do and I would love all Indigenous and non to know my work is all about learning how to be more whole, strong and Australian.'

Sandra Murphy is Campus Principal of Oakwood School in Noble Park, Victoria. She has worked in a range of educational settings, including mainstream and alternative schools across Victoria, TAFEs and regional coaching programs. She has twice been involved in setting up a new school, and she has a deep understanding and appreciation of the hard work and commitment that is required. Sandra takes great joy in nurturing and developing a team of committed educators with a shared vision. Providing the best possible education for vulnerable young people challenges and inspires her on a daily basis.

Sophie Murphy is completing a PhD under the supervisor of Professor John Hattie at the University of Melbourne. She is researching effective classroom questioning, discourse and surface-to-deep-level learning and the links this has with thinking. Sophie has been teaching and has held leadership positions for the past 20 years, leaving her ELC–12 position as the Director of Learning Potential at Westbourne Grammar at the end of 2015. Sophie will continue to work with Westbourne Grammar as researcher, bringing together educational research and practice. Sophie completed her Masters by Research with John Hattie as her supervisor in 2015.

Dr Tom Nehmy is a clinical psychologist with more than 10 years' experience. His passion is preventing psychological problems in children and adolescents while enhancing resilience and wellbeing. His doctoral research in developing the Healthy Minds Program was awarded the 2015 Flinders University Vice-Chancellor's Prize for Doctoral Thesis Excellence. He currently works with school students, parents, teachers and counsellors to help school communities build psychological skills for mental health, wellbeing and resilience. Tom has co-authored nine scholarly articles in peer-reviewed scientific journals and is an accredited training supervisor with the Psychology Board of Australia.

Gail Nelson is the Deputy Principal for Autism and Special Educational Needs at Canning Vale College in Perth,

Western Australia, where she has responsibility for the Autism Specialist Program and whole-school literacy and numeracy. She has a Master in Educational Leadership and specialises in Autism spectrum disorders, and literacy and numeracy intervention. Gail has more than 20 years' experience supporting people with special educational needs both within educational settings and within the community, where she organises a community group, Aspergers Support in Perth: Information and Education (ASPIE), to support young people with high-functioning autism and Asperger's syndrome, and their families.

Dr Bronte Nicholls is Director of Innovative Pedagogy at the Australian Science and Mathematics School in Adelaide. She has been a leader in both government and non-government schools and held positions with statewide responsibilities in the Department for Education and Child Development, the Future SACE Office and SACE Board. She has been involved in senior secondary curriculum and assessment development in science since the late 1980s. One of her current interests is developing a 'teacher pedagogical round' process involving teacher observations with input from senior students to improve classroom practice and ensure improved learning outcomes for all students.

Dr Patricia Norton is Master Teacher at Craigslea State High School, Queensland. Previous roles over an extended career in education in Queensland have included teacher (primary and secondary), Head of Department (English), Dean of Studies (Prep–Year 12) and Lecturer at University of Southern Queensland. Her doctoral research was in teacher learning, which remains a focus.

Chris O'Connell is Principal at St Gerard's Primary School, Dandenong North, Victoria. Chris has spent much of his professional life working in disadvantaged areas. He is passionate about students from these areas having the same right to access opportunities and pathways as their peers, irrespective of the suburb in which they live. Chris is proud that his students are achieving above the national average on performance and growth indicators. He believes that this is partly a result of this mission to grow a school community that expects and delivers high learning and developmental outcomes in all aspects of a student's life. Chris promotes collaboration within and beyond the school community, seeking external partners to build local capacity through collaborative projects that develop and deliver best practice.

Maria O'Donnell has taught for more than 25 years and currently holds the position of Teaching and Learning Coordinator at St Mary MacKillop College, Canberra. She has held a range of academic and pastoral leadership positions in the ACT and NSW school systems. Her teaching background is in the humanities. Maria has

particular interest in working to improve professional practice through the use of mentoring, especially in working with early career teachers.

Timothy O'Leary is the Success Coordinator at Wesley College, Victoria. Timothy supports developing staff capacity in using data and evidence to improve student learning.

Erin Orford is a Regional Project Officer for Curriculum, Pedagogy and Learning in the Central and Western Clusters of the Darling Downs South West Region in Queensland. She is part of a team that, with a focus on learning, works to cultivate school improvement and strengthen professional capability through collaborative partnerships, productive relationships and evidence-based practices. As part of Erin's classroom and specialist teaching experience, she worked in rural and remote schools in Queensland, some in areas of disadvantage and with students with high needs. She has a passion for working with educators to improve learning opportunities for all students.

Dr Carl Parsons is the Director of Integrated Services at Port Phillip Specialist School, Victoria. He has degrees in speech-language pathology and audiology, education and communication disorders and developmental neuropsychology. Carl has been a leader in alternative service delivery models and has published extensively. In 2012, the book entitled *An Extraordinary School: Remodelling special education* was published by ACER Press. Carl contributed five of the eight chapters to this book, including sections on integrated services, the visual and performing arts curriculum, and how art changes the brain.

Susan Paterson is a Master Teacher working across two schools in the Darling Downs South West Region in Southern Queensland. She is a qualified secondary school teacher who commenced her teaching career in Alpha in Central Queensland in 1983. Susan then worked in North Queensland where she spent 20 years teaching in secondary and primary schools. This year she is working closely with the Regional Project Officer, Tania Leach, to implement a numeracy module at one of the schools to build the capacity of staff in problem-solving. Susan was selected as one of 50 master teachers in Queensland to attend the Horizon Conference of Master Teachers in 2015. Susan is passionate about improving student outcomes – academic, and social and emotional – and invigorating teachers to improve their pedagogy.

Dr Kevin Anthony Perry is a postdoctoral researcher in inclusion at the Department of Learning and Philosophy, Aalborg University, Denmark. He is currently researching student perspectives on what promotes and hinders inclusion in Danish schools. Kevin has a diverse background and has experience of working in diverse occupations

such as soldier, taxi driver, doorman, and residential and street social worker. Kevin's doctoral thesis centres on the relationships between a group of young men with ethnic minority backgrounds and diverse frontline public sector employees. The study carefully explores these relationships from both perspectives and contributes towards understanding the micro-processes at play in distrust and trust-building processes.

Rob Proffitt-White is a respected and influential change agent driving improvement in mathematics and numeracy outcomes for the Queensland Department of Education and Training. He has a passion for mathematics and expert knowledge of pedagogy, cultures and teacher beliefs. A growing number of primary and secondary schools are committing to, and investing in, this research-based and verified, scalable and cost-effective model. Several schools presenting at the 2016 Excellence in Professional Practice Conference will discuss different aspects of this effective change model that ultimately aims to build confident creative communicators of maths and numeracy to expand the pipeline in science, technology, engineering and mathematics (STEM) fields.

Veronica Reid has been a Deputy Principal at Talara Primary College since 2004. She knows the importance of ensuring all teachers are aware of what is expected and are working together to impart the guaranteed viable curriculum in every classroom for every child. In her 20th year with Education Queensland working both as a class teacher and Deputy Principal, Veronica is committed to developing processes that are research based. As a result of the significant improvement in the numeracy agenda, Talara Primary College has been invited to participate in University of Tasmania's research project 'Developing Best Practice in Mathematics Education'.

Belinda Robertson has 22 years' experience as a teacher. She leads the East Adelaide School community's growth in curriculum, pedagogy and learning in mathematics.

Rachel Roebuck is Master Teacher at Bribie Island State School, Queensland. She has 20 years' experience as a primary school educator. Rachel is dedicated to improving student outcomes through effective research-based pedagogical practices. Collaboration with educators across the school and the early years education sector is an integral component of her practice.

Tiffany Roos is an experienced classroom teacher and education consultant who has worked both internationally and nationally. She is the Director of Research and Data at Wenona School, New South Wales. The Research and Data team seeks to engage teachers and schools in becoming more actively involved with both research and data, including its application in classrooms.

Ed Roper is Deputy Headmaster, Staff and Community Relations, at Brisbane Grammar School (BGS). He commenced at BGS as a teacher of mathematics and science, and technical assistant within the school's then fledgling computer department. Ed has since had a number of roles including Head of Year, Head of Mathematics, Assistant to the Headmaster - Planning, and in the early 2000s he planned, opened and led the School's Middle School. In his current position he oversees the Advancement and Community Relations Office; the ICT environment at the School, through the Director of ICT; industrial relations; and all aspects of the School's teaching development program. In this latter role Ed has been working very closely with staff to build and incorporate the BGS-specific expression of the Charlotte Danielson Framework for Teaching to underpin teaching development.

Joe Ross, a member of the Bunuba people, has held a range of leadership positions including Director of the Australian Indigenous Leadership Centre, Director of the Enterprise Career Education Foundation, and National Indigenous English Literacy and Numeracy Strategy Ambassador. He has been active in developing leadership development programs to provide skills development opportunities for young Indigenous leaders and enable them to contribute to shaping the future of their communities and Australia. Joe is the former Chair of the Northern Australian Land and Water Taskforce and has been prominent in facilitating the development of the National Indigenous Climate Change Project. A graduate of the Australian Rural Leadership Program, Joe was awarded a Centenary Medal for his active role in creating innovative leadership for young Indigenous leaders.

David Roy is a lecturer in Education at the University of Newcastle. His research interests are in pedagogy, drama and arts learning, and dyspraxia and inclusion in education. Educated in Scotland, and currently based in Australia, David has extensive experience in education as a department head, adviser, author and speaker. David was a practicing teacher for 17 years, working in the primary and secondary sector as a creative arts and drama specialist. He currently leads postgraduate teacher education. David has been part of examination teams in Scotland, Australia, and for the International Baccalaureate. His most recent text, *Teaching the Arts: Early Childhood and Primary*, was published by Cambridge University Press in 2015.

Matt Scott is Head Teacher, Technology at the Canobolas Rural Technology High School in Orange, New South Wales. His interests include educational technologies like 3D printing, laser cutting, coding and micro development computers like Arduino. Matt was the recipient of the Institute of Industrial Arts Technology Education Teacher

Excellence Award for his work on education in science, technology, engineering and mathematics (STEM) fields in 2014. His philosophy for technology education includes integrating advanced manufacturing into class programs to enhance student engagement and to promote STEM. Matt's qualifications include a Bachelor of Education (Secondary Technology and Applied Studies).

Vanessa Scott is an acting Deputy Principal at Pakuranga College, a large, multicultural, coeducational secondary school in Auckland's eastern suburbs. As Head of the English faculty, she led the implementation of strategies to improve learning and outcomes for diverse groups of students and teachers. Vanessa believes in transformational leadership, where shared goals form the basis of collaborative learning relationships. Vanessa has taught in a range of state schools including high decile, coeducational, single-sex, faith-based and low decile schools in New Zealand and in the United Kingdom. Vanessa is currently studying for a Master of Educational Leadership at Auckland University of Technology.

Patricia Simons is currently a Year 6 classroom teacher at Willetton Primary School, Western Australia. She has taught in a number of schools, was a teacher librarian for more than 10 years, a Curriculum Improvement Officer working out of a large district office in Perth and the Deputy Principal at Willetton Primary for more than five years. She is currently a member of the school's Visible Learning delivery team. As such, she is leading her team in implementing formative assessment and feedback strategies. Patricia is interested in how to collect useful data to improve teaching and learning.

Kasey Simpson is the success coordinator at Tarneit Prep–Year 9 College, a rapidly growing college in the outer western suburbs of Melbourne. The college was established in 2013, commencing with an enrolment of 331 students and growing to 1621 in 2016. Kasey has supported the development of staff within the college throughout its rapid growth, with a focus on the use of evidence to improve student learning outcomes.

Tamara Sullivan has been the Dean of e-Learning at Ormiston College since 2014. She runs regular ICT professional development workshops for teaching staff. In addition to developing a broad base of digital skills, these workshops are specifically targeted at enabling staff to plan, prepare and deliver 21st-century teaching and learning through online collaboration.

Alison Taylor is Deputy Principal at Pakuranga College. Alison has taught English in a variety of secondary schools, in state, Catholic, single-sex, coeducational, bicultural and multicultural environments in Australia and New Zealand. While completing her Master of Education, Alison became interested in theories of learning and motivation, and these theories have framed her leadership of teacher professional learning. Alison believes that teaching and learning is enhanced when teachers work in partnership with their students. In 2015, Alison and colleagues presented to a New Zealand Ministry of Education symposium on building teacher inquiry capacity and contributed to Professor Helen Timperley's investigation into sustainable learning communities. They are currently writing an article with Dr Claire Sinnema of Auckland University outlining how student voice influences teacher inquiry.

Stuart Taylor is Assistant Principal/Director of Studies at Riverside Christian College, Queensland. Stuart has led Kindergarten, Transition and Prep to Year 12 schools in New South Wales, Northern Territory and Queensland. His experience includes leading green field projects, pioneering a Trade Training Centre, and providing remote Indigenous boarding, and distance education. He understands the demands of independent schooling and is always up for the challenge. Nothing excites him more that seeing next-generation learning unfold at his school. His abiding mantra is, 'in the end, the kids deserve the best'. Stuart has been awarded Leadership Recognition for outstanding contribution to education in the Northern Territory and was a 2015 nominee for the Queensland College of Teachers Excellent Leadership in Teaching and Learning Award.

Andrea Thompson is Campus Principal of the Frankston Campus of Oakwood School. She has worked in education in Victoria and the UK and enjoyed travelling to far-flung places around the world. Andrea spent eight years in a small inner-city London school, as an English teacher, specialist Outreach Teacher and finishing as the Deputy Head Teacher. In Melbourne, her time included her first teaching job at Caulfield Park Community School and two years working as a Teaching and Learning Coach for the Western Metropolitan Region. Now in her third year at Oakwood School, she feels very proud to be contributing to great work around evidence-based teaching and learning practices and raising the educational outcomes of disengaged young people.

Amy Tickle is currently working as a Stage Coordinator and ICT Integrator at Pittwater House. She is part of a collaborative and dynamic leadership team, initiating effective change in the area of improving staff collaboration and productivity in order to improve student learning. Amy worked at Wenona Junior School as a Coordinator prior to her appointment at Pittwater House, where she also completed her Master of Arts in e-Learning.

Clare Tuohy is Head of Middle School at the Berwick Campus of Beaconhills College, Victoria. She provides crucial oversight over all aspects of the programs for this sub-school. Clare has developed a range of initiatives closely related to the ideas of Carol Dweck's growth mindset, providing new curriculum programs that focus on student personal development as well as supporting and managing students through a range of initiatives with reporting. Clare is a member of the senior education committee.

Nikki Urlich is Deputy Principal of Campbells Bay School, a large primary school in Auckland. Campbells Bay School has 240 Year 5 and 6 students and nine teachers working collaboratively in a modern learning environment (open plan collaborative space). Nikki originally came from the business sector specialising in communication management, and has been in education for seven years. She has spoken at conferences around New Zealand about the modern learning and teaching practice needed today and on modern learning environments. She has been published by the New Zealand Journal of Teachers' Work in 2015 and has recently had an interview and story segment on the TV3 network about modern learning environments.

Androulla Vagnoni is Lead Teacher of the middle years team at East Adelaide School. She has primary and secondary school teaching experience, specialising in English and the humanities, arts and social sciences.

Kristin Vonney is a public high school mathematics and science teacher who currently works as a Project Officer at the Flinders Centre for Science Education in the 21st Century (Science 21). One of the main aims of the centre is to investigate the science of learning, by using evidence from research to inform teaching practice in the classroom. She works with a range of sites from primary to high schools, to develop curriculum that will enable students to improve their executive functions or 'stop and think' skills, as well as their reasoning and problem-solving abilities.

Tracey Walker manages the Disability and Additional Support Unit at the South-Eastern Victoria Region office of the Department of Education and Training with a focus on inclusion of students with additional needs. Tracey has qualifications in speech pathology and business. She is passionate about ensuring inclusion and providing support for schools to provide the best possible programs for students.

Michele Walliker is Manager Education Services at Independent Schools Queensland (ISQ). She joined ISQ's Self-Improving Schools team in 2012 to support a successful trial of the program with 32 schools. Michele has since worked with 12 staff and consultants to deliver the Self-Improving Schools program to 108 schools comprising more than half of the Queensland independent sector.

Andrew Walmsley has taught mathematics, science, English, marine studies and Chinese over the past eight years at Hervey Bay State High School. His focus is on developing junior school curriculum and he leads the blended learning community. In particular he works on the embedding of numeracy and literacy strategies in the science key learning areas.

Brett Webster has been Headmaster of Ormiston College since 2006. His passion for quality learning enabled by technology has long been his focus. Prior to his appointment at Ormiston College, Brett was an Education Queensland Secondary School Principal and Chair of an ICT Reference Group responsible for building the capacity of teachers across 40 schools. His leadership in relation to innovative teaching at Ormiston College has been far-reaching, resulting in staff collaboration that has seen advanced integration of ICT throughout the entire school, from Prep to Year 12.

Sacha Webster is a passionate educator. She has taught and led in a range of educational settings for more than 17 years. She holds three educational degrees, including a Master of Education (Leadership), achieved at an extremely high level. Sacha's current roles as Stage 2 Coordinator and classroom teacher at Pittwater House build upon her experience as a Year 6 Coordinator at Kambala in addition to her overseas experience. Committed to excellence, she thrives as a member of her energetic leadership team.

Erin West is a speech pathologist who has worked in paediatrics for the past nine years. She has worked across a range of settings including community health, special schools, early intervention and private practice. Erin specialises in deafness, as well as eating and swallowing difficulties. Erin joined the team at Aurora School in early 2013 and completed her Master in Communication Disorders in the same year. She is passionate about working towards better collaborative practice between speech pathologists and education staff, particularly in bilingual settings.

Amanda White is a passionate educator and advocate of 21st-century learning. Amanda began her teaching career in early years education before moving into behaviour management and curriculum leadership roles. Amanda has worked in a variety of school settings in Australia and Europe. She is passionate about ensuring teachers are well-equipped to ensure students achieve the best possible outcomes and she believes the key to this is focusing on 21st-century pedagogy. Amanda currently works at Meridan State College where she is Deputy Principal. She also manages the Contemporary Learning Hub, which provides educators with leadership and support around effective contemporary pedagogy.

Greg White is Principal at St Mary's School, Dandenong. Greg has worked as a principal for more than 30 years in four very diverse schools. He passionately believes that all children should have equal opportunities to education and that disadvantage should not determine a child's future. Greg's current school community is focused on the needs of not only each student but also their families, encouraging and supporting parents to participate and engage in their child's education. Greg is proud that the staff, students and parents of St Mary's now rate themselves in the top five to 15 per cent of all Australian schools in most discipline areas of school organisational and cultural climate surveys. In partnership with his school community, Greg has built strong connections with the wider community, resulting in the implementation of many exciting and engaging school projects. Greg is a strong advocate of social emotional learning and believes that student learning is best nurtured and developed in a school environment that is safe, orderly and welcoming.

Leigh-Anne Williams is an early-career teacher in her first five years of teaching. She teaches English, English as an Additional Language, and Humanities, Arts and Social Sciences at Unley High School in South Australia. In 2015, she was selected to be part of an online moderation team which supported teachers in both metropolitan and rural schools to develop consistency in their assessment and teaching against the Australian Curriculum. The professional conversations that came out of this project led to her to further developing her own assessment practices and pedagogy.

Josephine Wise is Assistant Director (Education Services) at Independent Schools Queensland (ISQ). She leads projects that support school leaders to establish high-quality performance and development cultures and facilitates professional conversations with leaders to assist them to manage organisational change. She is an ISQ Self-Improving Schools consultant.

Kim Wood has been a Deputy Principal for 16 years, along with stints as Acting Principal. She has held the role of Deputy Principal at Craigslea State High School in Brisbane since 2013. Her extensive experience teaching in both rural and metropolitan Queensland schools, public and private, has contributed to her particular interests in both pedagogy and student welfare.

Melissa Wood is the Principal at Chandler Public School, a small, growing school in the Northern Tablelands of New South Wales. Melissa, along with four other school principals, undertook to work together as the Snow Gums Learning Alliance to improve outcomes for students and professional learning for teachers. Melissa has a background in information technology, which has been

very beneficial as the use of current technologies and technological pedagogies has been essential to the success of the alliance.

Sandra Woodward studied at the University of Sydney, where she completed a Bachelor of Science and then completed a Graduate Diploma of Education at Macquarie University. She has been teaching since 1995 and is currently a science teacher at Oakhill College Castle Hill. During her teaching career, she has been Assistant Science Coordinator as well as Gifted and Talented Coordinator. She has given many lectures and workshops in teaching physics and was the NSW Finalist for the 2012 Australian Institute for Teaching and School Leadership Australian Secondary School Teacher of the Year.

Sarah-Jane Woodward teaches at Staughton College, a government school in Melbourne. As curriculum coordinator, Sarah-Jane oversaw the implementation of Understanding by Design curriculum planning, an instructional model, professional learning teams and Visible Learning. As performance and development leader she developed a model of best practice, based on research, for Staughton College's context. Sarah-Jane has been the school's success coordinator during their work with the University of Melbourne's Network of Schools, driving evidence-informed practice in her school setting.

Dr Lesley Wright is a Research Associate with the Research and Data team at the Association of Independent Schools of New South Wales (AISNSW). Her role includes providing support to the current cohort of research projects funded by the AISNSW School Based Research Project initiative, of which the Wenona School project is one. She has a research background in gender, sexuality and diversity, and has worked in the area of education research for the past four years. She earned her PhD from Victoria University of Wellington (New Zealand).

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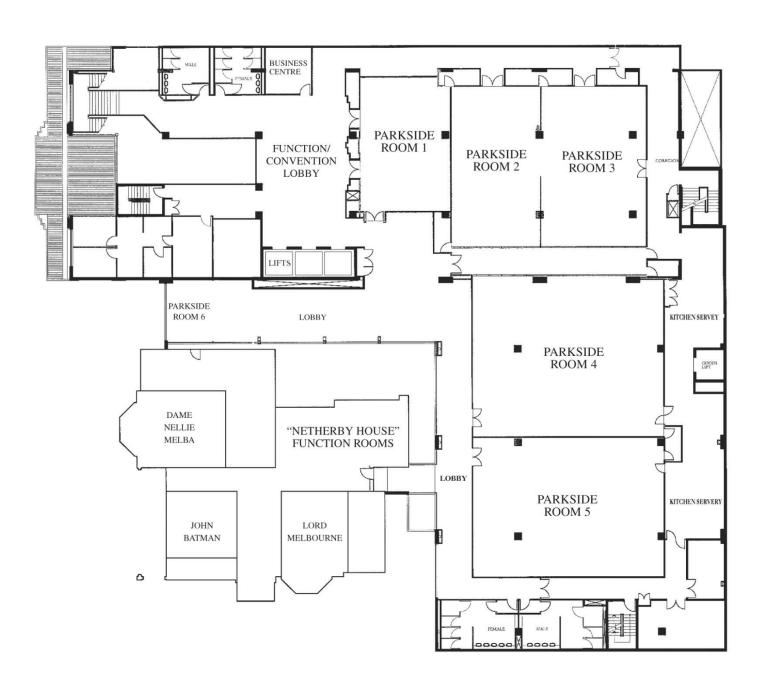
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