Excellence in Professional Practice Conference 2017

Thursday 25 May & Friday 26 May

Gold Coast Convention and Exhibition Centre

2684–2690 Gold Coast Hwy, Broadbeach, Queensland

www.acer.org/eppc

ACER

Australian Council for Educational Research

ORGANISING COMMITTEE

Lynda Rosman, ACER Institute

Professor Pauline Taylor-Guy, ACER Institute

Margaret Taylor, ACER Institute

PROPOSAL REVIEWERS

Jude Alexander, ACER

Dr Anne-Marie Chase, ACER

Melissa Hughes, ACER

Professor Lawrence Ingvarson, ACER

Robert Marshall, ACER

Gina Milgate, ACER

Pru Mitchell, ACER

Clare Nelson, ACER

Cath Pearn, ACER

Lynda Rosman, ACER

Jim Spithill, ACER

Professor Pauline Taylor-Guy, ACER

Colin Watson, ACER

touchstones

SETTING DIRECTION FOR PROFESSIONAL LEARNING

CIRCLE's professional learning and development planning software that embeds a proven process of self-review and goal-setting into a flexible and easy-to-use online environment.

Designed to provide direction for professional learning, Touchstones uses a simple five step process to guide staff as they gather and review feedback, set goals and reflect on their progress and achievement. The supportive coaching methodology encourages collaboration and interaction with peers. Schools select their own measures of best practice and these act as reference points along the path of reflection and action. They are the focus for learning and growth, guiding self-evaluation and goal-setting and helping to align individual effort with strategic intent.

http://www.mytouchstones.com/

CONTENTS

FOREWORD

Welcome to the fifth Excellence in Professional Practice Conference (EPPC), a forum for teachers and schools to share the outcomes of their investigative research work into their own practices.

Through events and publications, ACER is keen to support and share ways in which teachers and school leaders work as an 'improvement community' through 'collective leadership'. The focus of an improvement community is on finding solutions to specific problems of practice. The shared activities of the community include understanding starting points; designing possible solutions; monitoring implementation and changes in practice; monitoring student outcomes; and evaluating the effectiveness of new solutions through ongoing, iterative 'improvement research'. This year, EPPC has attracted participants from a wide range of schools who are either actively involved in developing their own research agenda or are in partnership with other educational institutions and individuals to further their improvement agendas.

A continuing theme for educationalists is the focus on 'teachers driving school improvement'. Principals, school leaders, teachers and support staff all recognise the need to engage their school communities in practices to review and reflect on their efforts to improve the quality of classroom teaching and learning. With EPPC offering more than 70 sessions across the two days, delegates will be able to engage in a range of presentation formats, including presentations, case studies, workshops and poster displays. This program allows delegates quality time to explore a range of presentation topics of specific interest to themselves and to their schools. Each concurrent session block will have presentations that cover specific focus areas – such as Professional Practice (excellence in student-centred learning and pedagogies), Communities of Practice (excellence in teacher-centred learning and andragogies) and Leadership (excellence in leading theory, policy and research to lead school improvement) – creating a comprehensive and exciting conference program.

I take this opportunity to thank all the contributors to this year's conference and encourage you to contribute to the success of this conference and the wider improvement community by taking the opportunity to meet new people and to share, reflect on and challenge your professional practice. Please consider submitting a proposal for next year's conference and be a part of our 'improvement community'.

Lynda Rosman

ACER Institute
Manager Programs and Projects

CONFERENCE STRANDS

Presentations at EPPC are grouped into three strands based on themes and specific relevance to excellence in professional practice.

PROFESSIONAL PRACTICE	COMMUNITIES OF PRACTICE	LEADERSHIP
Excellence in student-centred learning and pedagogies, theory, policy, research and/or practice, including cross-curricula and general capabilities.	Excellence in teacher-centred learning and andragogies – theory, policy, research, and/or practice, including coaching, mentoring, and beginner teacher support.	Excellence in leading theory, policy, research and/or innovative practice to lead school improvement.

FOCUS AREA

Within each strand, there are up to four focal areas. For example, a given proposal may explore a Communities of Practice topic, with a focus on primary education.

Early Childhood	Primary	Secondary	Whole School (F–12)

PRESENTATION FORMAT

There are five main presentation types.

Case study of practice	Presentation	Workshop	Round table discussion	Poster display
45 minutes	45 minutes	90 minutes	30 minutes	
Detailed descriptors of successful practice at particular points in time, or in specific contexts.	A formal style of presentation that elaborates on a specific practice or research.	Interactive presentation that may contain extended group discussions and activities.	A moderated discussion that addresses a specific question/topic in order to engage the perspectives of participants.	A display in the exhibition space utilised for breaks between formal sessions during the program.

CONFERENCE TIMETABLE

DAY 1   THURSDAY 25 MAY

8.00 am	**Registration and welcome, tea and coffee, exhibitors' expo**
8.30–9.00am	**Welcome to Country**
	Conference opening
	Professor Pauline Taylor-Guy, Director, ACER Institute
9.00–9.45am	**Keynote 1: Being a leader of learning and teaching**
	Professor Stephen Dinham OAM, University of Melbourne
9.45–10.30am	**Discussant forum**
10.30–11.00 am	**Morning tea, networking, exhibitors' expo, poster presentations**

CONCURRENT SESSION BLOCK 1						
	ROOM 5 Presentation	**ROOM 6** Presentation	**ROOM 7** Presentation	**ROOM 8** Case studies	**ROOM 4** Workshop	**ROOM 9** Workshop
Session 1 Thursday 11.00–11.45am	**How strong is your school as a professional community? The Professional Learning Community Framework and Questionnaire** Bernadette Hawker, Goondiwindi State High School, QLD; Prof Lawrence Ingvarson, ACER **CofP/F–12**	**Creating a school-wide culture of success in mathematics** Jodie Parsons and Yvonne Reilly, Sunshine College, VIC **L/Sec**	**Out and about: Being present as educators** Dena Reddan, Adam Coustley and Ebony Sheppard, St Therese Catholic Primary School, Torquay, VIC **PP/Prim**	**Action learning: Innovation and improvement through collaborative professional learning** Stacey Quince and Kirstine Gonano, Campbelltown Performing Arts High School, NSW **CofP/Sec**	(80 minutes) **STEMania: Integration of the Australian Curriculum for Mathematics and Science in Stage 4** Jake Little, Wenona School, NSW **PP/Sec**	(80 minutes) **Teaching impact cycles and teacher collaboration: Facilitating change in classroom practice** Dr Sandra Nissen, Lowood State High School, QLD **CofP/Sec**
Session 2 Thursday 11.45am–12.30pm	**Success for all in the hive: Engagement for all learners** Raelee Randall and Juliane Lewis, Dakabin State School, QLD **CofP/Prim**	**Promoting Aboriginal literacy and numeracy through the life skill information program** Darren Side, Xavier College, VIC **PP/Sec**	**Valuing action research by classroom practitioners** Dr Patsy Norton and Matt Moorcroft, Craigslea State High School, QLD **CofP/Sec**	**Improving teacher clarity: Enacting visible learning theory into action** Nicole Blyth and David Hunter, Penrhos College, WA **L/Sec**		

12.30–1.30pm	**Lunch, networking, exhibitors' expo, poster presentations**

CONCURRENT SESSION BLOCK 2

	ROOM 5 Presentation	ROOM 6 Presentation	ROOM 7 Presentation	ROOM 8 Case studies	ROOM 4 Workshop	ROOM 9 Workshop
Session 3 Thursday 1.30–2.15pm	**So we've got a Facebook page: Supporting early career teachers through social media** Bernadette Mercieca, Xavier College, VIC **CofP/Sec**	**Renovating the house of cards: Improvement that's sustained** Bo George, Mercy College, QLD **L/F–12**	**Coaching teams, action research and real improvement in teacher capacity** Simon Conlan, Mazenod College, VIC; Andrew Lawrence and Nicole Rogers, Yarra Valley Grammar School, VIC **CofP/F–12**	**Building shared understandings, capacity and self-reflection through a whole-school coaching model** Dr Bradley Merrick and Dr Gregory Cunningham, Barker College, NSW **CofP/F–12**	(80 minutes) **Writing: Making students smarter and improving outcomes for all** Christine Hills, Rockhampton Girls' Grammar School, QLD **PP/F–12**	(80 minutes) **Encouraging use of evidence to inform decision-making** Sam Symes, Pullenvale State School, QLD; Dr Tanya Vaughan, Social Ventures Australia **L/F–12**
Session 4 Thursday 2.15–3.00pm	**Data into action for impact** Kathryn Cunich, Oxley College, NSW **CofP/F–12**	**What middle leaders do: Steering a successful school improvement project in writing** Tania Schmidt and Jan Burton, Rangeville State School, QLD; Wendy Luscombe, DET, QLD **L/Prim**	**Better teachers, better learners: One year on** Philippa Mulqueen and Kylie Kilmartin, Pakuranga College, NZ **PP/Sec**	**Leading learning: Exploring the interrelated roles of school leaders** Susan Paterson, Gatton State School, QLD; Tania Leach, DET, QLD **L/Prim**		

3.00–3.30pm Afternoon tea, networking, exhibitors' expo, poster presentations

CONCURRENT SESSION BLOCK 3

	ROOM 5 Presentation	ROOM 6 Presentation	ROOM 7 Presentation	ROOM 8 Case studies	ROOM 4 Workshop	ROOM 9 Workshop
Session 5 Thursday 3.30–4.15pm	**The case for co-design: Improving achievement, attendance and engagement** Justin Kentish and Kay Smith, Craigmore High School, SA **PP/Sec**	**Learn. Grow. Flourish! Targeting growth in the middle years** Lucy Gowdie, The Peninsula Grammar School, VIC **PP/F–12**	**Children as agents of change in three sustainability projects in an early childhood setting** Jane Everett, Craigmore Kindergarten, SA **PP/EC**	**Tracking and visualising student effort: A practical analytics tool for student engagement** Robin Nagy, Redlands School, NSW **L/Sec**	(80 minutes) **Building capacity and initiative through the savvy use of BYOD** Lucy Badzim, Canberra Girls' Grammar School, ACT; Dr Jann Carroll, Australian Catholic University, ACT (ALL PARTICIPANTS MUST BRING THEIR OWN DEVICE TO THIS WORKSHOP) **PP/F–12**	(80 minutes) **Building the engine room of your school: Development of middle-level leaders** Heather De Blasio, Wilderness School, SA **L/F–12**
Session 6 Thursday 4.15–5.00pm	**A whole-hive approach to school improvement** Kelly Jeppesen and Lyn Griffiths, Dakabin State School, QLD **L/Prim**	**Wonders of the world: Our journey into LOTE** Sue Ellis and Skye Grivell, Encounter Lutheran College, SA **PP/Prim**	**Promoting academic excellence through digital learning** Philip Callil, Yarra Valley Grammar School, VIC **L/F–12**	**Feedback on feedback: The impact of feedback on the performance of senior Visual Art students** Peter Cooke and Dr Patsy Norton, Craigslea State High School, QLD **PP/Sec**		

Session 7 Thursday 5.00–5.30pm	**Professional Learning Community Framework and Questionnaire** Prof Lawrence Ingvarson, ACER	**ACER's postgraduate award courses** Dr Anne-Marie Chase, ACER Institute	**National School Improvement Tool (NSIT)** Robert Marshall, ACER Institute	**ACER's professional learning courses** Prof Pauline Taylor-Guy, ACER Institute

5.30–7.30pm Networking drinks: registration and exhibition area

Delegates are welcome to move between rooms at the end of each session to attend different presentations, assuming there is adequate seating available. Please respect the presenters and other participants by keeping conversation to a minimum.

LEGEND

Conference strands
Leadership (L)
Communities of practice (CofP)
Professional practice (PP)

Focus areas
Early childhood (EC)
Primary (Prim)
Secondary (Sec)
Whole school (F–12)

DAY 2   FRIDAY 26 MAY

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

CONCURRENT SESSION BLOCK 4

	ROOM 5 Presentation	ROOM 6 Presentation	ROOM 7 Presentation	ROOM 8 Case studies	ROOM 4 Workshop	ROOM 9 Workshop
Session 8 Friday 8.30–9.15am	Influencing self-regulation and resilience in students: What is the impact on actual results? Alex Krzensk, Anglican Church Grammar School, QLD **PP/F–12**	Reform efficacy: An essential construct for school leaders tasked with building organisational capacity Dr Donna Evans, Compass Education Australia **L/F–12**	Collaboration to increase the involvement of educational support staff in language development Erin West, Aurora School, VIC **CofP/EC**	A case study of subject coordinator leadership and student achievement in eight Catholic secondary schools in Sydney Deborah Buscall, Catholic Education Office, NSW **L/Sec**	(80 minutes) Using the structure of observed learning outcomes (SOLO) taxonomy to create deep-level learners from F–6 Vicki Phyland, Malvern Central Primary School, VIC; Sophie Murphy, University of Melbourne, VIC **PP/Prim**	(80 minutes) Teachers' first: An innovative approach to collaborative professional development Rachael Pelling and Nicole Barton, Gympie West State School, QLD; Rob Proffitt-White, DET, QLD **CofP/Prim**
Session 9 Friday 9.15–10.00am	It *is* rocket science: Early childhood through the eyes of Indigenous pedagogical leaders Early Childhood Education and Care Indigenous Leadership Program **PP/EC**	Leading girls into ICT: Increasing female participation in technology Elke Schneider and Lisa Thomson, Somerset College, QLD **L/Sec**	Take a seat: Exploring design thinking through collaboration with the airline industry Dr Charlotte Forwood, Strathcona Baptist Girls' Grammar School, VIC **PP/Sec**	Let's talk: Improving literacy outcomes through oral assessments Summar Austin, Mount Roskill Grammar School, NZ **PP/Sec**		

10.00–10.30am Morning tea, networking, exhibitors' expo, poster presentations

CONCURRENT SESSION BLOCK 5

	ROOM 5 Presentation	ROOM 6 Presentation	ROOM 7 Presentation	ROOM 8 Case studies	ROOM 4 Workshop	ROOM 9 Workshop
Session 10 Friday 10.30–11.15am	Driving data dialogue: Engaging staff with visualisation of school analytics Ben Hicks and Kathryn Cunich, Oxley College, NSW **L/F–12**	Aiming for student and teacher excellence Karen Yager, Matthew Bentley, Tracey Clarke and Matthew Robertson, Knox Grammar School, NSW **CofP/F–12**	Technology as a tool, not the teacher Ashlee Cochrane and Carole Berry, Clayfield College, QLD **PP/F–12**	School-wide application of action learning: Teacher-driven professional learning for improved student engagement and learning outcomes Helen Polios, Patrick Flanagan, Lalynne Smith and Ana Talde, Whalan Public School, NSW **PP/Prim**	(80 minutes) And you won't believe what happened next! How one school is changing a writing culture Bernadette Hawker, Goondiwindi State High School, QLD; Susan Evans, DET, QLD **PP/Sec**	(80 minutes) Fractions: Teaching for conceptual understanding and reasoning Catherine Pearn, ACER and University of Melbourne, VIC **PP/Prim**
Session 11 Friday 11.15am–12.00pm	The road to El Dorado: Three schools external assessment project Leonard McKeown, Windaroo Valley State High School, QLD; Sharon Amos, Park Ridge State High School, QLD; Bronwyn Johnstone, Capalaba College, QLD; Dr Katie Weir, Griffith University, QLD **L/Sec**	Closing the gender gap: Ways educators can inspire girls into STEM Stacey King, Mabel Park State High School, QLD **PP/Sec**	Innovative literacy and numeracy intervention: Literacy support and short-cycle intervention Emma Saal, Sue Schultz and Michael Clarkson, Laidley State High School, QLD **PP/F–12**	Developing, adapting and evaluating authentic professional learning Michelle Hostrup, Daceyville Public School, NSW; Hollie van Ravenstein, Camdenville Public School, NSW **CofP/Prim**		

12.00–12.45pm Lunch, networking, exhibitors' expo, poster presentations

CONCURRENT SESSION BLOCK 6

	ROOM 5 Presentation	ROOM 6 Presentation	ROOM 7 Presentation	ROOM 8 Case studies	ROOM 4 Workshop	ROOM 9 Workshop
Session 12 Friday 12.45–1.30pm	**Leading collaborative moderation and school improvement: The 'how-to'** Susanne Jones, DECD, SA **L/Sec**	**Positioning teachers as researchers: A professional learning model** Adrian Camm, The Geelong College, VIC **CofP/F–12**	**Improving reading, improving learning outcomes for all children** Dr Philip Russell, Yulara School, NT **PP/Prim**	**Distributive leadership: Creating teacher leaders, developing collective efficacy and enhancing community voice** Rachel Roebuck, Karena Aczel and Estelle Wolstencroft, Bribie Island State School, QLD **L/Prim**	(80 minutes) **Co-teaching to improve student outcomes** Janelle Ford, Emily Eu and Joseph Paton, Claremont College, NSW **PP/F–12**	(80 minutes) **Using innovative professional practice to design and measure learning progress** Christine Cawsey AM and John Meng, Rooty Hill High School, NSW **L/Sec**
Session 13 Friday 1.30–2.15pm	**Let's talk student growth, not attainment** John Van Dyk, Aquinas College, WA **L/F–12**	**An extraordinary problem of practice: How research transformed practice for pedagogical change** Kasey Ball, Murputja Anangu School, SA; Amy Johnston, Mimili Anangu School, SA; Rosalie Richards, Pipalyatjara Anangu School, SA; Daniel Balacco, Inner West & Anangu Lands Partnership, SA **CofP/F–12**	**Visible reading: Hattie in the hive** Lyn Griffiths and Kate Djellaoui, Dakabin State School, QLD **PP/Prim**	**Evidenced-based internship: Is there more than anecdata to support its design?** Jessica Cubbage, Lesmurdie Senior High School, WA; Dr Susan Blackley, Curtin University, WA **CofP/Sec**		

2.15–2.45pm	**Afternoon tea, networking, exhibitors' expo, poster presentations**
2.45–3.15pm	**Graduation ceremony: Graduate Certificate of Education (Assessment of Student Learning)**
3.15–4.15pm	**Keynote 2: Personal attributes: Developing the hidden qualities in quality teaching** Professor Nan Bahr, Griffith University, QLD
4.15pm	**Outstanding sessions awards and conference close**

Delegates are welcome to move between rooms at the end of each session to attend different presentations, assuming there is adequate seating available. Please respect the presenters and other participants by keeping conversation to a minimum.

LEGEND
Conference strands
Leadership (L)
Communities of practice (CofP)
Professional practice (PP)
Focus areas
Early childhood (EC)
Primary (Prim)
Secondary (Sec)
Whole school (F–12)

KEYNOTE PRESENTATIONS

Day 1 Thursday 25 May
Keynote 1
9.00 – 9.45am
Room 5 & 6

Keynote: Being a leader of learning and teaching

**Professor Stephen Dinham OAM,
University of Melbourne**

Leadership is increasingly recognised internationally as a vital factor in improving school effectiveness, teacher quality and student achievement. As a result there has been greater attention paid to formulating professional standards, models, profiles and frameworks for school leadership, both to articulate the breadth and depth of leaders' roles and to inform professional learning, selection, appraisal and accountability processes.

Alongside this, there has also been a greater recognition that teachers exercise leadership. As teachers' experience develops, it is more likely and expected that their involvement and influence will increase and move beyond the classroom, across the school and more widely into the profession. This widening and deepening of leadership roles for teachers requires professional engagement to create the conditions in which teachers can teach effectively and students can learn.

This keynote will be followed by an interactive forum of leaders to discuss issues raised by Professor Dinham.

Professor Stephen Dinham OAM is Associate Dean (Strategic Partnerships) and Professor of Instructional Leadership in the Melbourne Graduate School of Education, University of Melbourne, a position he has held since the beginning of 2011.

He has taught in government secondary schools and been appointed to a range of senior academic leadership roles in many universities, working variously in the areas of curriculum studies, teacher education, pedagogy, professional development and educational leadership at the University of Western Sydney, University of New England and the University of Wollongong. Stephen was also a research director at the Australian Council for Educational Research.

Stephen has conducted a wide range of research projects, many with multimillion dollar funding, in the areas of educational leadership and change, effective pedagogy/ quality teaching, student achievement, postgraduate supervision, professional teaching standards, teachers' professional development, middle-level leaders in schools, and teacher satisfaction, motivation and health. He has published books, chapters and peer-reviewed journal articles extensively, frequently presents at national and international conferences and has conducted consultancies with a wide range of national and international educational bodies.

Stephen was a president of the Australian College of Educators (2014–15) and of the NSW Branch of the Australian College of Educators (2000–02). He was also a council member of the Victorian Institute of Teaching from 2011 to 2016.

Keynote: Personal attributes: Developing the hidden qualities in quality teaching

Professor Nan Bahr, Griffith University, QLD

National aspirations for international economic advantage have long fuelled public interest in the impact of teaching on student outcomes. Discussions have centred on the concept of raising the quality of teachers, which has had a pointed and negative effect on the esteem of the profession of teaching. The result has been undue effort to itemise the competencies of quality teachers such that they can be clearly demonstrated and objectively rated.

Rather than regard the phrase 'quality teaching' as pernicious, this keynote will examine the concept of quality in teaching and focus on the elements that can serve to elevate teachers beyond base competence to the kind of excellence we know our learners deserve. These elements, the personal attributes of teachers, are central to the teacher–learner relationship and have been overlooked in much of the work to understand and develop quality teaching.

Professor Nan Bahr is Professor and Dean (Learning and Teaching), Arts, Education and Law, Griffith University. She is responsible for the quality of design and implementation of programs across the Arts, Education and Law Group. Nan has held leadership positions for teacher education at The University of Queensland and Queensland University of Technology, and has held the position of elected president for the Australian Teacher Education Association. As an educational researcher, she has a national and international profile, with more than 100 publications, including four books. Key research has been in the fields of music education, educational psychology, teacher education, adolescence, resilience, and teaching innovation in higher education. As a University teacher, she has been awarded the University of Queensland Award for Excellence in Teaching, and has been a finalist (twice) for the Australian Awards for University Teaching.

PAPER PRESENTATIONS, CASE STUDIES AND WORKSHOPS

Room 5

How strong is your school as a professional community? The Professional Learning Community Framework and Questionnaire

Bernadette Hawker, Goondiwindi State High School, QLD; Prof Lawrence Ingvarson, ACER

CofP/F–12

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, and reports on the results from using the survey in one school.

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 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.

Room 6

Creating a schoolwide culture of success in mathematics

Jodie Parsons and Yvonne Reilly, Sunshine College, VIC

L/Sec

At Sunshine College, each teacher strives to create an environment where students believe they can improve. This is because we as a school value progress and the development of one's personal best, irrespective of where one's starting point might be. In class, students are supported to identify and select the activity which is 'just right' for their learning requirements. Selecting a 'just-right' task is possible because teachers support students to understand their learning needs and what learning feels like for them. Teaching staff work collaboratively to ensure the 'just-right' tasks are equipped to satisfy the breadth of need within a cohort.

In 2008, and after several years of little to no improvement in students' Achievement Improvement Monitor (AIM) data and Victorian Certificate of Education (VCE), the presenters began to develop an alternative mathematics program: the Maths Futures program.

This session will discuss how the high-impact curricula strategies were a direct result of collaborative action research and derived from evidence-based best practices to ensure all students strive towards success. By using longitudinal data collected from a number of sources we have been able to track and evaluate the effectiveness of our programs and hold ourselves accountable.

Due to the success of the program, other content areas are investigating ways in which a similar program can be adapted to their demands. Participants in this sessions will hear how, in the years since the program's inception, teaching staff have continued to develop, review and refine the program. They continue to learn from one another and support each other to become excellent practitioners.

Room 7

Out and about: Being present as educators

Dena Reddan, Adam Coustley and Ebony Sheppard, St Therese Catholic Primary School, Torquay, VIC

PP/Prim

St Therese is a coastal Catholic primary school, located on the Great Ocean Road in Torquay, just outside of Geelong, in Victoria. As Torquay is a growing suburb, the enrolment of students in St Therese Primary School is rapidly increasing. St Therese Primary School has a substantial staff, which consists of experienced and early-career teachers, both locals and those who travel from neighbouring communities. As a five-star sustainable school, we use the inspiration of a Reggio Emilia approach to education to further develop the capabilities and success of the St Therese community.

Too often in schools, teaching practices enact prescribed methods without an awareness of the situated, daily contexts of learning. This contributes to the misperception that methods are the same as pedagogy. Instead, we follow the Australian Professional Standards for Teachers (of the Australian Institute for Teaching and School Leadership), which asks teachers to review the effectiveness of their teaching approaches to enhance student learning.

Our school encourages teachers as researchers to challenge traditional pedagogy and to seek innovative and authentic practice.

For this project, the school sought a research partnership with Victoria University, to provide ongoing impetus and broaden our research capabilities. The school also established wider community connections with the Surf Coast Shire and the Great Ocean Road Coast Committee.

Connecting learning to a multi-modal context helps build authentic relationship with the world we inherit and possibly reshape. Students visit Fisherman's Beach fortnightly, to allow opportunities for walking, listening, touching, tasting and smelling: being 'present', at one with the place. Similar to any reciprocal relationship which requires us to nurture, constantly revisit, give adequate attention to and explore, our connection to 'our special place' becomes more than human. It is influenced by geographic, historical and traditional contexts.

Building the learning narrative of the students in this manner not only fosters a natural curiosity, but moves beyond the restrictive pedagogies often misinterpreted through current curriculum documents and practices.

Although a work in progress, our current documentation provides evidence that the learning narratives of students and teachers are developing to propose deeper theories and increased understandings of the world around us. This is also echoed by the parent community who are engaged and actively involved in investigating 'our special place' as learners.

Disturbing the equilibrium of pedagogical approaches has resulted in a broadened perspective and complexity in practice. Employing the environment as the third teacher positions the teacher as researcher, where learning is directed by the participants rather than the researcher themselves. Although some may struggle with stepping outside their comfort zone, having the courage to leap and experiment with these pedagogies provides the opportunity for intellectual, moral, ethical and political practices that call for a deeper level of engagement and relationship with the planet.

Room 8

Case study: Action learning: Innovation and improvement through collaborative professional learning

Stacey Quince and Kirstine Gonano, Campbelltown Performing Arts High School, NSW

CofP/Sec

Action learning is a powerful model of collaborative professional learning that supports teachers to become 'practitioner-researchers'. Teachers undertake research directly related to the work of teaching. This research can improve student engagement and learning outcomes within their school context.

Campbelltown Performing Arts High School (CPAHS) has built a strong culture of teachers as practitioner-researchers through the strategic and codified implementation of more than 20 action learning projects over the past 10 years. This approach to professional learning, implemented in collaboration with academic partners from Western Sydney University, has driven a highly successful whole-school innovation and improvement agenda.

The implementation of action learning has been a transformative approach to teacher development at CPAHS and beyond. This personalised model of professional learning focuses on teachers working in teams to take 'calculated risks' in their practice; each team draws on current research to inform the development and implementation of strategies within the classroom and uses evaluative thinking to determine the impact of this work as it unfolds, refining it as necessary to maximise impact.

The school leadership team at CPAHS has worked closely with Western Sydney University academics to develop a set of evaluation tools, based on the principles of evaluative thinking, which are employed in various combinations by every project team. This includes the use of focus groups, work sample analysis, surveys, teacher reflections, photo elicitation and photo voice, interviews, video capture, teacher observation and peer assessment.

The iterative nature of action learning has supported leaders and teachers to develop, trial and evaluate the impact of a range of pedagogical approaches including personalised learning, peer and self assessment, co-created learning and project-based learning. The strategic evaluation of action learning has allowed teachers at CPAHS to identify the most effective of these new and emerging pedagogies before scaling and embedding them at a whole-school level.

This model has recently been replicated at a regional level: CPAHS's Principal, Stacey Quince, and academic partners have lead 28 schools in individualised action learning projects, based on their contextual priorities and needs, with great success.

Participants in this session will be provided with a range of scaffolds and tools developed and used by action learning teams at CPAHS which can be adapted for use in any context to drive small-scale or whole-school improvement or change. Participants will also be provided with access to the evaluation tools used by each team, as well as sample reports and findings from past action learning projects at CPAHS.

Room 4

Workshop (80 minutes): STEMania: Integration of the Australian Curriculum for Mathematics and Science in Stage 4

Jake Little, Wenona School, NSW

PP/Sec

In response to declining results, participation and attitudes towards mathematics and science in international assessments, there have been calls for schools to develop effective science, technology, engineering and mathematics (STEM) programs. With limited implementation of STEM programs in Australia, research suggests that these programs may only be attracting students already interested in STEM, possibly creating a larger STEM gap.

This session will briefly disseminate findings from a teaching fellowship conducted across the United States of America that was focused on examining successful STEM programs and initiatives. The focus of this session is to provide examples of how schools can successfully integrate the Australian Curriculum standards for Mathematics and Science. Participants will engage with several hands-on STEM tasks that are appropriate and suitable in secondary schools.

This session will also provide recommendations for schools embarking on implementing an integrated program, based on previous schools' experiences, along with current educational research. Initial findings from a STEM initiative at Wenona School will be presented, along with recommendations for future research and implementation in secondary contexts.

Participants will be provided with detailed and relevant background information and the key content strands that the STEM activities cover, along with example integrated Mathematics and Science scope and sequence programs. Further, participants will receive an information sheet that outlines useful resources that can assist in beginning to implement such integrated programs.

Room 9

Workshop (80 minutes): Teaching impact cycles and teacher collaboration: Facilitating change in classroom practice

Dr Sandra Nissen, Lowood State High School, QLD

CofP/Sec

When teachers attend professional development workshops, it can be a challenge to transfer that learning into action in the classroom. Ongoing support and teacher collaboration can make a difference to facilitating change to teacher practice.

Teaching impact cycles are being implemented as a strategy to facilitate intentional, collaborative discussions between teachers and inspire changes to teacher practice in the classroom. The teaching impact cycles are based on action research processes, agile sprints and data cycles. The structures for the collaborative discussions were developed following a review of protocols that work for looking at student work and inspiring intentional conversations.

Reading comprehension is an area of strategic focus at Lowood State High School. To support subject area teachers to use reading comprehension activities in their classes, all teachers are provided with professional development. While we use the teaching impact cycles to support the implementation of reading comprehension activities, they could also be applied to other forms of pedagogical change.

Teaching impact cycles occur for 20 minutes during staff meeting time, at approximately three-week intervals (three meetings per term). Teachers meet in groups of three. A protocol is used to facilitate the conversations. In the first meeting, teachers use diagnostic data to identify a focus student whose results they are aiming to improve. Following analysis of upcoming assessment tasks and achievement standards, an appropriate reading comprehension activity is selected and tried with the whole class. In the second and third meetings, teachers describe the implementation of the activity in class and have the opportunity to gather advice from their colleagues. Teachers also analyse samples of student work collaboratively, to gauge the impact of the teaching on student performance.

This will be an interactive workshop. We will describe the process of establishing the teaching impact cycles and will outline our ongoing research into what changes to teacher practice are occurring. You will have the opportunity to try out and review two of our protocols (one for sharing practice and one for looking at student work). You will come away with knowledge about an approach that aims to support teachers to enact their professional learning in their classrooms, and all the resources necessary to be able adapt and use the protocols in your next meeting or conversation with colleagues.

Room 5

Success for all in the hive: Engagement for all learners

Raelee Randall and Juliane Lewis,
Dakabin State School, QLD

CofP/Prim

How do you truly and authentically differential learning for students?

How can you ensure as a whole school you are meeting the needs of your learners at all ends of the continuum from high performing to those who need significant adjustments?

This presentation will share with you how we led a shift in the mental models and philosophy of how we support all students, especially those with a disability, high-performing students, those with learning disabilities and social/ emotional behaviours.

Through the research of Dr Loretta Giorcelli, Prof John Hattie and Kathy Walker, Dakabin State School began their whole-school journey to engage all learners in rich, individualised learning programs and inspired our staff to see the genuine reasons why we differentiate and adjust learning.

We will share with you Dakabin's modern and unique Diverse Learning Model, and how Dr Loretta Giorcelli's research has influenced the philosophical foundations of our school. Explore with us the stages of development of a whole-school philosophy and how this translated into action and artefacts inside the school.

The success of our Diverse Learning Model is due to the unrelenting focus of the Leadership Team and an efficient and innovating staffing approach. The staffing model uses existing human resources including a model of two heads of diverse learning, specialist teachers in diverse learning and a suite of coaches who support teachers in the pedagogy, planning and assessment for diverse learners. We have seen this unified approach as crucial to the success of inclusion for all students and enhanced learning outcomes.

This presentation will highlight how our diverse learner 'tier' model embedded a common language to identify, support and monitor all students' needs. It will create a picture of how we collect data in the least intrusive methods and in how we identify the adjustments for students with disabilities, learning difficulties, social and emotional difficulties, as well as identifying students who require extension. It is through the research of Kathy Walker that has informed our data collection processes, especially in the early years. We do this to develop a clear picture of the learner and their specific needs to reach their potential.

Our school has developed specific whole-school programs and practices designed to target the identified learning needs of all our children and to support teachers in deciding which the effective pedagogical practices to utilise are. This is evident in our visible reading program. John Hattie's effect-size research has helped us to refine and choose the best strategies for the highest outcomes.

From 2014 to 2016, we have seen 100% of our students learning alongside their peers, working in their classrooms and during play breaks. In this presentation you will get the opportunity to observe our whole-school planning model which incorporates collaborative planning between the classroom teacher and the specialist teacher in diverse learning and the significant impact this has on students' levels of engagement being met through the diversity of the pedagogy and individualised intervention.

When we support diverse learners, we support everyone and this is true inclusion.

This presentation will conclude with the significant outcomes of improvement over the past two years and our plans for moving forward from 2017 and beyond.

Room 6

Promoting Aboriginal literacy and numeracy through the life skill information program

Darren Side, Xavier College, VIC

PP/Sec

This presentation will discuss how mainstream and remote teachers can engage Indigenous students in transitioning to mainstream education. Participants in this session will reach a deeper understanding of the implications of the transition from one culture to another. It is the interaction of students from communities worlds away (the informal to formal) that can make this a daunting challenge for students and their teachers.

The support of all levels of leadership – from the WA Catholic Education Office to myself as Principal to the wider Aboriginal community – resulted in a renewal of the school. My leadership team in WA implemented programs agreed upon by administration, teachers and the community board.

Schools that successfully engaged Indigenous students in mainstream education were those that implemented models and programs to relate learning and comprehensive school-wide positive behaviour to real-life situations. The methodology and terminology was largely 'teaching in reverse'. Schools leveraged data from assessment tasks and diagnostic tools to inform teaching and learning practices. Contemporary theory of educational administration, such as proposed Bates, Elmore and Murphy, underpins this approach.

This presentation will also examine the role of the leader as opposed to the role of the administrator in remote Kimberley communities in WA. It will give unique insights into the lives of Aboriginal students and the challenges facing their parents who entrust educators to care for their children in a vastly different world.

Room 7

Valuing action research by classroom practitioners

Dr Patsy Norton and Matt Moorcroft, Craigslea State High School, QLD

CofP/Sec

Over the last four years, teachers at Craigslea State High School in Brisbane have engaged in professional learning within collaborative teams, known as peer learning groups. An initial evaluation of this framework for learning was tabled in the EPPC 2016 proceedings. More formal evaluative research was undertaken at the school in 2016 by the ACU's Learning Sciences Institute Australia into the means of increasing teacher agency in the learning process. This resulted in greater choice of focus for the peer learning groups and a commitment to an action research process by each group.

This presentation tracks the steps in the process of engaging teachers in selecting and owning collaborative action research. It also provides evidence of the nature and diversity of the school-based research characterised by authentic problems or foci, enthusiasm for learning and innovation, hands-on experience in the action research process, evaluation of practices, and sharing of research through publication of papers or participation in conferences. Hence this presentation provides a model of how to refine an approach to collaborative teacher learning within a school community, along with theoretical support for adopting action research. Further, it advocates celebrating that learning through publication of papers or involvement in conferences, as experience has shown that this is evidence of valuing the learning and makes teachers 'feel good about themselves'.

Room 8

Case study: Improving teacher clarity: Enacting visible learning theory into action

Nicole Blyth and David Hunter, Penrhos College, WA

L/Sec

In this case study we will present our journey of improving teacher clarity at Penrhos College over the time period of 2014 to 2017. This journey was informed by current research (Hattie, 2009; Hattie & Timperley, 2007) and drew upon a combination of coaching, traditional professional learning and more contemporary professional learning communities to achieve our goal. Annual data collection that focused on student voice via video has underpinned our case for change in conjunction with lesson observation, walk throughs and student feedback surveys.

While the research resonated with many educators at Penrhos College, the consistent application of practices such as learning intentions, success criteria and feedback in lessons was less evident. The data over time suggests staff are now engaging in planning and delivery practices which promote greater teacher clarity. In particular, student desire for learning intentions, success criteria and feedback from their teachers has been a key driver for change.

A K–12 whole-school professional learning plan has facilitated multiple pathways for engagement and participation of teaching staff. Strategies used to support professional learning include raising awareness of research, applications of practice to illustrate expectation, feedback on curriculum planning and delivery, and scheduled time for staff collaboration. Continued commitment and ongoing communication from leadership about progress toward achieving this strategic goal have been keys to our success.

While our journey is ongoing, we have learnt that change cannot be rushed. There has been an emerging correlation between this initiative and academic results for Penrhos College, suggesting that the investment in time and resources is worth continuing. The next step for is to define the 'Penrhos learner' and how each individual girl learns. This will evolve over time to support continual improvement in teacher quality to foster better student learning outcomes.

The session will share the process underpinning the initiative, a toolkit of strategies, data collection instruments, video excerpts from students and our results to date.

Room 5

So we've got a Facebook page: Supporting early career teachers through social media

Bernadette Mercieca, Xavier College, VIC

CofP/Sec

Early career teachers (ECTs) are increasingly using social networking sites to obtain the support they might or might not be getting in their school situations. This session will focus on my research through a survey, focus groups and interviews in 2016 with 104 early career teachers from most states of Australia and from New Zealand as part of a larger doctoral research project. It relates to how best to support ECTs through communities of practice. A community of practice is an idea popularised by Etienne Wenger, initially in the context of organisational and knowledge management, but more recently applied in the field of education. In this research project, communities of practice include social networking sites, including private Facebook groups, used by groups of teachers.

The research problem was the high rate of teacher attrition in Australasia. The Queensland College of Teachers suggests that 8% to 50% of teachers consider permanently leaving teaching in their first five years, with higher figures for male teachers and for teachers in remote areas. A related problem is the casualisation of the teacher workforce in Australasia. The Independent Education Union of Victoria and Tasmania alludes to an ongoing struggle with schools that keep younger teachers on fixed-term contracts for extended periods of time, beyond most teacher award agreements. For many ECTs, this can also mean starting at various times of the year and being in particular schools for very short periods of time. All of these factors have implications for mentoring, other forms of induction and for involvement in any teacher collaborative groups that a school may offer. In the light of these challenges for ECTs, social networking sites such as private Facebook groups offer a free, easily accessed, readily available 24/7 community through which ECTs can find support.

This presentation will honour the stories of these ECTs who have used private Facebook groups in three particular ways:

- casual support – those using Facebook to find support for their casual work
- cohort cohesion – those using Facebook to share resources and strategies with their cohort from either pre-service days or current experience
- situational support – those using Facebook to compensate for being in an unsupportive/hostile school environment.

The session will show how these ECTs used private Facebook groups as preferred social network sites to build collegiality and trust, and to form an online community of practice, not unlike a virtual staffroom. The presentation will be of interest to pre-service teachers and their lecturers, early career teachers and school leaders.

Room 6

Renovating the house of cards: Improvement that's sustained

Bo George, Mercy College, QLD

L/F–12

As a leader, how do you gain and maintain traction on the slippery slope of strategic whole-school improvement? Coordinating a focused and cohesive process with a large number of professionals, each with their individual perspectives, strengths and passions, toward a common goal is perhaps the greatest challenge faced by school leadership teams. Yet the overall success of our national reform agenda depends strongly on our school leaders and the success of the improvement processes they implement. This complex problem has solutions: sustainable, measurable and achievable solutions. An operational model for an annual school improvement cycle will be shared in detail for your consideration, as but one possible solution. Is this the answer to embedded change you've been looking for?

By implementing the best-practice recommendations of peak-body authorities such as ACER and ATSIL, at the 'coalface', in a systematic way, we have been able to secure ongoing and measurable improvements across the whole school. This annual school improvement cycle has been refined (or 'renovated') over a three-year period and is now embedded and stable and delivering excellent results. One key to the success of the implementation is whole-of-school-community consultation. Through this process of consultation, all staff, students and parents have engaged with (and learned how to identify) the best-practice performance indicators for a quality school. Through consultation and collaboration, a common understanding and language has developed about what quality education should be like, and how to achieve it in our school.

A vital component of this school improvement cycle is the implementation of transparent feedback processes, including, and perhaps most importantly, 'student voice'. The outcome has been the development of an authentic and sustainable improvement process that focuses the collective energy of the school to achieve measurable improvement and ongoing transformation.

Delegates should note, this is not a 'set-and-forget' fix. There remains the inevitable need for sustained attention and energy from leaders, such as yourself. This model may serve as a useful mechanism to help you implement and manage a sustainable and effective school improvement cycle in your school.

Room 7

Coaching teams, action research and real improvement in teacher capacity

Simon Conlan, Mazenod College, VIC; Andrew Lawrence and Nicole Rogers, Yarra Valley Grammar School, VIC

CofP/F–12

It is widely acknowledged that the teaching staff in schools is a repository of great skills, knowledge and wisdom. This potentially enormous resource remains largely untapped in many schools, thereby depriving educational institutions of a potent tool for improving their teaching and learning. The experience of the presenters is that careful planning of a whole-school professional learning program that uses professional learning teams (PLTs), or coaching teams, as its basis, can deliver genuine improvements in student learning. The professional learning program which is the subject of this presentation took place in a P–12 co-educational independent school, located in Melbourne's eastern suburbs.

In recent years, PLTs have provided a mechanism for tapping into the collective expertise of teachers. A common method of operation for PLTs has been for a small group of three or four teachers to meet on a semi-regular basis, identify a goal or an aim, tailor lessons to the aim, observe each other's classes and then debrief about what they have seen and 'coach' each other, with a view to improving teaching practice. Certainly this is a worthwhile exercise, but an approach that lacks a certain rigour and can quickly become repetitious.

The addition of an action research component to the work of the PLTs allows teachers to complement their own expertise, knowledge, and observations with published research in an area related to their goal or aim. Drawing on existing research in the field of education adds an extra facet to the coaching component that is integral to the effective operation of PLTs. In addition, because the PLTs are composed of teaching staff from across the school, both primary and secondary, and from all faculty areas, capacity enhancement across the whole school is a realistic aim.

As schools and educators face ever greater scrutiny in their efforts to improve student learning, facilitating a collaborative professional learning approach such as PLTs with an action research component is a cost-effective method of examining and improving teacher effectiveness.

Room 8

Case study: Building shared understandings, capacity and self-reflection through a whole-school coaching model

Dr Bradley Merrick and Dr Gregory Cunningham, Barker College, NSW

CofP/F–12

The Barker Institute was established at Barker College in 2014 as a key strategic initiative with three aims: professional learning, research and innovation. The Barker Institute allows the latest research and evidence to be used to improve teaching practice and student understanding through meaningful interactions with staff, students and parents across all stages of learning, whether in the Preparatory, Junior, Middle or Senior School.

A central tenet in professional learning was to engage staff in self-reflection of their own practice using a peer-coaching model within a 'college of teachers' structure, where staff could nominate or be nominated to be trained as coaches and then to work with colleagues across the school (Pre-K to Year 12). During 2016, the Barker Institute engaged in a reflective process to evaluate the initial success and validity of the coaching framework and its implementation. The evaluation drew on a variety of online survey tools and group-based semi-structured interviews, as well as on staff perspectives on innovative approaches to practice that could be offered as adjuncts to the coaching process. These included: provision of regular, shared, open lessons for observations; creation of small professional learning groups for discussion about pedagogy; trialling of the coaching process across the school with willing participants; and ongoing collection of feedback and data from staff where possible.

This case study presentation will share some of the insights and related projects that have emerged from this coaching initiative. There are now 45 staff trained and engaged in the process. The presentation will draw on the initial findings and explain the operational considerations that were required for this whole-school initiative. The case study will present staff perceptions and concerns: many participants highlighted the value of this professional learning, which involves both coaching and mentoring of staff. The case study will explore some of the issues for continued development of the 'college of teachers' and the challenges associated with whole-school innovation within a crowded and busy day-to-day program for more than 2100 students and 200 teaching staff. Transfer to other educational settings will also be considered.

Room 4

Workshop (80 minutes): Writing: Making students smarter and improving outcomes for all

Christine Hills, Rockhampton Girls' Grammar School, QLD

PP/F–12

Why is writing still in decline in Australia? Are our students just getting worse at it or is it that we don't know how to best teach the skill? And please, don't start me on the rationalising I hear about boys and writing.

Each year, the National Assessment Program – Literacy and Numeracy produces a disturbing result: writing in Australia is moving backwards. How is it that with the depth of research we have at our fingertips that we still can't get transference of this very important skill?

If you are interested in:

- making a substantial impact on the way your students engage in writing
- skilling your students to be self-editing
- learning about ways to improve the quality of feedback that students receive
- improving whole cohort performance in writing

… then this workshop is for you.

The Collins Writing Program is not a book, it is not a text, and it is not a recipe. It is a comprehensive set of teaching practices that will:

- increase student confidence
- allow teachers to focus teaching in a meaningful way.

In this workshop, you will:

- engage with data from real schools that shows the way to have an impact on your students
- learn about using change theory to frame a response to writing in your school
- practice using the writing strategies
- learn how to frame feedback that is more than teacher correction of a draft
- learn strategies, including the use of focused correction areas, to enable your students to self-correct their work
- learn high-impact strategies to improve the quality of sentence structures
- develop an understanding of how to incorporate the strategies into current curriculum and teaching.

If you are interested in making a difference to the way your students approach writing in the middle years, 80 minutes with the Collins Writing Program will start you on a journey of change in your very next class.

Room 9

Workshop (80 minutes): Encouraging use of evidence to inform decision-making

Sam Symes, Pullenvale State School, QLD; Dr Tanya Vaughan, Social Ventures Australia

L/F–12

Participants in this workshop will need to bring your own device (Android or Apple).

Evidence for Learning (evidenceforlearning.org.au) is a non-profit organisation that exists to support great practice in education across all schools and classrooms in Australia.

Our vision is an Australia where evidence-informed approaches raise the learning impact for 5- to 18-year olds, so that all children, regardless of background, make the best possible progress. We do this through building, sharing and encouraging the use of evidence to strengthen school decision-making, leading to improved educational outcomes for learners. School leaders in this workshop will learn about the way we are helping to build and share evidence with the Teaching and Learning Toolkit as well as learning about the evidence ecosystem.

The Teaching and Learning Toolkit (the Toolkit) is a free online summary of global educational research drawn from an international literature source of more than 10 000 studies (Evidence for Learning, 2017b). The Toolkit synthesises international and Australian research, to estimate the average impact, cost and strength of the evidence for a wide range of teaching and learning approaches. The Toolkit is a live resource that will be updated regularly as new studies are published in Australia or overseas. The Toolkit was recently upgraded with additional section focused on Australasian evidence through a collaboration with the Melbourne Graduate School of Education at the University of Melbourne.

Educators in this workshop will learn about the evidence ecosystem (http://evidenceforlearning.org.au/evidence-informed-educators/evidence-ecosystem/). The evidence ecosystem is the interaction of two processes; the impact evaluation cycle in schools and the wider evidence chain involving education researchers and policymakers (Evidence for Learning, 2017c).

Educators in this workshop will use the Toolkit to detail how they can turn evidence into action within their school (for example, how they can implement feedback at their school or classroom). The educators will explore how they can use the approaches within the Toolkit to help address a selected challenge they are facing at their school. They will also explore how to measure the impact of the approach they are proposing (such as through the use of pre- and post-intervention measurements).

Room 5

Data into action for impact

Kathryn Cunich, Oxley College, NSW

CofP/F–12

Teachers need to use data to plan, assess and reflect on student learning and achievement, in order to gauge the effectiveness of their own teaching (Hattie, 2011). Leaders need to facilitate authentic collaborations based on data to build collective teacher efficacy. Schools need to develop systems that communicate student data in a way that is accessible, commonly understood and purposeful. What does this look like in practice for time-poor teachers, leaders, schools and systems?

This presentation will explore Oxley College's use of data to improve student learning and achievement. As part of the Visible Learning strand, 'Know thy Impact', school leaders have worked with teachers to develop a K–12 school-wide system of coding that is easy to access, interpret, analyse and disaggregate. The result? A thriving climate of rich and authentic conversations for teachers and leaders in collaborative planning teams.

A culture of 'beautiful data' is emerging, evidenced by teachers who are empowered to differentiate and provide targeted interventions for their students, assisted by their knowledge and understanding of student 'D'nA' (data in action). By accessing the visible D'nA, teachers are able to efficiently see a combination of results from a range of external assessments such as the ACER General Ability Tests (AGAT), Progressive Achievement Tests (PAT), Tests of Reading Comprehension (TORCH), International Competitions and Assessments for Schools (ICAS), National Assessment Program – Literacy and Numeracy (NAPLAN), and writing samples for each of their students. In this session, workshopping of the process and the interpretation of the data will be used to help participants understand how to map a class, plan for response to intervention and build a school-wide understanding of the diversity of its learners. The patterns and stories that emerge are powerful motivators for transforming all classrooms, K–12.

Data is a key tool for teachers. Helping teachers and leaders interpret a range of data in a way that directly impacts student learning and achievement is both challenging and imperative. This session will provide practical advice from a school evidencing success in improved student engagement and outcomes, as featured in *Visible learning into action: International case studies of impact* (Hattie et al, 2015).

Hattie, J. (2011). *Visible learning for teachers: Maximizing impact on learning*. New York, NY: Taylor & Francis.

Hattie, J., Masters, D., & Birch, K. (2015). *Visible learning into action: International case studies of impact*. Abingdon, United Kingdom: Routledge.

Room 6

What middle leaders do: Steering a successful school improvement project in writing

Tania Schmidt and Jan Burton, Rangeville State School, QLD; Wendy Luscombe, DET, QLD

L/Prim

Research indicates that professional learning communities (PLCs) that work collaboratively on data inquiry cycles lift student achievement. This session describes the approach of a large urban school, Rangeville State School, which, through data inquiry, implemented a school improvement project in writing across 2015 and 2016 which yielded significantly improved student outcomes, including:

- 26% increase of students achieving in the upper two bands in National Assessment Program –Literacy and Numeracy (NAPLAN), with 51% of the total cohort in the upper two bands for writing in 2016
- a 30-point improvement in mean scale score for Year 3 students
- 89% of students achieving a C or above in English.

This project was Rangeville's response to a gradual decline over five years in Year 3 and Year 5 NAPLAN writing data. Additionally, teachers had reported increasing student disengagement and other stakeholders noted an inconsistent whole-school approach to the planning and explicit teaching of writing.

Through a partnership with a regional curriculum support officer, the master teacher and the head of curriculum were able to:

- develop a whole-school English program aligned to the Australian Curriculum that highlighted writing while maintaining a strong focus on reading
- select specific targeted areas in the teaching of writing, for which they developed clear and consistent whole-school practices to implement while also resourcing and supporting the teaching of writing
- facilitate cultural change by gradually supporting teachers to work as professional learning communities, authentically collaborating to improve student learning outcomes.
- simultaneously continue to improve NAPLAN reading data.

This session will show how a 'faces on the data' approach can support teachers or PLCs to:

- build trust and normalise discussions about student writing so that teachers share ownership and responsibility of the teaching and learning of writing
- set writing goals and provide constructive feedback to students
- strengthen teachers' accountable talk about teaching and learning
- analyse formative, summative and NAPLAN writing data to identify and calibrate specific problems, in particular text structure, audience and sentence structure
- actively seek solutions to address problems of practice
- and student learning gaps
- develop a consistent whole-school approach to the explicit teaching of writing that engages and supports students to become successful writers.

The presenters will also describe the results of these actions, including specific improvement in learning outcomes, pedagogical practice and attitudinal and cultural shifts.

Room 7

Better teachers, better learners: One year on

Philippa Mulqueen and Kylie Kilmartin,
Pakuranga College, NZ

PP/Sec

The challenge for teachers is to develop pedagogical responsiveness to meet the diverse learning needs of students. This is why teachers at Pakuranga College choose to inquire into an aspect of their teaching each year with a focus on improving student learning outcomes. The process of gathering student voice and adapting teaching in response to it has strengthened teacher and student learning partnerships. However, in 2016 it was felt that the next step in building authentic learning relationships was to focus on gathering student feedback much more regularly using a variety of modes and providing a context where students felt safe to respond with ever-increasing honesty.

At the beginning of the school year, Dr Claire Sinemna of Auckland University led staff in rich discussion of some of the issues emerging from research in relation to the timing, mode, frequency and implications of student voice. Staff understanding was deepened through the use of weekly professional learning time to read and discuss some of the latest research. Staff also shared some of the ways they were gathering student voice and using it to inform their inquiry into a problem of practice they had identified early in the year. Many teachers kept logs of their learning journey using student voice and shared this informally with their colleagues. However, all teachers were required to use faculty meetings, their professional learning groups and a cross-curricular group to share their reflections, methods, successes and failures. In September, students and teachers collaborated in a variety of joint presentations to

all staff about their experience of being engaged together in the learning process. The expectation and provision of time for teachers to share their experience increased accountability and transparency. It was clear that students valued the efforts of teachers to listen and respond to their feedback. A survey of teachers provided valuable data that was analysed alongside the presentations.

The school-wide approach helped students see that their feedback mattered, while simultaneously convincing teachers of the value of seeking and responding to regular, specific feedback from students. More than 90% of teachers reported using student voice to help them evaluate the usefulness of teaching and learning strategies. They identified positive changes in student understanding, attitude or engagement as a result of changes in the teaching and learning strategies used. The presentations and survey also identified gaps in the understanding of teachers around the use of student feedback and inquiry, which are being addressed in 2017.

Our experience shows a school-wide focus on gathering student voice frequently and in a variety of ways has a positive impact on student and teacher learning partnerships. We recommend soliciting student input on the questions they wish teachers would ask them as an important step in developing the use of student voice to improve student achievement.

Room 8

Case study: Leading learning: Exploring the interrelated roles of school leaders

Susan Paterson, Gatton State School, QLD; Tania Leach, DET, QLD

L/Prim

This paper explores the interrelated leadership roles of a principal, regional project officer, master teacher and teacher leaders in improving teaching quality in a Queensland government primary school. Throughout the two-year case study, various leadership structures were enacted and their impact on school improvement analysed.

Research in the area of leadership and school improvement often focuses on the work of principals as instructional leaders who foster distributed leadership practices (Lewis & Andrews, 2009; Spillane, Halverson & Diamond, 2001). David Hargreaves (2011), Frank Crowther and associates (2011), and Peter Senge (1990) are a few of the researchers who have championed models for school improvement. Factors that have contributed to successful model implementation leverage shared understandings and the development of key competencies in partnership with shared accountabilities. Such explanations, however, do little to clarify how the various leadership roles within a school are simultaneously enacted.

This paper seeks to shed light on how the various leadership layers are enacted, bridging the gap between school improvement strategies and the resulting classroom practice.

This case study emphasises the voices of practitioners, articulating their processes for enacting school improvement practices over the two-year period. Two researchers were involved in the writing of this paper: one insider master teacher, one insider/outsider project officer researcher. The analysis looked for specific factors that contributed to context-specific distributive leadership processes, and to consistent pedagogies. These are supplemented with strategy extracts, observations and feedback.

The findings revealed the following:

- key factors essential to the enactment of this distributive leadership model
- the preferred model to build the collective capability of the leadership team
- clarity of the school improvement agenda and processes from all key stakeholders
- contextualised, whole-school, evidence-based pedagogy, as evidenced by:
  a. a positive shift of teachers focus from the delivery of pre-planned lessons to differentiating teaching based on student learning needs
  b. consistent pedagogical practices being observed in 100% of classrooms.

Partnerships between the various leadership levels involve more than explicit roles and responsibilities. Shared ownership (developed through collaborative inquiry) contributes to effective strategy translation and implementation. Although a small case study, this research provides insights into the lived experiences of enacting complex change and improvement policy agendas. Future research would benefit from increasing the scope of the case studies to better understand the processes and approaches that best support practitioners to successfully translate policy to practice in their own contexts.

Room 5

The case for co-design: Improving achievement, attendance and engagement

Justin Kentish and Kay Smith, Craigmore High School, SA

PP/Sec

This presentation will look at how the Teaching for Effective Learning (TfEL) framework and a range of co-design activities can be used to increase the academic achievement and engagement of all students regardless of their educational level.

This presentation will unpack how teachers and leaders at Craigmore High School co-designed learning for improved educational outcomes starting from 2015. It will explore how teachers can work with individual students and classes, as well as how leaders can support staff and students to create a partnership of schools to improve the educational opportunities for all.

The TfEL Framework is made up of four domains with several elements under each one to support effective teaching. The framework was developed following five years of research, observations and interviews with students, teachers and educational leaders.

The school-based action research that produced data for this presentation was generated at Craigmore High School and across the Uleybury Partnership in Northern Adelaide.

The data encompasses academic achievement in the form of results from ACER Progressive Achievement Tests in Reading and Mathematics, as well as teacher grading of student work across cohorts. Anecdotal data from students and staff is used to support claims of improved engagement, and attendance data from the school to support increased attendance rates. The project considers qualitative data from individual student and teacher reflections on participating in the process of co-design.

The outcomes of this project include:
- increased attendance and academic achievement from previously low achievers
- increased academic achievement of students to stretch their thinking
- improves student metacognitive skills
- student and teacher engagement in the creation of co-design communities.

This presentation will discuss recommendations including:
- how leaders can support their staff to take risks that involve bringing students into conversations around learning and the learning of their peers
- how teachers can stretch their thinking and their pedagogy to find a place in their professional practice that allows for students to move beyond being the receiver of knowledge to a co-designer of knowledge
- how teachers can apply their created knowledge to relevant, real-world challenges and passions that engage, inspire and ultimately create strong learning communities.

Room 6

Learn. Grow. Flourish! Targeting growth in the middle years

Lucy Gowdie, The Peninsula Grammar School, VIC

PP/F–12

'Quod Bonum Tenete: Hold fast to that which is good' is the enduring motto of Peninsula Grammar. It sits at the nucleus of our evolutionary approach to 21st-century teaching and learning. The school aims to meet the challenges of the present, in order to best prepare its students for the future. In creating a middle-years teaching and learning framework, we focused on growth. The framework targeted the individual learner and challenged traditional notions of best classroom practice.

Change was driven by key questions:
- How do we cater purposefully to this generation of free-thinking, technological learners?
- How do we engage them in meaningful learning when all of the answers are but a mouse click away?
- How do we construct critical, creative thinkers when they buy into popular perspectives without question?

By removing the shackles of tradition, challenging the status quo and pushing the envelope in all different directions, we empowered not only our students, but our educators to learn, grow and flourish.

This presentation is focused on the design, implementation and assessment of this framework. The framework has, at its core, the growth and success of every learner. The research was centred on growth mindsets, the importance of measuring teacher impact and investigations into learning continuums and developmental taxonomies. From this research, we developed an informed, evidence-based process of teaching, assessing and reporting. The design fundamentally shifted approaches to teaching and learning: from a culture of isolation to one of constructive collaboration; from a one-size-fits-all model to a targeted focus on teaching at the point of need. The framework recalibrated the role of teacher and learner over the course of the year and highlighted the urgency of meaningful change.

The framework was implemented in 2016, and targeted the Year 5 cohort. The school measured the the students' learning against criterion for targeted areas of growth, to ensure the new curriculum processes and procedures were effective at the specific point of need.

The outcomes were as significant for the educators as they were for the students. All students exhibited growth across the learning continuum, some as many as two levels (within the Victorian Curriculum) in one academic year. The educators adopted a broader perspective of who they needed to be in their classroom and learnt the importance of evaluating their impact with a more collegial, confident and critical lens. Through shared successes – and more importantly, failures – the team was unified in its purpose and desire to see the framework succeed. 'Hold fast to that which is good' has taken on new meaning in the hallways and classrooms of Peninsula Grammar.

Room 7

Children as agents of change in three sustainability projects in an early childhood setting

Jane Everett, Craigmore Kindergarten, SA

PP/EC

The United Nations Education, Scientific and Cultural Organisation (UNESCO) recommends that the most suitable starting point for education for sustainability is early childhood. Most education for sustainability programs in early childhood education target education *about* the environment or educating outside *in* the environment — but very few programs have educated young children about *actioning for* the environment.

Craigmore Kindergarten gives children opportunities to action for the environment in three sustainability projects. Children discuss their ideas and record them in a small group around a floorbook.

Children have a self-access garden shed. They are free to obtain gardening tools as well as rain water to use in their role play of caring for the garden, or to use in work for purpose activities such as revegetating kindergarten land with native species. Children choose to work alongside parents and educators in gardening projects during play time. Children sort their food waste and dispose of it according to the categories of recyclables, landfill, compost, chicken food, and soft plastics. Children and their educators take the soft plastics to Coles Supermarkets for their 'REDcycle Program' to be manufactured into outdoor furniture for Australian preschools and schools. A pair of breeding Masked Plover birds on site has piqued the children's interest in their offspring, and so they decide to yell out to passing motorists to slow down as the chicks cross the road with their parents. Their educator scribes a community notice to be attached to their perimeter fence as the children dictate the text.

Delegates may wish to reflect on their own practice in education for sustainability in the early childhood sector.

- How are the opinions of very young children taken into consideration in planning environmental experiences?
- How are the Rights of the Child considered in environmental planning?
- How can children self-access materials in their role play and work?
- How can very young children contribute towards sustainability projects and work for a purpose in the preschool?
- How can children participate in sustainability projects in the community with their families?

Very young children wish to contribute to sustainability projects in their community and have a human right to offer their opinion. As recommended by UNESCO, the most logical starting point for sustainable development is early childhood education.

Room 8

Case study: Tracking and visualising student effort: A practical analytics tool for student engagement

Robin Nagy, Redlands School, NSW

L/Sec

To what extent do good academic results lead to success in life? Are there other traits which we should be measuring and nurturing at school? In the world beyond the classroom, dispositional characteristics such as persistence, resilience, self-discipline and effort are increasingly becoming valued as more reliable indicators of success than academic results alone, and this is supported by current research into these 'non-cognitive' character traits. This session will detail the evolution of a student effort tracking project which quantifies, visualises and tracks student effort against academic achievement.

We teach against an educational landscape increasingly dominated by high-stakes summative assessment and academic ranks but just what are we assessing? Do these measures reliably indicate the future potential of our students? Research indicates that increasing testing does not raise academic standards and promotes an extrinsic rather than intrinsic motivation for learning. Rather than nurturing a joy of lifelong learning, this results-driven focus emphasises distinct ability divisions that promote fixed mindsets in students, teachers and parents. The result is to create an academic climate where failure is seen as a reinforcement of inability, rather than a challenge to be overcome, and one in which students' anxiety levels increase, often with a detrimental effect on their performance and wellbeing.

By comparing students with each other based on their effort, rather than their achievement alone, we subtly shift the systemic success-focus onto qualities which promote a growth mindset in all students. So how do you measure effort? How do you ensure staff and student buy-in? Do students rate their effort the same as their teachers? How do you ensure consistency and accuracy of data?

This project, deployed in successive versions over seven years in two secondary schools, has successfully improved intrinsic student motivation for learning across all cohorts and has led to high-quality, data-driven coaching conversations with students and teachers. Participants in this session will discover that evaluating student effort, although challenging, is possible; and will learn of a practical approach that has a beneficial motivating effect on students of all academic standards, as well as creating a culture of learning rather than one of passing tests.

Room 4

Workshop (80 minutes): Building capacity and initiative through the savvy use of BYOD

Lucy Badzim, Canberra Girls' Grammar School, ACT;
Dr Jann Carroll, Australian Catholic University, ACT

PP/F–12

The bring your own device (BYOD) initiative is a trend that has been gaining popularity. It is widely acknowledged that technology plays a significant role in the daily lives of students, forming an integral part of their learning.

This workshop aims to provide skills, tools and insights gained from research into the implementation of BYOD conducted in three Year 5 classrooms over the course of 12 months in an International Baccalaureate school. The introduction of BYOD necessitated a significant change in the way teaching and learning occurred. The school needed to reconceptualise pedagogy, assessment and planning. Traditional teacher and student roles were challenged. Data was required to inform our practice and to provide an evidenced-based approach to ensuring teachers and students built capacity, took risks and celebrated initiatives within a community of practice.

A hands-on approach is vital to embedding technology. This session will engage attendees in demonstrations, discussions and sound pedagogy drawing on student work samples and key research. It will also explore the important decisions and actions that were employed throughout the school to drive the BYOD program. Student voices will be showcased to demonstrate how powerful technological tools for teaching and learning provide learning experiences across the curriculum to enable students to engage confidently with, responsibly select and manipulate appropriate technologies for learning.

Attendees will receive insights into what has been learned from our research and strategies to improve their own practice when teaching and learning with technology or to assist in the decision to introduce a BYOD program at their school. Additionally, participants will receive a link to access all apps, examples and learnings, with additional tips for classroom implementation.

All participants must bring their own device to this workshop.

Room 9

Workshop (80 minutes): Building the engine room of your school: Development of middle-level leaders

Heather De Blasio, Wilderness School, SA

L/F–12

The successful enactment and implementation of a school's educational mission and strategic plan rests heavily upon the shoulders of those who must deliver it: the middle tier of school leaders, often called the 'engine room' of a school. Research suggests that in Australia such leaders are frequently appointed for their skills as classroom practitioners or their leadership potential, but often with little formal preparation prior to commencing their role.

This workshop draws on contemporary middle management and educational leadership literature, as well as a successful initiative conducted in our school in the past 12 months, which has seen significant growth in the leadership capacity of our middle-level leaders.

Through group activities and discussion, participants will learn a range of strategies to develop middle-level leaders in their own schools. Based on the principle of purposeful design, these include structures and protocols for leaders to: cultivate interpersonal skills; activate groups; generate and share ideas whilst allowing everyone a voice; process information within groups; and foster 'conscious curiosity' about student data, empowering leaders to use it skilfully and respectfully with their teams to address student needs. Templates will be provided, along with ideas for the ongoing development of middle-level leaders through annual leadership goals and action plans, reflective conversations and follow-up mechanisms.

Given the increasing evidence of the crucial role that middle-level leaders play in the learning agenda of our schools, this workshop offers a practical and purposeful approach for developing the capacity, skills and willingness needed. This is critical for any school if strategic intents for school improvement are to be realised in the daily life and experiences of all teachers and students.

Room 5

A whole-hive approach to school improvement

Kelly Jeppesen and Lyn Griffiths,
Dakabin State School, QLD

L/Prim

This presentation has something for everyone: teacher leaders, school leaders, curriculum leaders and future leaders. We have imagined the school as a hive. In keeping with our metaphor, we welcome you to enter the world that is our Dakabin State School hive; and through a cross-pollination of ideas and concepts, you will leave this presentation with ideas to support your own learning and your school improvement journey.

Our school is on a quest to develop continuous and sustainable school improvements using contemporary research. During the presentation, we will unpack how we have intentionally identified and blended elements of key educational research. We aim to have a consistent approach to teaching and learning that optimises our energy and uses high-yield pedagogies to improve student learning outcomes.

Dr Michael Fullan's leadership and systems change research, Professor John Hattie's visible learning research and other works of evidenced-based research have driven our strategic and operational decisions. This research, along with a humble metaphor, has revitalised our school, inspired our teachers and staff, enhanced the results of our students and built confidence in our school within community.

At Dakabin State School, we have developed a pedagogical framework and explicit instruction guide colloquially known as 'the Hive'. This is an organic artefact in our school that is highly valued by our teaching team. It is essentially our evidence-based professional guide to how we collectively align our pedagogies for effective, quality teaching. It is the evidence in our school of how we have interpreted and translated research into practice that makes sense for teachers, is efficient in the use of human and financial resources, and improves student outcomes.

As a leadership team we believe that it is our job to coach, support and build the climate in which teachers can practice their craft, refine their technique and maximise their impact and effect on student learning outcomes. We will explore how we have implemented a teacher capability coaching suite and how we use data strategically and practically to measure the learning achievements of students and for teachers to 'know thy impact', and for us as educational leaders to know our impact.

For more explicit examples of how these practices translate into learning specific pedagogical practices in our school, see the presentations 'Visible reading: Hattie in the hive' and 'Success for all in the hive: Engagement for all learners'.

Room 6

Wonders of the World: Our journey into LOTE

Sue Ellis and Skye Grivell, Encounter Lutheran College, SA

PP/Prim

How do we engender an understanding and appreciation of culture in young people as they begin to learn a language other than English? Wonders of the World (WOW) is a rich and diverse 'cultural infusion' program for Foundation students. Taking the concept of global connections to a personal level, the children take their 'passport' and suitcase each week to visit culturally significant stories, songs and aspects of daily life.

Beginning with a multi-language greeting, children are engaged with picture books related to, or from, the country being 'visited'. With input from families, students explore with relish. Engagement levels are high, particularly for those children who have a connection to the 'destination'. Our aim is sweeping – to unpack the concept of culture and to enable students to connect with their own histories and experiences. We also recognise that diversity is something to explore and celebrate. While on the surface, our population may appear somewhat monocultural, there is an opportunity for families to reflect on their own varied networks and history.

Inspired by Tayangar and Mladic-Morales' *Global Education Toolkit for Elementary Learners* (2014), we sought to 'personalise the global' for students. Through written and oral literature, art and humanities, students explore countries and cultures over two lessons each week, delving into the commonalities in daily life and the way children live. One student explained that: 'In the Netherlands the children ride bikes and they can go shopping and put things in the box on their bike because it is flatter than Victor Harbor.' Another commented: 'We got our Schultüte from Germany when we started school.' These are examples of the connections children make during WOW.

Following a year of WOW, students delve into their early language experiences in Japanese. Anecdotal evaluation indicates an increased level of interest and engagement, attempts at language use and an eagerness to share learning experiences with their family.

In our context, the value placed on the acquisition of an additional language is challenging. However, we believe that 'the development of intercultural understanding is a central aim of learning languages' (Australian Curriculum and Assessment Reporting Authority [ACARA], 2014).

The explicit and strategic approach to teaching WOW allows the program to be easily replicated in other contexts. The workshop will review the initial vision, implementation, challenge and outcomes (both expected and surprising) of this multi-modal and engaging cultural infusion program.

Room 7

Promoting academic excellence through digital learning

Philip Callil, Yarra Valley Grammar School, VIC

L/F–12

While societies continue to be transformed by technology, the case for change in many schools remains relatively static. Unless the need for change is embraced by leadership, the impetus to prepare students for an ever-evolving future can be stifled.

This presentation will look at a vision for academic excellence using digital learning. Six key areas are identified. Each will be discussed in the context of a multi-year plan. The plan is designed to prepare students, not only for the rigours of senior studies, but for their lives beyond school.

Room 8

Case study: Feedback on feedback: The impact of feedback on the performance of senior Visual Art students

Peter Cooke and Dr Patsy Norton, Craigslea State High School, QLD

PP/Sec

Types of feedback can be quite diverse, as can the modes of delivery of feedback. A senior Visual Arts teacher at Craigslea State High School in Brisbane undertook evaluative research over two years of senior schooling to determine what form of feedback his students valued and the impact of forms of feedback on their subject results. His intent to invite student feedback on his teacher feedback was linked with a desire to improve the mindset of students and thereby their effort and motivation.

His review of theory resulted in the identification of feedback categories of praise, elaboration and verification. These were matched to his types of classroom feedback, which targeted one or more of the syllabus subject criteria. The teacher surveyed students to determine which type of feedback, from their perspective, had most impact on specific criteria, including appraising, visual literacy and application. In addition, he tracked and compared student performance standards over two years of study. These two sources of data were triangulated against qualitative data obtained from interviews with students whose results improved significantly over the two years.

The outcomes of the research not only identified critical causal relationships between types of feedback and student performance, but also revealed the benefits of engaging students in talking about the process of learning. This presentation may assist educators in considering the benefits of reciprocity of feedback and a systematic approach to evaluating the impact of feedback.

Room 5

Influencing self-regulation and resilience in students: What is the impact on actual results?

Alex Krzensk, Anglican Church Grammar School, QLD

PP/F–12

In the modern classroom, technology and instantaneous access to knowledge is the norm. Instantaneous access, however, can arguably have a negative impact on students' ability to concentrate, be resilient and self-regulate. This study analyses the impact of explicitly developing self-regulation and academic resilience on academic results.

Self-regulation and resilience have long been correlated with academic success. Skills include: bouncing back from adversity; using failure as a form of feedback; planning effectively; monitoring and evaluating learning against goals; and modifying as required. Too often, these are considered innate skills that develop with maturation, rather than as skills that can be taught. It is always difficult, in schools under the increasing pressures of external testing and content delivery, to add to an already crowded curriculum. However, when self-regulation and resilience are treated as trainable skillsets and developed explicitly on a regular basis, the research indicates a positive influence on academic outcomes.

Effective differentiation and individualisation have long been core goals of quality education, particularly in the last decade underpinned by technology. In response, the development of quality digital learning tools over the same duration has exploded, reaching the point now where essentially anything can be learned online. Thus, education is currently amid a digital transformation. Uptake and usage of technologies however, are still quite poor from a macro perspective and education lags significantly behind other industries in technological usage. A major underpinning issue however, stems from student ability, relative to their use of resources, to self-regulate effectively. Research is indicating that ultimately, successful student learning is limited only by their drive and aptitude to effectively use the plethora of resources available.

This study exposes and develops student ability to recruit and use the skills of self-regulation and resilience by dedicating class time, on a regular basis in Mathematics, to the individual addressing of misconceptions and the navigation of digital resources. The study analyses quantitative student results from their quarterly Mathematics exams with the goal of assessing *if the ongoing development of self-regulation and resilience skills has a significant effect on independently assessed academic outcomes.*

Results to date have found a significant difference between the control stage and intervention stages one and two (note: each stage, including the control stage, represents an entire cohort of ~200 students). Results improved both between term results (inter-stage) and internally over the course of the intervention (intra-stage).

In addition, the program also sought to develop and assess strategies that effectively engaged teachers and provided a constructive conflict that ultimately prompted adjustments to normal teaching practice. Qualitative teacher feedback surveys indicate that teachers acknowledge the value of these strategies and have incorporated the strategies into their daily teaching practice.

Room 6

Reform efficacy: An essential construct for school leaders tasked with building organisational capacity

Dr Donna Evans, Compass Education Australia

L/F–12

To say that change is a constant is almost cliché yet it is a truism confronting educators all across Australia. While change can suggest innovative and exciting additions to practice, it can also bring with it a number of negative consequences for teachers in the form of stress, resistance and frustration, the outcomes of which are felt right across the site. The task for school leaders is to instil and sustain commitment, enthusiasm and engagement in such high-change and economically challenging environments, when teachers feel they are time poor and fatigued. Yet, when talking to teachers, even those relatively new to the profession, it is apparent they have a very strong sense of what elements of reform will work in practice and the necessary site conditions required to successfully implement it.

The term 'reform efficacy' describes teachers' observations and conclusions about a reform's capacity to deliver its intended outcomes. Teachers are experts at understanding this because they are the implementers and practitioners of such initiatives and use their expertise to make them work. This presentation shares teachers' perceptions of 'reform efficacy' and shows how such understandings can be a powerful leadership and management tool for all those engaged in implementing change. Its intention is to provide a richer understanding of how change might be more effectively managed while limiting its negative impacts, most specifically on the education system's most important resource, its teachers.

Room 7

Collaboration to increase the involvement of educational support staff in language development

Erin West, Aurora School, VIC

CofP/EC

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. There is a focus on language and communication within the school strategic plan, to improve the access and outcomes for each language. Every classroom has one hearing teacher and one deaf support worker or teacher, so that there is a language model for English, and one for Auslan.

In order to track the language development of our students, we rely upon language samples taken throughout the day by teachers and educational support (ES) staff. Teachers of the deaf and speech pathologists work collaboratively to complete a checklist in English (The Sunshine Cottage Acquisition Scales for Listening, Language and Speech) and another in Auslan (developed by Aurora School) for each child on an approximately six-monthly basis. However, while teachers of the deaf receive special training regarding English language development in children, there is no training for deaf staff members regarding Auslan.

Given that speech pathologists regularly provide training to teachers to increase their knowledge and skills around language development, in line with the school's strategic plan, it was proposed that similar training could be provided to ES staff. This training would look at improving their knowledge and skills regarding the linguistics of Auslan, and workshop ideas for language teaching.

This has involved a weekly meeting facilitated by a speech pathologist familiar with the linguistics of both languages. There has been a focus on linguistic concepts, as well as the development of language for children. This meeting has also allowed for regular peer discussion, in addition to group analysis of language samples using the Auslan recording sheets to strengthen understanding and improve inter-rater reliability for the assessment process.

We now have stronger links between the speech pathologists, teachers and ES staff, and a demonstrated increase in the confidence of the ES staff to run activities focusing on language development. This has translated into the performance review process, and the expectations for ES staff to increase their responsibility and input towards language learning. The quality and number of language samples gathered from the children has also increased, with samples now available for every child in the program. ES staff were surveyed at the end of 2016 to identify positives and negatives of practice throughout the year and each staff member has identified the training meetings as being a highlight of their practice in 2016.

Providing linguistic training for ES staff has resulted in an increase in confidence and ability to run activities autonomously, lessening the load for the class teacher. It has improved the use of the Auslan recording sheets, so that more language samples are being gathered more often. The quality and consistency of these samples has also increased. These positive outcomes demonstrate that it is possible to utilise speech pathology support to focus on training and language sampling, in order to improve the quality and language input in the classroom.

Room 8

Case study: Subject coordinator leadership and student achievement in eight Catholic secondary schools in Sydney

Deborah Buscall, Catholic Education Office, NSW

L/Sec

This case study has its genesis in the improvement in student achievement in secondary schools in Sydney Catholic Schools in NSW. The study explored the instructional leadership of subject coordinators in 13 subject departments in eight secondary schools in Sydney Catholic Schools. Although the study was driven by the focus of raising student achievement in the NSW Higher School Certificate (HSC) examination, it had a broader focus in relation to improving student achievement in secondary schools. While the literature acknowledges that there are a number of factors that contributed to student achievement, this study focused on one of those myriad of factors: the effect of instructional leadership of subject coordinators.

The data for this case study was collected from six English and seven mathematics subject departments in eight secondary schools within the Catholic Education Office's Sydney Catholic Schools (SCS) system in NSW. An adapted version of the Educational Leadership Practice Survey (ELP, NZCER, 2012) was used to gather the data in this study.

The case study, consisting of these 13 subject departments, found that instructional leadership, as framed by the adapted ELP (NZCER, 2012), was effective in all subject departments. It also found that there was little difference in the effectiveness of subject coordinator leadership in the six English and seven mathematics subject departments and that there were differences in the views of teachers and subject coordinators about the effectiveness of instructional leadership. However, when the subject departments were examined in terms of those that were higher performing and those that were lower performing, the effectiveness of the instructional leadership of the subject coordinator in the three higher performing subject departments was no more effective than that of the subject coordinator in the three lower performing subject departments.

Further examination and analysis of the different views of the teachers and subject coordinators suggested that there was an unidentified element at play in leadership in higher performing subject departments in secondary schools in SCS. This unidentified element went beyond the traditional role of the subject coordinator, the nature of relationships that exist in subject departments, and the complexity of the human factors of teachers and teaching.

This case study also supported the integration of the theory and execution of instructional leadership of the subject coordinator in the improvement of student achievement, and provided recommendations that may assist subject coordinators in this integration.

Room 4

Workshop (80 minutes): Using the structure of observed learning outcomes (SOLO) taxonomy to create deep-level learners from F–6

Vicki Phyland, Malvern Central Primary School, VIC; Sophie Murphy, University of Melbourne, VIC

PP/Prim

This will be a practical hands-on workshop that will unpack some of the theory, research and high effect size of using the structure of observed learning outcomes (SOLO) framework to support teaching and learning. Research from John Hattie's *Visible Learning* will be discussed, including how learning intentions, instructional practice and success criteria can be developed and enhanced with the use of the SOLO taxonomy. The SOLO taxonomy enables all learners to engage in deep-level learning opportunities with specific verbs used to move from surface to deep-level learning.

Though a variety of activities, participants in this workshop will gain knowledge through specific strategies and tasks that will create meaning and can be taken back to the classroom/school. Specific examples will be shown from the Malvern Central P–6 teachers and their students. The examples document the learning growth fostered through using this framework.

The session will promote understanding of learning intentions, success criteria and the SOLO taxonomy. Delegates will leave this workshop knowing how a shift in language can create deep-level learning opportunities for all.

Room 9

Workshop (80 minutes): Teachers' first: An innovative approach to collaborative professional development

Rachael Pelling and Nicole Barton, Gympie West State School, QLD; Rob Proffitt-White, DET, QLD

CofP/Prim

The Gympie Mathematics Alliance has united seven (Prep to Year 6) primary schools and one high school in the north coast region of Queensland. The schools have a shared vision to empower teachers to become confident, creative and passionate about teaching mathematics. Local principals recognised a need to go beyond the purchasing of commercialised resources, and requested state-supported expertise to have teachers develop and validate their own resources. The Gympie Mathematics Alliance aims to align teacher knowledge, beliefs and self-efficacy to deliver the intent of the Australian Curriculum: Mathematics through grass-roots, collaborative, job-embedded professional development.

Over an extended period, schools send teams of teachers to become experts with up-to-date research in mathematics pedagogy, curriculum and assessment. The workshops, three full days each term, build teacher knowledge and confidence. They also target school agendas, focus on collaboration and the following fundamental tasks:

- designing validated and rigorous diagnostic tools to enable teachers to think about mathematical concepts and their own student's thinking
- creating interconnected activities to alleviate content overload
- developing cognitive activation tasks allowing all students access to critical thinking
- embedding the right routines and pedagogies to nurture positive disposition
- upskilling teachers in facilitating productive mathematical discussions
- drawing teachers to the intent of the Australian Curriculum: Mathematics.

Delegates will become familiar with the processes undertaken by Gympie Mathematics Alliance teachers through the following activities:

- developing mathematical questions that can activate all four proficiencies of the curriculum (understanding, fluency, problem-solving and reasoning)
- designing questions to probe conceptual understanding
- using a scale to identify student needs and move learning forward
- exposure to the Gympie Mathematics Alliance suite of diagnostic tasks
- personalising the process of modelled, effective teaching traits through viewing videos of best practice.

This model has demonstrated impact, scalability and sustainability. As of 2017, the project has grown to include nine clusters, comprising 72 schools across the north coast region of Queensland. Importantly, it has led to teachers' improved understanding that all students require exposure to critical thinking, and increased willingness to create classrooms where all students are inspired by mathematics.

Room 5

It *is* rocket science: Early childhood through the eyes of Indigenous pedagogical leaders

Denise Cedric, Joanne Smith, Kym Bradbury, Nicole Watego-Gilsenan and Shontelle Petterson Heard, Early Childhood Education and Care Indigenous Leadership Program

PP/EC

This presentation focuses on the research of a group of 12 expert Aboriginal and Torres Strait Islander pedagogical leaders from urban, rural and remote Australia and is relevant to practitioners and policymakers in addressing the needs of Indigenous children and families.

The Australian Government has heavily invested in policies and programs to address the persistent gap in achievement and outcomes for Aboriginal and Torres Strait Islander people (Closing the Gap) with little effect. According to the recent Closing the Gap Report handed down by Prime Minister Turnbull, six of the seven targets set down a decade ago are not on track (2017).

Early Childhood Education and Care (ECEC) is a core focus of government attention. Our research shows that policy and practice in ECEC can position Aboriginal and Torres Strait Islander children and their families as deficit rather than focus on their strengths and in relation to parenting and language of education and run counter to the UN rights of the child. Policy, as the 'institutional representation of values' (Prunty, 1984), and metrics used to define and measure the 'gap' can, and do, direct practice all the way down to the classroom.

Despite the guiding principles that underpin the National Quality Standard in Early Childhood Education (ACEQA) that include the mandate to value Australia's Aboriginal and Torres Strait Islander cultures, and the Early Childhood Australia's Code of Ethics, which acknowledges Aboriginal and Torres Strait Islander traditional ways of being and caring for children, the voice and expertise of Indigenous families and educators remains largely unheard and unrecognised.

In the spirit of mutual respect and reciprocity, the 12 research projects document successful practice through a strength-based approach and draw on the deep cultural and pedagogical knowledge of Indigenous educators and families. They give voice to Indigenous ways of being, knowing and doing. The presentation uses artwork and storylines present the research findings. The projects focus on families as educators, the importance of home language, strength-based policy, play-based and age-appropriate pedagogies, wellbeing, identity and culture, and propose policy and practice solutions. The research foregrounds the expert knowledge and voices of Aboriginal and Torres Strait Islander educators and families and was conducted in a broad range of early years' services and contexts in rural, remote and urban areas of Queensland, Northern Territory and South Australia.

Room 6

Leading girls into ICT: Increasing female participation in technology

Elke Schneider and Lisa Thomson, Somerset College, QLD

L/Sec

Traditionally, girls have been under-represented in selecting to study information and communications technologies (ICT) at school and in choosing ICT as a career path. It is important to look at ways of increasing girls' participation in science, technology, engineering and maths (STEM) subjects for national economic growth, gender equality and improving future employment opportunities for women. With projections estimating that 75% of jobs will be affected by advancements in automation, this becomes even more critical. The Australian Government is investing heavily in initiatives designed to cater for a future where two-thirds of new jobs are related to information technology, and yet there are still cultural challenges that produce social barriers and deter women from entering these fields of study and work.

Somerset College has sought to increase girls' participation in ICT through an ethics of care approach that emphasises student-centred learning with continual feedback and authentic digital social connectedness. 2016 saw the first participation in the Search for the Next Tech Girl Superhero, a girls-only technology enterprise competition that successfully has engaged teenage girls at Somerset College in technology, innovation and entrepreneurship. Competitions give girls a collaborative and creative space in a social activity that improves their self-efficacy and confidence. The girls responded positively to female role models who extended a hand to them, warmly encouraged them to debunk the 'geek' myth and modelled working in ICT as a people-oriented profession. The participation, encouragement and promotion of their work by a female teacher and leader gave additional value and credence to the girls' participation.

Qualitative and quantitative data supports the success of this initiative. The project has offered caring coaching in a low-risk, social, safe and fun environment. The girls' participation has seen an increase in their self-efficacy in relation to ICT. We have seen a significant increase in girls' electing the two-year ICT subject starting in Grade 9, even with girls that did not participate in the competition. For the first time, female participation in ICT has become visible to all sectors of the Somerset College community and has been actively promoted and celebrated, along with boys' ICT achievements as well. The entrepreneurial, collaborative and innovative nature of the competition has been appealing to the participants and the diverse range of onlookers. Younger girls have seen this and have started to consider the idea that they might also enjoy working with ICT. There has been a two-fold increase in the number of girls electing to participate and commit to Tech Girls, indicating that this is a sustainable approach.

Room 7

Take a seat: Exploring design thinking through collaboration with the airline industry

Dr Charlotte Forwood, Strathcona Baptist Girls' Grammar School, VIC

PP/Sec

Research indicates there are many influencers in the development of student achievement and engagement, including feedback, explicit instruction and collaboration. There is a need for students to develop transferable skills, such as digital literacy, critical thinking and creativity to engage with the workforce of the future. As an educator of girls, Strathcona is interested in ensuring students have opportunities to develop these skills, as well as engage with science, technology, engineering and mathematics within disciplinary and transdisciplinary programs.

This session describes a transdisciplinary program for Years 7 and 8 students, with a specific focus on how Year 8 students explore design thinking through collaboration with the airline industry. The SEED program (Seek Engage Enrich Diversify) uses the guided inquiry design framework and the Stanford d.school design thinking process to develop information and digital literacy skills, critical and creative thinking, and engagement in a range of authentic inquiries.

The 'take a seat' unit explored design thinking in collaboration with innovation and design experts at aircraft engineering organisation Lufthansa Technik AG in Germany. The unit provided an authentic learning experience for both students and teachers. It offered Lufthansa Technik staff the opportunity to engage with adolescents, affording them valuable insights into teenage technology use and expectations. Lufthansa Technik's brief required students to design and build a full-scale model of an airline seat for a specific passenger, such as someone with a sports injury, travelling with small children or requiring special assistance due to a stroke or other medical condition. Lufthansa Technik provided specialist information as well as feedback to students during the course of the program.

This session provides an overview of the unit and shares examples of data collected and analysed, including qualitative and quantitative questionnaires and learning journals, as well as examples of embedded technology used. At the conclusion of the project, it was clear that collaboration with business offered all stakeholders the opportunity to develop a range of skills, with students, teachers and Lufthansa Technik staff reporting high levels of engagement. Learning journals were used by students to track and reflect on content, learning processes and output, and used as evidence of student thinking and learning. This information, as well as student and staff feedback, has been used to inform program development, as well as learning opportunities beyond the SEED program.

Room 8

Case study: Let's talk: Improving literacy outcomes through oral assessments

Summar Austin, Mount Roskill Grammar School, NZ

PP/Sec

Literacy skills are essential for critical thinking and problem-solving. While literacy is defined by the New Zealand Ministry of Education as the written and oral language skills that people use in everyday life, many schools target University Entrance literacy, which is comprised of reading and writing assessments. To this end, traditional assessments are oriented towards collecting evidence in written forms, even when writing skills are not being assessed. This session describes an inquiry into assessing students' personal response to texts through oral language.

Students often engage with literature in a range of ways and many are able to discuss and form opinions but have difficulty expressing themselves clearly in their writing. This session describes an inquiry into improving outcomes in this standard by targeting students with strong oral language capabilities.

The subject of the inquiry was a co-ed, multicultural class of 31 students, many of whom had strong oral language skills, but low confidence in their written ability. The inquiry was based on a New Zealand Qualifications Authority (NZQA) internal assessment delivered by many schools in New Zealand, derived from Level 7 of the national curriculum. The assessment asks students to: 'form developed personal responses to independently read texts, supported by evidence'. It assesses students' ability to express viewpoints on texts, and make links between the text, themselves and the wider world. It contributes to the University Entrance literacy credential, which is increasingly becoming a target for all school-leavers in New Zealand.

The dominant method of assessing personal response to text is through essay-like reading logs, although this is not a requirement of the standard. For this inquiry, in place of traditional reading logs, students were offered the opportunity to prepare for an interview, which was recorded as evidence. The results were promising, and suggest that three important aspects are central to the success of this trial – targeted intervention, student agency and resourcing.

The session will detail how assessment tasks can be modified to suit students' capabilities. Participants in the session will receive a report detailing the inquiry process and a breakdown of the results, as well as a selection of resources based on the assessment task.

Room 5

Driving data dialogue: Engaging staff with visualisation of school analytics

Ben Hicks and Kathryn Cunich, Oxley College, NSW

L/F–12

Having staff participate meaningfully in data-driven dialogue can be key to affecting positive change in a school. Since 2014, Oxley College has been on a journey to improve the level of whole-staff engagement with the data we collect. Interpreting statistics requires a particular skill set that not all teachers are comfortable with. This presentation will examine some different strategies trialled over the last few years and outline what helped them succeed or fail.

We will be looking at a range of data sets that most schools collect, such as NAPLAN and assessment data. Oxley College has also been exploring the potential of integrating additional data, such as our walk-through analysis and effort reporting, which we will also examine. The session will explore the ways that dialogue may be encouraged through different modes of presentation, and illustrate the use of visual design to facilitate understanding when interpreting data.

The presentation will also explore the use of automation to streamline the data to document process. We will consider common pitfalls that can occur when looking at school analytics.

By examining ways to use and customise emerging technologies to visualise information, we hope to help others see opportunities to improve their own information-sharing systems.

Room 6

Aiming for student and teacher excellence

Karen Yager, Matthew Bentley, Tracey Clarke and Matthew Robertson, Knox Grammar School, NSW

CofP/F–12

This presentation focuses on an innovative and audacious approach to professional learning that we have implemented at Knox Grammar School in Sydney. The evidence-based approach grew out of a need to develop confluence between professional learning, curriculum and teacher and student performance. We needed to know if we were making a measurable difference to the learning and performance of teachers and students.

We are conducting action research into the impact of this approach. The approach is focused on enriching pedagogical content knowledge and grounded in the discerning use of quantitative and qualitative data to inform targeted teaching practice. The research is based on the premise that the implementation of such a professional learning model will lead to measurable improvements in teacher and student performance, self-efficacy and wellbeing.

The approach to professional learning model that will be presented is grounded in the research of Fullan (2010, 2016), OECD (2014), Masters (2012, 2013), Darling-Hammond (2014) and Bentley et al. (2015), who all assert that whole-school system improvement will not be achievable without the entire school community and its leaders working together for the collective good. The focus on enriching pedagogical content knowledge has been informed by the research of the OECD (2013) and Darling-Hammond (2014). Their research has demonstrated that the highest performing schools in the world improve teaching and learning by focusing on enriching subject-specific pedagogy. Thus, we have formed learning and research teams in each department in the senior school and at Knox Preparatory, focused on active inquiry and continuous improvement.

Geoff Masters' work on the AITSL Performance and Development Framework, and his research into using data effectively and measuring student growth have been vital in forging the approach and objectives of our approach to professional learning. During 2016, we focused on immersing our teachers in data mining at a granular level, and introduced the notion of targeted teaching. According to the Grattan Institute (2015), targeted teaching is based on the 'collection and use of evidence of each student's learning to identify how best to advance each student' and using this evidence of learning to target teaching.

We are using multifaceted qualitative and quantitative evidence to assess student achievement, and student and teacher wellbeing and self-efficacy. Baseline and value-adding data will be generated by Progressive Achievement Tests. We will be gathering data using a validated scale at

the beginning and end of each year to identify and quantify student and teachers' self-efficacy.

What excites us the most about the approach is that we are already witnessing the strengthening and enriching of a collaborative culture grounded in research and focused on targeted improvement. In 2017, the project has been scaled and diffused to encompass Knox Senior School and Knox Preparatory School. A key message we have learned from the approach is that we need to focus on student *and* teacher wellbeing, engagement and learning. When our teachers are valued, supported and given time to learn together, their self-efficacy and teaching performance will flourish.

Room 7

Technology as a tool, not the teacher

Ashlee Cochrane and Carole Berry, Clayfield College, QLD

PP/F–12

In the current educational landscape, schools overwhelmingly promote student access to technology as an essential component of a contemporary education and a key contributor to success in the classroom. Contrary to the popular assumption, however, simply having access to technology in schools does not guarantee learner success nor support for teachers in instruction and planning.

Teachers witness daily their students' increasing interaction with technology. Teachers are very aware of the importance of 'keeping up'. With the evolution of technology, it is now a community expectation that educators utilise instructional practice that not only leads to student success, but that also nurtures the development of digital capabilities relevant to life in the 21st century. In response to these demands, there has been some apprehension within the teaching profession towards digitising teaching and learning. This apprehension is often misinterpreted as a resistance to change, but is more indicative of the challenges associated with teachers' ever-changing role description.

Rather than questioning why technology should feature in the teaching and learning space, we are querying what the boundaries around a responsible use of technology in classroom instruction should be.

- To what extent is technology driving pedagogy and reducing the independence of practitioners and students?
- Is the degree of digital intervention in schooling actually building students' motivation, progress and academic achievement?
- How do teachers and learners maintain their individual operational styles while technology offers (rightly or wrongly) to 'do it all' for them?

This presentation will be highly relevant to educators at all career stages and within all sectors as it addresses the ever-increasing requirement of including digital technologies in teaching and learning programs. We anticipate a broad appeal for attendees as we unpack some of the common concerns and assumptions surrounding use and/or overuse of technology, as well as explore the need for practical teaching strategies that are functional and appealing for use in classrooms everywhere.

Room 8

Case study: School-wide application of action learning: Teacher-driven professional learning for improved student engagement and learning outcomes

Helen Polios, Patrick Flanagan, Lalynne Smith and Ana Talde, Whalan Public School, NSW

PP/Prim

Western Public School is a P–6 NSW government school located within the metropolitan area of Sydney. The school's student body is comprised of 375 students and includes a two-unit preschool and four support classes for students with intellectual disabilities. Twenty-one per cent of students are Indigenous and 32% of students speak English as an additional language/dialect. In addition to this, the school has an Index of Community Socio-Educational Advantage of 850, which, when compared to the national average of 1000, demonstrates the level of educational disadvantage with which these students begin school (MySchool, 2015).

As a result of these complex issues facing the school on a daily basis, the school has made the professional learning of its teachers a high priority over the past 10 years. Since 2008, action learning has been used within the school as a platform for teacher professional learning. Action learning, which originated in the work of Revans (1983), focuses on a type of learning that enables organisations and individuals to adapt to change. Learning is viewed as a process by which real-life problems are studied and resolved through learning and action. It involves a group of people coming together regularly to help each other to learn from their experience (Dick, 1997). Initially at Western Public School, as in many other schools, action learning was implemented on a small scale, with a small group of teachers. However, uniquely, Western Public School has broadened the use of action learning to involve the whole school's teaching, support and executive staff.

During 2016, the staff at Western Public School implemented 23 action learning projects. These action learning programs occurred over a two-term period in which staff were provided with four half-day sessions to meet with their team, which was made up of an across-stage professional learning community (PLC). During this time together they were able to discuss their individual project and their progress, ask questions, gain feedback and further develop their action learning project. Each PLC was given autonomy in deciding the process that they would undertake in order to complete their action learning projects. This process often involved: collaborative discussion among teachers; reading relevant literature; sharing of student work samples; giving and receiving feedback about projects; reflecting on individual progress; and documenting evidence of student learning. At the end of 2016, all 23 individual action learning projects were written up, bound together and presented to the school's staff members as a record of their achievements.

Overall findings across the 23 projects included improved teacher professional learning, changes in classroom practice and increased student outcomes. From these findings the conclusion can be drawn that changes in student outcomes can only occur after changes in classroom practice have occurred, which in turn can only occur as a result of teacher learning. Furthermore, this three-stage process can only occur given sufficient time (Cambourne, 2016).

Room 4

Workshop (80 minutes): And you won't believe what happened next! How one school is changing a writing culture

Bernadette Hawker, Goondiwindi State High School, QLD;
Susan Evans, DET, QLD

PP/Sec

In 2015, our school, like so many others, was on a slippery slope. It was experiencing a longitudinal decline in Year 9 NAPLAN Writing data; our students were disengaged from the writing process; and our teachers were struggling to re-engage students and lift results. We had to do something different. So, we established a professional learning community (PLC) that was tasked with scaling up evidence-informed practices for the teaching of writing across Years 7 to 10. The school leadership team wanted to braid effective pedagogy, data and feedback processes for writing, to develop consistency and ensure every student's writing was improving.

Since 2015, our PLC has been addressing the following problems of practice:

- How do we make the teaching of writing everyone's responsibility?
- How does purposeful data use improve pedagogy?
- How can we use descriptive feedback to inform next steps for learning?

Using the structure of a PLC enabled us to have a framework to develop shared understandings and ownership. A consistent pedagogical approach, teaching strategies and metalanguage for writing enabled the focus to be on how we teach and talk about what we teach. Teachers used classroom modelling, peer-teaching, check-in meetings and skills sessions to support their pedagogical changes. The PLC collaboratively developed resources that helped students know the writing focus, determine their current skills, and ascertain next steps for improvement.

We know our practices are working because in 2015, our NAPLAN Writing results for Year 9 revealed we were 16 points behind the mean scale score for the Darling Downs South West region. However, in 2016 we were +18 above the region. Between 2015 and 2016 we made +34 difference to the mean scale score.

Our PLC has shown that every student can succeed if teachers are: working collaboratively in a safe, supportive culture; consistently using evidence-informed pedagogical practices and tools; purposefully using data to improve pedagogy and differentiate teaching based on student learning needs; providing explicit and descriptive feedback; assisted to unlock implicit knowledge to inform and improve student learning.

Purposefully building teacher capacity and ownership of the teaching of writing, through action-orientated learning and reflection cycles is crucial to ensuring embedded and sustained improvement of practice.

Workshop activities:

- professional learning communities: what are they and why do they work? (developing shared understandings)

- writing across learning areas: what am I responsible for? (making links to the Australian Curriculum general capabilities)

- making data real: use data purposefully to improve student writing (analysis of student writing using NAPLAN writing criteria and aligning this analysis with curriculum using student writing tools)

- writing strategies that work: modelling evidence-informed pedagogies (engaging in activities to use in a classroom).

Room 9

Workshop (80 minutes): Fractions: Teaching for conceptual understanding and reasoning

Catherine Pearn, ACER and University of Melbourne, VIC

PP/Prim

Teaching for conceptual understanding and reasoning is very important for the teaching of mathematics. There has been considerable research over more than two decades investigating the misconceptions revealed by middle years' students when solving fraction tasks. However it is not only Years 5 to 8 students struggling with mathematics who have these misconceptions, but also high-achieving mathematics students. These misconceptions may only be revealed by a careful examination of students' responses to fraction tasks. The most recent research has revealed a link between fractional competence and algebraic thinking that needs understanding and reasoning rather than rote learnt procedures.

In this hands-on workshop, participants will be introduced to the possible misconceptions held by middle years' students through the investigation of student work samples. Participants will also be actively engaged in two approaches needed for teaching fractions for understanding. The first approach focuses on the measurement model that includes the move from paper folding to fraction walls and then number lines. This approach develops equivalence, computation and the notion of 'fractions as numbers'. The second approach includes the use of discrete objects and the move from a known fractional part of a collection to the equivalent whole. This approach focuses on equivalence and develops reasoning and generalisation needed for algebraic thinking. Possible misconceptions will be identified and solutions discussed.

Participants will be introduced to assessment tasks that will help to identify whether middle years' students have understanding of fraction concepts and assist them to interpret students' responses to these tasks.

The session will also emphasise the importance of language (both oral and written) in developing understanding of fraction concepts.

Both teaching approaches will be trialled by participants and the implications for participants' own contexts will be discussed. Links will be made to relevant resources.

Room 5

The road to El Dorado: Three schools external assessment project

Leonard McKeown, Windaroo Valley State High School, QLD; Sharon Amos, Park Ridge State High School, QLD; Bronwyn Johnstone, Capalaba College, QLD; Dr Katie Weir, Griffith University, QLD

L/Sec

Queensland education is undergoing its biggest reform in 40 years with the re-introduction of an external exam for certification of senior school leavers. This presentation describes how three high school principals viewed this change as their 'El Dorado': a place of vast riches and opportunity. Their response was to design and implement data-driven changes to learning and assessment in Year 7 Mathematics, Science and English that would prepare these students for summative assessment that was not devised by their teachers.

The underpinning philosophy of the Three Schools External Assessment Project is that educators understand the impact of their practice on student learning. This emerges from Hattie's ideas about enabling teachers to build critical skills in identifying and implementing effective pedagogy that maximises student achievement. By working across three diverse schools, the teachers involved in the project could question and reflect on their curriculum and assessment assumptions beyond the limitations of school-based pedagogy. The result breaks some of the barriers to effective school reform by allowing educators to 'look outside their goldfish bowl' and become participants in a bigger project.

The project adopts an evidence-based approach to reform; it collects and analyses quantitative and qualitative data about student achievement and links this to targeted classroom interventions. An important aspect of the project methodology is utilising a pre-test, post-test common exam across the three schools that will enable the calculation of effect size of the proposed pedagogical reforms for every student, every class and for each school in English, Mathematics and Science. This method provides 'visible learning' data for project participants to evaluate and celebrate their impact on student achievement and then scale up those successful strategies to include all learning areas offered across the three schools during subsequent semesters. Ultimately the project aims to build a culture of high performance in each school that sets students up with high expectations for future learning outcomes.

The focus of this presentation is on the initial phases of the project and the processes employed to achieve its goals. This includes details about how department heads from each school shared data to locate elements of the curriculum that needed improvement and used this evidence to construct a common exam and to agree on targeted pedagogical strategies to be implemented in Term 1. The presentation will also discuss some of key project enabling factors, as well as the challenges faced to date.

Room 6

Closing the gender gap: Ways educators can inspire girls into STEM

Stacey King, Mabel Park State High School, QLD

PP/Sec

At Mabel Park State High School, the implementation of STEM initiatives has evolved: from simply a strategy to improve students' engagement with STEM, it has become a dynamic philosophy across the whole-school community. The school developed targeted strategies to attract girls into university-entry STEM pathways. These have proved to be so popular that girls are now well-represented in all facets of the school's STEM learning culture. The success of the project is reflected in the positive gains in key indicators such as enrolments and academic achievement.

Research indicates that a gender imbalance persists in STEM-related fields. Even though gender may not always be a barrier in itself, students are exposed to gendered stereotypes and gender-differentiated experiences in school. This can negatively affect girls' engagement and confidence in STEM subjects. The research is less clear, however, on how schools can make the required paradigm shifts to better engage girls into STEM, particularly as there are no 'quick fixes' or well-defined approaches to improve the career paths of women.

Ultimately, the Mabel Park STEM story is an example of how a school community took an innovative approach to inspiring girls by: making the necessary shifts in the design of the teaching and learning program; recruiting strong female role models; and forging productive partnerships. These have all been conducive to sustaining interest and building the confidence of girls.

This session describes how educators can shape a whole-school program that inspires girls to excel in STEM-related pathways by building curiosity and interest into a sustained program, rather than the traditional approach of high schools, where short bursts of high-interest are 'moments' and not everyday experiences. Furthermore, the session will delve deeper into ways to: prioritise and embed STEM into the school culture; make available space for STEM both physically and in terms of what is offered for girls in the curriculum; address unconscious bias and its impact on supportive classroom environments; promote positive role models; and address early engagement in STEM.

Even though Mabel Park is still on its own 'learning journey', there are key programs that have driven the development and enhancement of successful outcomes. The presentation will highlight: Maths Science Academy (MSA); Girls Excelling in Maths and Science (GEMS) Program; Primary Science Partnership; Excellence Now in Albert Beaudesert Logan Education (ENABLE) STEM Network; and partnerships with universities and other organisations.

Room 7

Innovative literacy and numeracy intervention: Literacy support and short-cycle intervention

Emma Saal, Sue Schultz and Michael Clarkson, Laidley State High School, QLD

PP/F–12

Laidley State High School has been improving student outcomes and filling learning gaps in literacy and numeracy through two innovative interventions: Literacy Support and Short-Cycle Intervention.

Through purposeful use of data, specific cohorts of students are chosen with specific learning needs to participate in one or both programs.

Literacy Support programs are small classes of students at a similar level/need who work in regular timetabled lessons for one semester to bridge gaps in literacy that have been identified through their assessment data. The focus is on reading comprehension. Through a strong focus on growth mindset, transparent data conversations and goal setting, a variety of teaching techniques are used, dependent on the students' needs.

Short-Cycle Intervention utilises item response analysis to form small groups (no more than four students). The groups come out of the classroom environment (typically to our picnic tables around the school) for short tutoring cycles (15 to 20 minutes) to fill a specific learning gap evident in the item responses. The intervention aims to address student learning needs that may have an impact on future success in numeracy. Students chosen were able to understand theories in mathematics were but were not reaching correct responses due to a specific gap in learning. Through the intervention, these students are now achieving correct responses and more success in the curriculum. These sessions are purposefully casual and outside the classroom environment with students who all have the same learning gap. Students are immediately comfortable in this environment due to the casual nature and common learning need.

Laidley State High School has successfully trialled both interventions. The school is now ready to spread the word and encourage other schools to undertake similar trials. This presentation will share our journey and findings with both Literacy Support and Short-Cycle Intervention with specific reference to the processes, data and resources we use to inform our practice, and the logistics to making these interventions work effectively in any school.

Room 8

Case study: Developing, adapting and evaluating authentic professional learning

Michelle Hostrup, Daceyville Public School, NSW; Hollie van Ravenstein, Camdenville Public School, NSW

CofP/Prim

Research indicates the strong relationship between establishing a culture of professional learning and the impact of professional learning on practice and student outcomes. The professional learning should: engage teachers in setting goals for their learning, stimulate changes and improvements in practice, and be closely connected to the teacher's immediate school context. This session describes the development and implementation of a program of in school professional learning that spanned over two terms.

Camdenville Public School is a future-focused primary school located in Sydney's inner west. Since 2013, the school has been exploring and implementing a range of innovative pedagogies and practices, including project-based learning (PBL) and flexible learning spaces. These practices were developed and implemented over a three-year period. By the beginning of 2016 all teachers had received professional learning in PBL and were implementing this approach in their classrooms.

In Term 1 of 2016, the school conducted a review of PBL. The evidence gathered suggested that teacher understanding of PBL was not consistent across the school and that not all teachers felt confident planning and implementing the approach in its entirety. In response, the school leadership team developed a concurrent program of professional learning and a whole-school PBL project. This enabled teachers to immediately apply their professional learning to a collaborative project, test ideas and give and receive feedback on their PBL programs. The professional learning was based on areas of need identified in the evidence and through ongoing feedback and evaluation from teachers. The evidence collected following the intervention showed a significant improvement in teacher confidence in a variety of aspects of PBL, higher quality of student work across the school and greater collaboration across classes due to the shared understanding of teachers. These changes have been sustained in 2017.

Some of the factors that have contributed to the success of the professional learning include: gathering a range of school-based evidence prior to implementing the professional learning; tailoring the professional learning by responsively planning sessions on a weekly basis; and providing opportunities for teachers to direct the learning and engage in reflection and evaluation with colleagues.

This session will provide participants with strategies to support school leaders in developing, evaluating and driving professional learning within schools that directly engages teachers and embeds positive and sustainable whole-school change.

Room 5

Leading collaborative moderation and school improvement: The 'how-to'

Susanne Jones, DECD, SA

L/Sec

Over the last two years, seven South Australian secondary (Years 8 to 12) Department for Education and Child Development schools have been planning, preparing and practising collaborative moderation in their individual school and across their network schools. This is the first year that all state government schools are required to moderate once in their school and once across schools.

Collaborative moderation is one of the most effective methods of quality assuring teacher judgements, as the process strengthens the consistency of teacher judgement across the system.

The work undertaken by the leaders in these schools has provided a framework of collaborative moderation processes and structures for teachers, to utilise in making considered, on-balance judgements about the quality of student learning demonstrated against the relevant Australian Curriculum achievement standard. This framework includes strategies for collecting student work, structuring meetings, understanding and using the achievement standard, and designing quality assessment tasks.

Collaborative moderation requires working with peers across schools and partnerships to consider students' evidence of learning. This ensures that teacher judgements are adjusted or validated, quality assured and deprivatised. The review of the initial work done in these seven sites is informing statewide collaborative moderation practices.

This presentation is a practical professional learning session for secondary school curriculum leaders incorporating data collected on collaborative moderation practices, processes and outcomes from the seven secondary sites and 650 participants who successfully ran this process in 2015 and 2016. The quantitative and reflective feedback from participants is being used to review this framework of leader and teacher work, for use in 2017 and beyond. The session will present the framework's outcomes, structures and processes, showing how they are changing teacher practice in assessment and moderation in South Australian secondary schools.

Room 6

Positioning teachers as researchers: A professional learning model

Adrian Camm, The Geelong College, VIC

CofP/F–12

This presentation will discuss professional learning projects that position teachers as activists and chief investigators of their own practice.

At The Geelong College, learning projects are an embedded form of action research through which teaching staff strive to learn something new, deepen their knowledge base, stay current with new developments in learning or experiment with an innovation that aims to improve student outcomes. Learning projects are underpinned by a research question that is relevant to the individual and is explored over the course of the year. Teaching staff work both individually and collaboratively in dedicated professional learning and research time. Teaching staff then present their progress to their peers toward the end of each year. Within three short years, this model has shifted the dominant dialogue to one of learning and agency and has changed professional learning from a passive to an active pursuit.

This presentation will share and discuss in detail the journey that one Independent school has undertaken to make professional learning an ongoing and active endeavour. The session will share a complete model, and discuss successes, failures and tips for ensuring that the adoption of such a model is sustainable. The presentation will explore ways of influencing a learning culture and how the use of video-stimulated recall can be used in schools to assist with critical examination of different aspects of teacher practice.

Room 7

Improving reading, improving learning outcomes for all children

Dr Philip Russell, Yulara School, NT

PP/Prim

It has been widely reported over recent years that reading levels achieved by Australian children have plateaued at best, and, in some cases, declined. A similar result was experienced in the context which is the focus for this presentation. A group of concerned colleagues in a small remote school in the Northern Territory embarked on a teaching and learning journey to address this. This involved an action research process specifically targeting the improvement of learning outcomes for all children, no matter where their current location on the reading and learning continuum. The aim was to move the school's learning bell curve to the right. The project positioned acquisition of reading skills and knowledge as a precursor to improved outcomes across all learning areas.

This session will walk participants through the cycles of action research that were implemented over the last two years at the school, detailing initiatives undertaken in the classrooms and the successes and failures experienced along the journey.

The session will draw attention to the increased use of learning data to inform classroom practice and differentiate the curriculum where required for individual and small groups of children. The project directly evaluated changes in classroom practices against analyses of children's responses on the Progressive Achievement Test – Reading (PAT-R), NAPLAN Reading Comprehension and the introduction of a more detailed reading benchmark assessment system. This session will also explain staff professional development and the use of staff meetings to improve teaching and learning practice.

The session will share the initiatives that are currently being implemented. It will conclude with the presentation of results that were achieved by the children over the 18 months leading up to the end of 2016, with accompanying recommendations for a way forward.

Room 8

Case study: Distributive leadership: Creating teacher leaders, developing collective efficacy and enhancing community voice

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

L/Prim

'A true mark of a leader is not how many followers one begets but how many leaders.' — Roland Barth

At Bribie Island State School we recognise that staff have extensive and diverse areas of passion and expertise. We commit to the development of these future leaders through a culture of collective efficacy and distributive leadership. Professor John Hattie ranks collective efficacy as the number one factor influencing student achievement, with an effect size of 1.57 (Hattie, 2016). Articulating and embedding a clear and focused explicit improvement agenda for the school has led to shared goals and increased opportunities for teacher leaders to emerge.

Bribie's distributive leadership model is at the heart of a school culture that not only builds teacher leadership capacity, but also increases staff and student voice. The leadership team includes the principal, deputy principal, head of curriculum, master teacher, head of special educational needs, support teacher of literacy and numeracy, guidance officer and business services manager. The team members act as instructional leaders and facilitators of staff learning. They focus on the following key elements: prioritisation, evidence-based practice, alignment of curriculum/instruction/assessment, data analysis, collaborating with staff and promoting a culture of continuous learning.

In complex organisations like schools, leadership change is inevitable and occurs on a regular basis. Such changes at our site cast light on a need to widen our leadership paradigm and build capacity within our organisation. We recognised the need for a collective responsibility for our students and our school. Actions taken included: identifying key staff; providing opportunities for staff to develop and lead programs across the school; providing release for staff to advance these projects and share with their colleagues; expanding upon student-based interest areas and providing a wide range of opportunities to address these; engaging teaching staff in leading programs bringing a 'real perspective' to their implementation; developing staff knowledge in key areas; and developing a culture of mentoring and trust.

In recent years we have seen continual growth in the number of teacher leaders within the school. In 2017, we have over two-thirds of teachers involved in teacher leader roles including: lead teachers, committee chairperson, professional learning community leaders, program development and staff learning. Success of this initiative is evidenced by increased staff engagement in school initiatives, improved community confidence, and improvements in academic reporting data.

Room 4

Workshop (80 minutes): Co-teaching to improve student outcomes

Janelle Ford, Emily Eu and Joseph Paton, Claremont College, NSW

PP/F–12

This workshop will investigate the steps taken at Claremont College to open up single-cell classrooms to become flexible learning spaces, and the evidence of improved student learning because of this change.

In the words of Anthony Muhammad, 'cultural change eats structural change for breakfast', so this workshop will look at the challenging and rewarding aspects of changing a school's culture.

Some of the most significant changes to have an impact on student outcomes at Claremont College have been the cultural changes throughout the school.

The school sought articles and examples of practices from across the globe that were both known to be best practice in their particular area of focus, and also fitted in well with the school's expectations of where we hoped co-teaching would lead us. Participants in this workshop will leave with a list of relevant resources and articles including: *Work Together but Only If You Want To* (DuFour, 2011), *Teachers Make a Difference: What is the research evidence?* (Hattie, 2003), *What to Look For in Classroom Walkthroughs* (Education World, 2011), *Transforming School Culture: How to overcome staff division* (Muhammad, 2009), *Putting Faces on the Data* (Sharratt and Fullan, 2012), and *Counting What Counts: Reframing education outcomes* (Zhao, 2016).

Throughout the workshop we will refer to our own action research paper, 'Co-teaching improves student outcomes' (Ford, 2016), to investigate the school's findings.

Participants will be given time to interact with one another, time to consider how job-embedded professional learning could work in their own context, and time to ask teaching staff from Claremont College about their experiences of significant change in their workplace.

The job-embedded professional learning activities will include:

- the co-teaching models, explaining what co-teaching looks like
- courageous conversations to professional dialogue
- working in teams
- best practice in your school
- collaborative professional development walkthroughs.

There will be many take-home messages from these sessions as well as practical examples of how to plan and implement job-embedded professional learning days. Delegates will walk away with five frameworks for providing job-embedded professional development within their own educational setting, to help staff to work better together, and to ultimately become improved teaching practitioners.

Room 9

Workshop (80 minutes): Using innovative professional practice to design and measure learning progress

Christine Cawsey AM and John Meng, Rooty Hill High School, NSW

L/Sec

Rooty Hill High School in NSW has been using outcomes-based accountability for some years as part of its ongoing collection and analysis of data for school improvement. Outcomes-based accountability, also known as results-based accountability, is a performance framework based on the work of Mark Friedman. This work now underpins the exploration of innovative, evidence-informed practices. The school has also used the work of Todd Rose (*The End of Average*), Pasi Sahlberg (*The Next Big Thing in Education: Small data*), Professor Bill Lucas (*Assessing Creativity*) and Professor Yong Zhao (*World Class Learners: Educating creative and entrepreneurial students*).

The presenters invite you to join them for an 80-minute interactive workshop to share the school's journey towards the innovative measurement and assessment of progress.

Together, we will explore:

- activities to understand the use and misuse of 'modern statistics' in Australian secondary schools
- how outcomes-based accountability can be applied to school improvement and activities to consider its use
- the use of patterns and progress: triangulating external, internal and student data focused on the assessment of skills, capabilities and dispositions
- a case study from Rooty Hill High School: assessing creativity using benchmarks and self-assessment
- student self-assessment of the Australian Curriculum capabilities using online portfolios
- evidence protocols for schools.

The presenters will suggest three key take-away messages for your own work, research and practice:

- When systems have focused primarily on using big data based on statewide statistical averages, they have limited the understanding of schools, parents, and students about individual and collective learning progress.
- Schools, like many successful not-for-profit organisations, benefit from using outcomes-based accountability to identify and make progress towards improvement.
- Schools can be innovators in the assessment of progress in student and school learning.

Room 5

Let's talk student growth, not attainment

John Van Dyk, Aquinas College, WA

L/F–12

Since the introduction of effect size into the educational landscape, school leaders and teachers have been asked to be evaluators of their impact on student learning. Yet, for the classroom practitioner, 'knowing thy impact' is easier said than done, as the calculation of effect size appears to be the work of researchers. As the Director of Learning, the presenter of this session aimed to bridge the gap between teaching research and practice to use effect size effectively in the classroom. This session will outline the journey to measure student growth and utilise it to inform teachers and school leaders at Aquinas College in Perth.

The presentation will begin where the research started, in the presenter's classroom, from the perspective of a teacher trying to improve their craft. This commenced through analysis of data in Year 10 Physics and the calculation of student growth via effect size. The analysis was shared with Professor John Hattie, who extended the interpretation of the data through graphical means, comparing student entry scores to growth. This was a transformative moment, which led to extensive exploration of student growth in various domains such as NAPLAN, Western Australian Certificate of Education examinations and internal data. This wider analysis has assisted school leaders at Aquinas College to share knowledge with teachers about which students are achieving the highest and lowest growth under their tutelage. The analysis has also identified more global areas of concern, which are being addressed through the school improvement plan.

During this session, the presenter will describe the journey and key messages from the action research. Attendees will also have hands-on experience with data – to calculate effect size and identify trends in student growth graphically – to ensure they leave with confidence to apply the learning to their own school context. The shift in mindset required for teachers to use data as part of their planning and reflection cycle is a challenging one. Aquinas College aims to achieve this shift by upskilling teachers with new tools and understandings. It is hoped that the analysis shared will become one of many tools teachers can use to assist them in making the best choices to maximise student learning in their classrooms.

Room 6

An extraordinary problem of practice: How research transformed practice for pedagogical change

Kasey Ball, Murputja Anangu School, SA; Amy Johnston, Mimili Anangu School, SA; Rosalie Richards, Pipalyatjara Anangu School, SA; Daniel Balacco, Inner West & Anangu Lands Partnership, SA

CofP/F–12

In remote Central South Australia, there are classroom contexts that include a diversity of students from Pitjantjatjara or Yankunytjatjara language backgrounds; where the average weekly attendance fluctuates widely between 57% and 81%; where students display a range of complex behaviours; and where achievement data indicates that approximately only 1 in every 10 students in a classroom is able to independently read in Standard Australian English. This session describes the extraordinary problem of practice for remote South Australian teachers to intellectually challenge, support and stretch students in the Anangu Lands context.

Underpinned by selected high-impact research and the Department of Education and Child Development (DECD) resources, the Task Predicts Performance coaching program was established. Focus teachers from sites across the Anangu Lands participated in a weekly cycle of reflection for evaluating and transforming tasks to specifically elicit the level of student thinking caused by planned classroom tasks. Based on this reflection, the task would be redesigned to create higher intellectual challenge for students. Teachers often extended strategies to incorporate gamification and student self-assessment of task performance.

The evidence indicates that, over 18 months, the majority of tasks have progressed from recall, recount and classifying levels of thinking to comparing, contrasting, connecting, justifying and explaining levels of thinking, after redesign. Teachers reported that students were more engaged with the success criteria of their work and more clearly understood what their next learning steps were when gamification and prediction were involved. The perception data reported by teachers indicated the weekly focus on deep learning tasks was a meaningful use of time that had a profound impact on their pedagogical practice and, more importantly, enhanced the levels of task challenge present for students. Teachers progressed to become coaches of other teachers within their sites to transform tasks – a pedagogy of practice now embedded in the most extraordinary of contexts.

Room 7

Visible reading: Hattie in the hive

Lyn Griffiths and Kate Djellaoui, Dakabin State School, QLD

PP/Prim

As a literacy leader or teacher, how can you guarantee quality reading teaching happens every day in every classroom?

This presentation will outline a whole-school approach to consistency of practice leading to improved results in reading. We have used evidenced-based pedagogy to increase student achievement in reading.

This presentation will detail our journey of research, and the trial and adoption of a sustainable approach to the teaching of reading in Years 1 to 6. We will share with you how we prioritised the teaching of reading as a priority at our school, and how our Visible Reading model engages teachers in professional conversations using data and feedback.

Measuring the effectiveness of the work of teachers was difficult to represent using data from the National Assessment Program – Literacy and Numeracy. We needed to maintain the teachers' efficacy while presenting authentic and sometimes confronting data. Analysing the data and developing our collective understanding of John Hattie's work on effect size led us to researching high-yield pedagogies and applying the 0.4 effect size as a measure of progress for students and as feedback about efficacy for teachers.

An important element of the model is involving students in setting their own expectations and goals. For students to improve, they need to stretch their expectations, design authentic reading goals and be able to see their success. Our school designed and developed a consistent way of showing student progress through our reading hives. Students can see that they are reaching their year-level target, and also measure progress on a personal goal sheet, which reinforces strategies to help them achieve their goal.

We will share with you how we, as leaders, use the effect size data: in feedback conversations we have with teachers to improve the teaching of reading; and to pinpoint areas of development for individual students.

The Visible Reading approach at Dakabin uses defensible evidenced-based strategies to improve reading. It is sustainable and uses existing human resources. Its strength lies in a strong research base, the connectedness of the program through the hive pedagogical framework, the interdependence of the staff delivering the program and the coaching support available for refining teaching practice.

Room 8

Case study: Evidenced-based internship: Is there more than anecdata to support its design?

Jessica Cubbage, Lesmurdie Senior High School, WA; Dr Susan Blackley, Curtin University, WA

CofP/Sec

This case study reports on the beginning stages of a school–university partnership designed to enact the features of high-quality professional experiences. Research into teacher education courses is often small-scale action research based on limited cases, restricting findings' generalisability. Researchers exhort us to move from 'anecdotes and war stories to solid evidence' rather than relying on 'anecdata' – information compiled from anecdotes or items of hearsay – in developing practice in education. But, based on research evidence, what constitutes excellent and effective pre-service education and how can this be enacted in ways appropriate to the specific context?

A West Australian secondary school and university have established a program, based on feedback from recently employed graduate teachers, to improve the quality of professional experience and the profession-readiness of graduate teachers. The research addresses questions such as: 'What impact does a strong professional identity make on the capacity of a teacher to take leadership of learning design for their classes?' The program involves: providing opportunity for collaboration on curriculum and assessments; iterative evaluation of pre-service teachers' and teachers' own learning; low-key observation of teaching and frequent feedback; and creating opportunities for the pre-service teacher to become genuinely part of the collegiate team within the school and to adopt a strong professional identity as an educator under the intensive supervision of a mentor who is an instructionally intelligent teacher.

Phase One of the project will be presented. This focuses on documentation of project design and processes, evaluating organisational and project challenges and capabilities. Participants will have the opportunity to discuss the challenges of data collection in similar case studies. Such projects risk being consigned to the basket of 'ungeneralisable small-scale study'. However, case studies are important for both schools and universities in defining and delivering purposeful and consistent practicum experiences for pre-service teachers.

PRESENTER BIOGRAPHIES

Karena Aczel is an experienced primary school educator. She has a passion for coupling knowledge of school context and staff experiences with a deep understanding of student needs to implement evidence-based teaching and learning experiences. Currently working in a school leadership role, Karena has a deep knowledge of curriculum, strengthened through engaging in research and data and draws upon this in her collaborative pedagogical approach. Developing the process of inquiry in future leaders and supporting implementation and review of a range of unique whole-school initiatives is integral to her role.

Sharon Amos has worked for the Queensland Department of Education for 19 years in the roles of teacher, Head of Department, Deputy Principal and most recently Principal of Park Ridge State High School. Prior to entering education, she was a leader and director in the fields of training and promotional management for high-performing businesses both in Queensland and nationally. As a leader, Sharon is focused on developing staff capacity to collectively solution-seek and develop innovative and sustainable approaches to meeting students' individual learning needs. Her focus on a responsive, team approach to the learning space resulted in a submission to the Showcase Awards for Excellence in Schools in the category of innovative curriculum practice. Sharon is excited about the possibilities of a strategic, cross-school approach to preparing students for external exams, through the development of a targeted skills-based approach to teaching and learning. She is committed to working in this space and working closely with other principals and school leaders to tap into a range of approaches and views toward a sustainable move forward. She is motivated by the potential of significantly increasing students' ability to transfer knowledge from one context to another.

Summar Austin is the Head of English at Mount Roskill Grammar School. She studied English and Psychology at the University of Auckland before going on to complete graduate studies in mental health, secondary school teaching and educational leadership. She is interested in e-learning and classroom innovation, and has presented examples of practice at subject associations and national conferences. Summar has taught English in large, multicultural schools in Auckland.

Lucy Badzim is a Year 5 classroom teacher at Canberra Girls Grammar School. She has 18 years of teaching experience where she has led staff workshops (Prep to Year 12) based on her experiences of teaching in a 'tablet technological' classroom. Lucy has made contributions to a number of school communities (SCEGGS, Darlinghurst; Ruyton Girls, Kew). Her work focuses on delivery of teaching and learning programs to implement the curriculum within the technological classroom. Her goal is to strengthen the use of powerful educational techology alongside hands-on learning. Lucy holds a Bachelor of Education (Primary) and a Masters of Education (majoring in curriculum).

Professor Nan Bahr is Dean (Learning and Teaching), Arts, Education and Law, Griffith University. She is responsible for the quality of design and implementation of programs across the Arts, Education and Law Group. Nan has held leadership positions for teacher education at The University of Queensland, and Queensland University of Technology, and has held the position of elected president for the Australian Teacher Education Association. As an educational researcher, she has a national and international profile, with more than 100 publications, including four books. Key research has been in the fields of music education, educational psychology, teacher education, adolescence, resilience, and teaching innovation in higher education. As a university teacher, she has been awarded the University of Queensland Award for Excellence in Teaching, and has been a finalist (twice) for the Australian Awards for University Teaching.

Daniel Balacco is the Principal Consultant for the Inner West and Anangu Lands partnership in SA. With a background in educational measurement, and previous roles as Manager, Research and Evaluation, and School Performance Consultant, Daniel's work has focused on the implementation of educational policy, programs and research. His latest work is having an impact on leadership and classroom practice, in relation to leading schools to effectively monitor and track student achievement and growth, implementing cycles of teaching and learning improvement, coaching teachers in collaborative analysis of pedagogy and assessment, and working with leaders to enact rigorous self review and improvement planning processes.

Kasey Ball is the Wellbeing Coordinator and middle primary teacher at Murpurtja Anangu School, where she has been teaching since 2015. Kasey's leadership is focused on areas such as: wellbeing as a response to trauma-related behaviour, empowering and supporting local Anangu staff and bringing new pedagogical methodologies to the context. Kasey wants to continue her leadership role in the Anangu Lands by collaboratively building the capacity of other teachers to improve student outcomes.
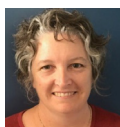
Nicole Barton has taught at all levels of primary school. She has been the master teacher at One Mile State School in Gympie since 2016. Her focus has been to improve pedagogical knowledge and practice associated with the Australian Curriculum: Mathematics. At a school level, she has played a pivotal role by supporting the alignment of the Gympie Mathematics Alliance professional development initiative with classroom practice through modelling, co-teaching and professional conversations. As a member of the Gympie Mathematics Alliance she has been central to the development of the resources associated with the project.

Matthew Bentley is Director of Professional Learning (Arts Hub) at Knox Grammar School in Sydney. He has more than 20 years teaching experience in state, Catholic and independent secondary schools. His interests include curriculum development and professional learning. Matt undertakes the roles of Supervisor of Marking for Higher School Certificate English, Senior Marker and Examination Committee member for the NSW examinations. He is a past president of the Professional Teachers' Council of NSW and currently a Director with the English Teachers' Association of NSW.
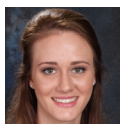
Carole Berry is a teacher of Spanish at Clayfield College. Responsible for the implementation of the Spanish language as a new subject from Prep to Year 12, Carole is investigating the most effective ways to instruct and support students in their language learning that ensure the contemporary needs of the students are met through well-informed, guided and creative teaching methodologies and strategies. In 2016, Carole was a member of the Queensland Curriculum and Assessment Authority Expert Writing Team (Spanish) and the Queensland College of Teachers recognised her work in this initial phase of her career, by announcing her as one of seven finalists in the annual Excellence in Beginning to Teach Awards.

Dr Susan Blackley is a specialist teacher and scholar in mathematics education and professional studies and has been an educator for 36 years. She is a research and teaching academic in the School of Education at Curtin University where she is a Senior Lecturer and the Director of Student Experience and Partnerships. Susan has a strong program of collaborative educational research, which results in publications for high-quality journals and ensures the quality of her teaching. Her current research lies in digital pedagogies, digital andragogy, teacher identity, digital professional portfolios, and STEM education.
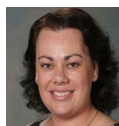
Nicole Blyth has held the role of the Dean of Teaching and Learning at Penrhos College for the past six years. This role inspires and challenges her to lead continual improvement of academic curriculum and pedagogy in the Secondary School, along with line management of academic staff. Nicole started her career as a Chemistry teacher in 1997 and has worked at a range of public and private schools in both metropolitan and country areas. Nicole has a Master of Education with Honours, focusing on teacher training and technology integration, is a qualified GROWTH coach and assessor of Australian Institute for Teaching and School Leadership certification of teachers.

Kym Bradbury is the Director of the Wynbring Jida Child Care Centre.

Jan Burton is the Head of Curriculum at Rangeville State School in the Darling Downs South West Region in Southern Queensland. She is a primary school teacher who has worked for Queensland state government schools for the past 26 years in a number or roles including classroom teacher, education advisor, small-school principal and pedagogy coach. Jan has a passion for working with educators to collaboratively use data in meaningful ways, and designing and delivering quality explicit instruction. She has recently worked closely with the school Master Teacher, Tania Schmidt, and DET Regional Project Officer, Wendy Luscombe, to develop and implement a whole-school approach to writing.

Deborah Buscall currently holds the position of Secondary School Consultant at Catholic Education Office, Sydney. She is a highly experienced educator who has held a range of positions in secondary schools in NSW. Her early career was in the public system in urban schools in Sydney. Her latter career has been in urban Catholic schools in Sydney. She has held positions in the Diocese of Parramatta, Broken Bay and more recently in Sydney Catholic Schools. She has held leadership positions as a subject coordinator, an administration coordinator, a deputy principal and a school principal in a large co-educational Catholic secondary school. It was in her nine years as a secondary principal that her interest in the leadership of subject coordinators and student achievement was enlivened. This interest continues in her current role as a secondary schools consultant in the Inner West Region of Sydney Catholic Schools. In this role she works closely with 10 inner-west secondary schools to improve their results in NAPLAN and the NSW Higher School Certificate. This interest was also the focus of her doctoral study through the Australian Catholic University. Her thesis is now completed and waiting for examination. The thesis was titled: *A Study of Higher and Lower Performing Subject Departments in Sydney Catholic Schools.* Deborah's case study at this conference is informed by this doctoral work.

Philip Callil is the Director of Information Technology and eLearning at Yarra Valley Grammar, Victoria. He is a passionate advocate of digital innovation and learning in the curriculum. In 2013, Phil visited South Korea as a guest of Samsung and, and after an invitation from the Chinese Government, presented on the subject of information and communication technology innovation in Australian education at an international conference in Wuhan, central China. An Apple Distinguished Educator and President of the Victorian IT Teachers Association from 2010 to 2013, he has also presented and attended at other conferences and visited schools around the world. In 2014, he was the Subject Specialist for the Australian Curriculum Review of the Technologies Learning Area.

Adrian Camm is Director of Teaching and Learning and also Director of the Centre for Learning, Research and Innovation at The Geelong College. He has worked with schools and organisations around the world and has had the chance to present his innovation for the future of learning to leading thinkers in education, business and industry. Adrian holds a Masters of Education (Leadership), is a PhD candidate, and has been recognised with many awards during his career including Best National Achievement – The Ministers Award for Excellence in ICT at the 2009 Australian Awards for Teaching Excellence and Outstanding Secondary Teacher of the Year at the 2010 Victorian Education Excellence Awards.

Dr Jann Carroll is a lecturer in Literacy and Education studies at the Australian Catholic University on the Canberra Campus. She has years of experience teaching in both the primary school and higher education sectors. Jann's doctoral work centred around the influence of technology on boys' literacy attainment in middle school. Her research interests continue to revolve around the use of technology in teaching and learning across the curriculum. Jann is currently undertaking a research project focusing on the impact of bring your own device (BYOD) practices on learning and teaching. She loves to spend time in classrooms learning about and showcasing the exceptional and inspiring work of teachers in the technological classroom.

Christine Cawsey AM FACEL is a past president and a life member of the NSW Secondary Principals' Council (NSWSPC). She is the principal of Rooty Hill High School, a highly successful, comprehensive secondary school in the western suburbs of Sydney, recognised as one of the 40 most innovative schools in Australia by the *Educator* Magazine (2016). Christine is a member of the Order of Australia and sits as a non-executive director on the boards of GWS Giants AFL Club, The Smith Family and the Australian Council for Education Leaders. Her academic expertise and recent writing includes work on classroom observation, evidence-informed learning and equity.

Denise Cedric is a pre-Prep Educator based at Yarrabah State School, employed by the Queensland Department of Education and Training (DET) for many years. Denise is a Pedagogical Leader for the Early Years Learning Framework on behalf of DET's Indigenous Priorities and Community Engagement team.

Tracey Clarke is the Director of Professional Learning (STEM Hub) at Knox Grammar school. She is a teacher of Mathematics and Technology and has teaching experience in all three educational sectors. Tracey's work includes syllabus development, the publication of teaching materials and academic papers. She has a passion for professional learning, in particular the inclusion of effective technology-rich teaching into all STEM subjects.

Michael Clarkson is the Principal of Laidley State High School, Queensland, a position he has held since 2005. He has been employed by the Queensland Department of Education and Training since 1989 and has worked for many years in various roles in Western Queensland schools. As a Principal, Michael has led his current school to develop innovative strategies that have enhanced inclusion, targeted individualised learning support and resulted in significant improvements in school NAPLAN performance. He is known for challenging, empowering and supporting his school leaders to make effective, research-validated strategic decisions that target improvement in key school focus areas.

Ashlee Cochrane is the Head of Languages at Clayfield College. In her time in this role, Ashlee has overseen significant change in the scope of Languages education, including the Languages program's expansion in 2017 to reach students from Prep to Year 12. Ashlee is passionate about maintaining the relevance and value of language learning for students. She encourages teachers to integrate technology into their lessons while promoting the importance of students identifying their own ways of learning. Ashlee makes regular contributions to the profession through her involvement in a number of projects for the advancement of Languages studies in Queensland, and the Modern Language Teachers' Association of Queensland (MLTAQ) acknowledged this with a 2016 Excellence in Teaching Award for her commitment and dedication.

Simon Conlan is the Staff Development Coordinator at Mazenod College, a Catholic boys' secondary school in Melbourne's south-eastern suburbs. He has been a secondary teacher for 26 years, teaching in five different schools over that period, encompassing single gender and co-educational schools. Simon's interest in teacher professional development was kindled during his Master of Education studies, which he completed at the University of Melbourne in 2003. He has been both a year level coordinator and head of department during his teaching career, positions which have given him the opportunity to mentor and develop fellow teachers.

Peter Cooke is a teacher of senior Visual Art at Craigslea State High School. Peter Cooke has been a classroom practitioner for 35 years, the majority of that time as a teacher of Visual Art and Media Studies. He has experience as Panel Chair of Senior Visual Art within the Queensland criterion-based system and is also a CIS (Council of International Schools) Accredited Team Member. His particular interest is in curriculum design and implementation within both junior and senior secondary Visual Art.

Adam Coustley is a primary school teacher who is learning and researching with students in a growing coastal town in Victoria. He has completed postgraduate and masters-level studies in the areas of literacy and leadership, and is currently working with graduate and masters students in early childhood education at Victoria University. Adam has an interest in the Reggio Emilia approach to early childhood education, and recently visited Italy to experience the democratic and negotiated nature of learning in the early childhood centres. He is also part of a research project with Victoria University, taking students 'Out and About' to develop a connection to place and view their natural local environment from a non-humanistic perspective, pondering and investigating the many stories of 'our place'.

Jessica Cubbage is the Special Programs Manager at Lesmurdie Senior High School where she motivates, engages and mentors staff to be instructionally intelligent. Within this role, Jessica has committed to the improved learning of pre-service teachers (PSTs) through an extended placement model that focuses on instructional design under the mentorship of highly accomplished teachers. Her professional expertise includes growth coaching, conference accreditation training and establishing effective feedback systems. Jessica has a particular interest and expertise in building pedagogical capacity and in developing a focus on instructional leadership at all levels of school management.
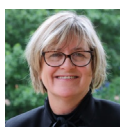
Kathryn Cunich is a passionate educational leader, determined to make a difference in student learning and achievement. Kathryn has presented nationally and internationally, including in London and Washington in 2016. Her focus is on how to turn research about what works best for students into action that is achievable and purposeful for teachers and leaders. Using the strands of Visible Learning, Kathryn is able to show how schools can use systems and processes to not only build collective teacher efficacy, but to maximise student engagement and achievement. Kathryn is currently Deputy Head of Learning at Oxley College in Bowral, a school featured in *Visible Learning into Action: International case studies of impact* (Hattie, Masters, Birch, 2015).

Dr Gregory Cunningham has a special research interest in visual literacy. He completed his doctorate in this field prior to a post-doctoral sabbatical at the College of William and Mary in Virginia, United States. A passionate teacher of English, Greg has presented research into emerging practices in the English classroom and boys' education at conferences in Australia, the United Kingdom and in the United States. He has been a site researcher in the Harvard International Case Study Research Project, determining the efficacy of staff practice and student understanding relating to the Teaching for Understanding framework, which Barker College has used as its teaching and learning framework. Currently, his work relates directly to research conducted by the Barker Institute and in the areas of professional accreditation and teacher coaching. Greg has also represented the independent school sector on NSW professional learning committees, as an assessor and consultant on accreditation processes and professional development.

Heather De Blasio is Director of Learning and Teaching Excellence at Wilderness School (K–12). She is responsible for teaching and learning and for professional learning. Heather is committed to supporting teachers to continue improving as educators so that all students can progress. She is currently undertaking a Doctor of Education at the University of Melbourne, with a focus on leadership for middle-level leaders. Heather has presented at state, national (ACEL, 2013, 2014, 2016; ACER, 2015) and international conferences (ICSEI, Glasgow, 2016; uLead, Banff, 2016, 2017). She is a contributing author of the upcoming second edition of Patrick Griffin's *Assessment for Teaching*.

Professor Stephen Dinham OAM is Associate Dean (Strategic Partnerships) and Professor of Instructional Leadership in the Melbourne Graduate School of Education, University of Melbourne, a position he has held since the beginning of 2011. He has taught in government secondary schools and been appointed to a range of senior academic leadership roles in many universities in New South Wales, working variously in the areas of curriculum studies, teacher education, pedagogy, professional development and educational leadership at the University of Western Sydney, University of New England and the University of Wollongong. Stephen was also a research director at the Australian Council for Educational Research. Stephen has conducted a wide range of research projects, many with multimillion dollar funding, in the areas of educational leadership and change, effective pedagogy/quality teaching, student achievement, postgraduate supervision, professional teaching standards, teachers' professional development, middle-level leaders in schools, and teacher satisfaction, motivation and health. He has published books, chapters and peer-reviewed journal articles extensively, frequently presents at national and international conferences and has conducted consultancies with a wide range of national and international educational bodies. Stephen was a president of the Australian College of Educators (2014–15) and of the NSW Branch of the Australian College of Educators (2000–02). He was also a council member of the Victorian Institute of Teaching from 2011 to 2016.

Kate Djellaoui is Head of Curriculum and Literacy Coach at Dakabin State School. She has taught throughout Queensland and overseas and has worked as an English Advisor and in Queensland State Schools. In her current role, coaching a team of hardworking, inspiring teachers to further improve their pedagogical practices in the teaching of reading and writing, Kate has become very interested in how the use of digital technologies can be used to enhance student learning in this area.

Sue Ellis is Head of Junior School at Encounter Lutheran College. With a passion for inquiry learning and building global connections, Sue sought a new approach to initiating language learning in the junior primary years. A collaborative leader, she strives to build connections and partnerships within the college and wider community. With a Master of Education, she leads with a growth mindset, coaching staff to ensure continued professional learning and reflection, with student development and wellbeing at the heart of all she does.

Emily Eu is a Year 3 classroom teacher at Claremont College. She has been teaching for more than six years. Emily completed a Bachelor of Education degree from the Sydney University and has taught Stage 1 and Stage 2 at Rissalah College, Regents Park Christian School and now at Claremont College. Emily has worked with the Association of Independent Schools to create quality mathematics programs and she teaches at Maths Challenge Camp for gifted Year 6 students each year. She has an interest in inquiry-based learning and has been trained by Lane Clarke to integrate this in her pedagogy.

Dr Donna Evans is a secondary teacher, who has worked in all sectors, in regional and metropolitan areas, religious and secular schools, single-sex and co-educational environments. She has undertaken a variety of roles as teacher, Head of Department and Director of Curriculum and Learning. Her most recent school position was as Deputy Head of School (Kindergarten to Year 12) and Head of Middle and Senior Years (Years 7–12) in an all-girls, regional day and boarding school. She completed her doctorate in 2016, which focused on ways teachers responded to the implementation of Phase One of the Australian Curriculum. Since moving to Victoria, she lectures at Federation University and operates an educational consultancy, COMPASS Education, across Australia.

Susan Evans is an educator, Queensland Education Leadership Institute Coach and Regional Project Officer. Susan 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 of her career has been to work with children and adults to help them achieve their absolute best.

Jane Everett is a Preschool Teacher from South Australia. Her focus is on environmental education with young children, particularly in sustainable practices. Jane has won two Natural Resources Management Education (NRMEd) grants, a Wipe Out Waste (WOW) grant and a Junior Landcare grant to help fund these learning programs. She is interested in quality experiences for young children in science, technology, engineering and mathematics (STEM). Jane holds a Bachelor of Science and a Bachelor of Education, and has taught preschool and primary school.

Patrick Flanagan is a teacher at Whalan Public School. He is passionate about teaching students with intellectual disabilities to ensure they have access to quality curriculum. His interest in future-focused classrooms and the development of expert learner skills for his students led to his in-class research project.

Janelle Ford is the Deputy Principal at Claremont College in Randwick in the eastern suburbs of Sydney. Her qualifications include a Master of Leadership and Management in Education, Bachelor of Education (Primary), and Diploma of Teaching (Infants Education), and she is a member of the Australian College of Educators. Janelle is the recipient of a Quality Teaching Award from the NSW Minister for Education and the Australian College of Educators, and an Outstanding Professional Service Award from the Professional Teachers Council NSW. She is accredited at the level of Professional Excellence through the Independent Schools Teacher Accreditation Authority, and has a Highly Accomplished Teacher medal through the Board of Studies Teaching and Educational Standards NSW. She has been instrumental in leading cultural changes at Claremont College, to achieve effective co-teaching models resulting in improved student outcomes.

Dr Charlotte Forwood is a teacher and speech pathologist with experience working in government, independent and special schools in Australia and the UK. She is the Leader of Advanced Learning at Strathcona Girls Grammar School. Her responsibilities include student learning, curriculum design, tier 1 to 3 interventions and staff professional learning. She has a particular interest in vocabulary development, language and literacy skills in upper primary/adolescence, transdisciplinary learning and metacognition. She is co-coordinator of the Boroondara Gifted Network. Charlotte is the author of Independent Schools Victoria's Middle Years Language Consultancy Program, as well as several student and teacher resources.

Bo George is the Teaching and Learning Coordinator at Mercy College, Mackay. He has more than 20 years of experience in education. He has worked in primary, secondary and tertiary sectors and also as a consultant and advisor to education departments in Australia and overseas. He has a passion for supporting the ongoing improvement in education through effective and sustainable strategic change management processes.

Kirstine Gonano is Deputy Principal at Campbelltown Performing Arts High School. She has been a passionate educator for 21 years. She is committed to empowering students as active participants in their learning. Using project-based learning, she has developed strong partnerships with the local community, enabling students to innovate and create new solutions to local problems. Kirstine has led teams of teachers to explore classroom practice and use evidence-based research to create new approaches to teaching and learning. Her work has been recognised in a number of forums including the Australian Council for Educational Leaders NSW branch Leadership Award in 2016.

Lucy Gowdie is the Deputy Head of Middle Years: Learning and Curriculum, at Peninsula Grammar on the Mornington Peninsula in Victoria. Lucy has more than 15 years' experience in both Australian and international settings. She is a passionate advocate for the empowerment of every educator. She believes the educator's role is to champion the capacity of every student to grow and experience success throughout the learning journey. Her current focus is redesigning curriculum for a contemporary context, through targeting areas of growth within a data-driven, skills-based evolutionary learning design.

Lyn Griffiths has been an educator since 1980. At Dakabin State School she was the Support Teacher Learning Difficulty prior to being appointed Deputy Principal in 2014. She also has been, for shorter periods of time, the Head of Curriculum and the Head of Special Education. Her major area of influence is reading. She is passionate about all students being learners and all teachers knowing their impact.

Skye Grivell has developed and implemented the 'Wonders of the World' (WOW) program at Encounter Lutheran College. A dedicated educator of 17 years in a primary classroom context, Skye recently studied her Master of Education (Teacher Librarianship) and now works in the collaborative role as Teacher Librarian. Immersing herself in children's literature with her own growing children, Skye now translates this passion into her own teaching and planning with peers. She is an inquiry-focused practitioner who uses innovative methods to draw children into a world in which they are personally connected, while developing global connections that celebrate the family history of individual students.

Bernadette Hawker is currently working as a Master Teacher and classroom teacher at Goondiwindi State High School in rural Queensland. Bernadette is a senior educator with more than 25 years of teaching experience. She is passionate about the use of evidence-informed pedagogy and is committed to promoting teacher efficacy and school improvement through teacher engagement in Professional Learning Communities (PLC). Her current work focuses on the utilisation of a PLC to improve writing across all subject areas in Years 7 to 10.

Ben Hicks is a connoisseur of patterns who enjoys uncovering truth and finding elegant ways to share information. More specifically, he has a background in non-linear model analysis, computational design and statistics, which he has applied to a range of fields including finance, water catchments and school analytics. Ben has taught mathematics in three continents and currently plies his trade at Oxley College in the Southern Highlands of NSW. There he is also head of e-Learning, the resident data expert and a Visible Learning leader.

Christine Hills is the Principal of Rockhampton Girls Grammar School in Central Queensland. She has six years' experience as a primary principal in Moura and Rockhampton. Her focus has been on ensuring that school improvement results in real change for student outcomes. After receiving the Public Education Foundation scholarship in 2014, Christine completed a leadership course at Harvard, Cambridge, where she became aware of the work of Professor John Collins on developing student knowledge and skills with writing across the curriculum. She has used learnings from Harvard to enhance the highly successful programs she has developed in primary schools in Central Queensland. Taking a leadership role at Gladstone State High School in 2015 enabled her to take these programs into the secondary sector. Christine's work with school leadership teams and school improvement was acknowledged by the Australian Council of Educational Leadership (QLD) with an Honorary Fellowship in 2014 and by the National Excellence in Teaching Awards Program with a national award for leadership in 2013. This will be her third presentation at the Australian Council for Educational Research Excellence in Professional Practice Conference.

Michelle Hostrup is the Principal of Daceyville Public School. Michelle has been a teacher and school leader in London and Sydney for more than 15 years, working in a range of primary and special education settings. She is committed to leading school improvement through contextualised, long-term professional learning programs. Michelle has worked in the NSW Department of Education's Futures Learning unit to develop resources and professional learning to support teachers across the state in implementing future-focused teaching and learning. She is passionate about engaging teachers in sustainable innovation and quality teaching practices.

David Hunter is the Dean of Professional Learning, Development and Growth at Penrhos College, a position he has held for the past six years. He has 31 years of experience teaching in secondary classrooms across Western Australia and has held a variety of leadership positions in several schools. David has been involved in the design, delivery and evaluation of the Visible Learning professional development program at Penrhos College since its inception. He is also a qualified GROWTH coach who loves working with his staff to be the best they can be.

Professor Lawrence Ingvarson is a Principal Research Fellow at the Australian Council for Educational Research whose major research interests centre on the professionalisation of teaching. He is a Fellow of the Australian College of Educators and a recipient of a Distinguished Service Award from the Australian Science Teachers Association. In 2014, he was awarded the Sir James Darling Medal for outstanding and sustained contribution to Victorian Education by the Australian College of Educators. His publications include *Assessing Teachers for Professional Certification: The First Decade of the National Board for Professional Teaching Standards*, which brings together the rigorous research and development work conducted by the National Board for Professional Teaching Standards since its establishment in the United States in 1987. With colleagues at ACER, Lawrence recently prepared the background research report for the Teacher Education Ministerial Advisory Group and the *Background Report on Initial Teacher Preparation in Australia* as part of the 2018 OECD Teaching and Learning International Study (TALIS). He recently co-directed a study for the International Association for the Evaluation of Educational Achievement (IEA) on the preparation of mathematics teachers in 17 countries (Teacher Education and Development Study in Mathematics, or TEDS-M).
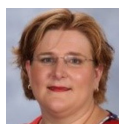
Kelly Jeppesen is the Principal of Dakabin State School. Her career has had a number of diverse roles, from Multi-age Classroom teacher, Teaching Principal, Prep Principal Advisor for the introduction of the Queensland Prep Year and Teaching and Learning Auditor. With experience in rural and regional Queensland, she has been Principal for more than 15 years at schools including Bellenden Ker and Gayndah. She is dedicated to translating current research into practical pedagogies to get the highest possible learning outcomes for students. She works with a very talented and professional leadership team and a motivated, dedicated teaching team.

Amy Johnston started her career teaching at Mimili Anangu School in 2013 after having completed her two placements in remote locations. She taught in an upper primary classroom for three years at Mimili and has recently been in a Student Learning Coordinator position for the past year. Amy's leadership has focused on such areas as: early career teacher development, culturally responsive pedagogy, and literacy and numeracy outcomes. She is passionate about working with children from disadvantaged backgrounds who have experienced trauma and working with Aboriginal children and families. Amy wants to continue to strive for improved educational outcomes for Anangu children.

Bronwyn Johnstone is the College Principal of Capalaba State College, a Prep to Year 12 college in the Redlands. The college consists of an early childhood development program, primary campus, secondary campus and positive learning centre. As College Principal, Bronwyn has developed and maintained relationships with a variety of stakeholders including senior management, industry peers, committees and industry suppliers. Additionally, she has a proven track record of working collaboratively with partner schools to enhance student learning opportunities. Bronwyn knows that as an educator she can foster a love of learning that can transform lives and create opportunity. She has worked with a diverse workforce in a variety of metropolitan, suburban and rural school settings. She has a proven ability to promote a positive learning and development culture. This translates into student success: last year 94% of the Capalaba State College students eligible for a tertiary entrance rank achieved an Overall Position 1–15. Additionally, 100% of graduates achieved a Queensland Certificate of Education or a Queensland Certificate of Individual Achievement. Bronwyn is passionate about collaborative partnerships and promoting student success. This has been a theme of Bronwyn's leadership over the past two decades in education. She is committed to learning, both for her students and herself. She is currently completing her Masters of Educational Leadership and holds a Graduate Diploma in Education and a Bachelor of BioMedical Science.

Susanne Jones has worked with teachers and leaders in South Australia during the implementation of the Australian Curriculum. Between 2012 and 2015, she worked with teachers across the state in understanding and using the Australian Curriculum achievement standards to design assessment, moderate student work and report student achievement. She has provided professional learning in moderation and assessment for teachers from Reception to Year 12, and presented at state, national and international conferences, including the ACER Excellence in Professional Practice Conference and the Research and Innovation in Classroom Assessment conference in 2016. Susanne works with leaders and teachers to develop resources that support curriculum change to improve student learning. As a Policy Officer in DECD she works in partnership with site leaders and leadership teams, supporting their work in curriculum, pedagogy, assessment and moderation.

Justin Kentish has been a teacher at Craigmore High School for eight years. Justin is a passionate advocate for co-design. He has seen the change and success that young people can access when teachers and school leaders embrace the idea of learning partnerships with the students. Justin supports students' engagement in co-creation of knowledge and learning that is connected to their lived experience. He believes this improves learning outcomes and better equips young people for the challenges of an increasingly complex world.

Kylie Kilmartin is Assistant Head of the English and Media Faculty, Pakuranga College, Auckland, New Zealand. Kylie studied both English and History before establishing that English was her passion. Now in addition to her role as an English teacher, she helps lead professional learning in the school. Kylie works to develop better teachers, by supporting the growth of the college's Year 1 teachers through an educative mentoring approach. This work has seen Kylie challenge and change some of her own thinking around teaching. She is focused on engaging student voice, which leads to co-creating purposeful learning opportunities that prepare students for the real world.

Stacey King is Head of Department of Maths and Science at Mabel Park State High School. She has been a driving force in science, technology, engineering and mathematics (STEM) education. She has linked educational programs to real-world applications through initiatives such as the Maths Science Academy, the Primary School Science Partnership and STEMfare. Stacey is also co-chair of a region-wide STEM network that aims to sustain partnerships with schools and outside agencies. Stacey was the past recipient of the Peter Doherty Award for Excellence in Science. In 2016, she was awarded the $20 000 CHOOSEMaths Award for Mentoring Girls in Maths, sponsored by BHP Billiton Foundation in partnership with Australian Mathematical Sciences Institute. More recently, Stacey was the award recipient of the Department of Education and Training's International Women's Award for her commitment to enhancing the achievements of girls through the establishment of the Girls Excelling in Maths and Science (GEMS) program.

Alex Krzensk is the Head of Years 7–9 Mathematics at Anglican Church Grammar School, Brisbane. With a professional interest in data analytics, educational technology and self-regulated learning, Alex has been involved in the development of programs that focus on the effective collection and dissemination of data to students and teachers. Currently, Alex is completing his PhD with the University of Oulu, Finland, and is assessing the impact of explicit self-regulated learning interventions.

Andrew Lawrence is the Teaching and Learning Coordinator at Yarra Valley Grammar, an independent school in the outer east of Melbourne. He has worked in schools for more than 25 years and held a number of leadership roles in that time. Other roles he holds within the school are: Year 7 Coordinator, Teacher in charge of Special Projects and Senior Middle School Coordinator. He has a passion for innovative and experiential learning and considers student engagement is crucial for their learning. In 2016 he helped lead the transition from performance development coaching to action research based on the school's strategic plan.
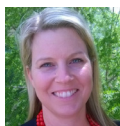
Tania Leach is a Regional Project Officer in the Darling Downs South West Region for Education Queensland and member of Leadership Research International at the University of Southern Queensland. Tania's role has a strong focus on educational research. She has a Master's degree in Curriculum and Pedagogy and is a current doctoral candidate with a focus on leadership roles that promote system coherence. She has taught students from Prep to Year 12, worked within the roles of Head of Department and Head of School, and is guest lecturer at the University of Southern Queensland. Her current regional and inter-regional projects include 'Purposeful pedagogy: Improving numeracy outcomes' and 'Collaboration at a system level: Findings, possibilities and future implications'.

Juliane Lewis began her career in rural and remote schools in Queensland and the Northern Territory. As a classroom teacher, Juliane has worked in all primary year levels, multi-age and high-performance classes. With the knowledge she gained in the classroom, Juliane moved into leadership roles including Digital Coach, Support Teacher for Literacy and Numeracy, and acting Head of Curriculum. More recently, Juliane has worked in schools in the North Coast Region as Numeracy Coach, Master Teacher and currently as Head of Diverse Learning for Years 3 to 6 at Dakabin State School. She has worked at Dakabin for 10 years and enjoys working with the talented staff members who make up the Dakabin 'hive'.

Jake Little is a Mathematics and Science teacher at Wenona School. He was the recipient of the Mathematics Association of NSW Teacher Award in 2014. Jake has presented at national and international conferences on the topics of problem-solving in mathematics and flipped classroom pedagogy. He has published in peer-reviewed academic journals, including the *Asia-Pacific Journal of Teacher Education*. He is a pre-service STEM teacher mentor with the Faculty of Education and Social work at The University of Sydney. Jake is currently a Higher Degree by Research candidate at the University of Sydney completing his Doctor of Philosophy part-time on STEM education.

Wendy Luscombe is an experienced educator, working in the curriculum, pedagogy and learning team in the Darling Downs and South West Queensland Region for the Department or Education and Training, Queensland. Wendy is passionate about literacy and interested in how teachers and middle leaders work together to enhance professional capability, while maintaining an unwavering focus on student learning. Wendy has worked in a range of contexts, from a large primary school as Head of Curriculum to smaller rural and indigenous communities. She has many years of classroom experience, has worked as an English advisor, is a tutor of functional grammar and the First Steps literacy programs, and is an active member of the Darling Downs local council of the Australian Literacy Educators' Association.

Leonard McKeown is principal of Windaroo Valley State High School, a school of 1200 students in South East Queensland. He has worked with the Department of Education and Training for 27 years, teaching in a variety of primary, P–10 and secondary schools. Leonard has also worked in remote area Queensland for four years. He was a State Finalist for the Showcase Awards in 2015 for his work with the Flying Start pilot program to move Year 7 to high school. He is studying a Masters of Education by dissertation, researching the impact of reading intervention programs in junior secondary school, through Griffith University. Leonard is a principal representative on the State Council of Queensland Secondary Principals' Association.

Bronwyn Mehorter is a former primary teacher and a doctoral student at the University of Wollongong. The focus of her doctorate is on the effective professional development of primary teachers. Her study seeks to develop a model of onsite professional learning, one that has been formally grounded in the real world of the school. Through her study, Bronwyn hopes to contribute knowledge and understanding about the professional learning journey of a particular school. She is passionate about excellence in teacher professional development.

John Meng is the Head Teacher of Mathematics and the Languages Other Than English Faculty at Rooty Hill High School in NSW. He has been actively leading the promotion of quality education in Greater Western Sydney since 2006. John is the incumbent President of the Mathematical Association of NSW and the immediate past president of the Chinese Language Teachers' Association of NSW. He has successfully led the implementation of many high-impact teacher professional development projects at state and national levels. John is often invited to present at state and national education conferences with the themes covering learning data, science, technology, engineering and maths (STEM) in schools, and information and communication technology-infused teaching and learning.

Bernadette Mercieca is a teacher and an assistant head of a learning area at Xavier College, Melbourne. She is also a sessional tutor in education at Australian Catholic University, Melbourne, where she had developed her interest in young teachers and how they are supported. She is a doctoral candidate at the University of Southern Queensland, researching the value that communities of practice might have for the professional learning of early career secondary teachers in Australasia. Bernadette has presented at a number of conferences and has recently published a chapter in *Communities of Practice: Facilitating social learning in higher education*.

Dr Bradley Merrick is a musician and music teacher, responsible for the development and integration of best practice through professional learning, innovation and research at the Barker Institute. His doctorate examined the influence of self-efficacy and self-regulation upon student understanding and engagement when composing music using technology. He has presented locally, nationally and internationally at a range of symposia and conferences. He has co-authored several music textbooks combined with scholarly articles and papers that explore emerging approaches to teaching and learning. He contributed to the *Oxford Handbook on Music Education* (2012) and the *Routledge Companion to Music, Technology, and Education* (2017). He is the National President of the Australian Society for Music Education.

Matt Moorcroft began his career with initial training as a primary school teacher, but transitioned to secondary school along with Queensland's Year 7 students. This context enables him to explore in depth the particular needs of junior secondary students, which is an area of interest for him. He teaches Mathematics, Health and Physical Education, as well as Science. Now in his sixth year of teaching, Matt is keen to expand his pedagogical content knowledge through targeted action research and collaboration with colleagues. He is also due to complete a Master's Degree in Leadership and Management in mid 2017.
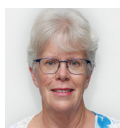
Philippa Mulqueen MEdL (Hons) is a Specialist Classroom Teacher at Pakuranga College, Auckland, New Zealand. Her role involves supporting the growth of beginning teachers through the implementation of an educative mentoring approach. In addition, she helps lead professional learning in the school and works as a learning and teaching coach with more experienced teachers in the school. The goal is to help them implement effective teaching practices and maintain a purposeful learning environment that engages students.

Sophie Murphy is a researcher and lecturer, who is completing a doctorate under the supervision 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 held leadership positions for the past 20 years. Sophie completed her Masters by Research with John Hattie as her supervisor in 2015.

Robin Nagy is the Dean of Students at Redlands School, Sydney. Robin has been a practicing teacher for more than 20 years. He has worked for six years at Cranbrook School, Sydney as a Housemaster and teacher of Mathematics. Robin has also worked internationally as a Mathematics teacher and Head of Year at Bangkok Patana International School, Thailand and City of London School, UK. Robin also worked in industry as a firmware development engineer. He served on the Executive of the Mathematical Association of New South Wales for several years and has presented at numerous state and national conferences.

Dr Sandra Nissen is passionate about supporting teachers and school leaders in their professional development. She has explored this passion in a variety of settings including P–12 schools, sessional tutoring and within state and nationally based organisations. Sandra is currently working as a Master Teacher engaging in school-based research, coaching teachers and school leaders. She is also an international online coach supporting teachers, school leaders, and policy leaders from around the world in leadership, using data for change and pedagogy. Sandra aims to present interactive workshops where participants and the presenter engage in a joint learning experience.

Dr Patsy Norton is a Master Teacher at Craigslea State High School, where her responsibility is to improve teacher capability and student learning outcomes. She has had extensive experience in public and independent schools as well as in administration roles, as Head of Department and Dean of Studies. Her professional passion is the teaching of English. In addition, she enjoys supporting teachers in the implementation of literacy learning strategies across the curriculum, as well as encouraging classroom-based action research. Her personal research interests lie in teacher learning, literacy learning and pedagogy.

Jodie Parsons is Leading Teacher Curriculum Design and Development at Sunshine College, Victoria. Jodie has a passion for curriculum development which helps students to develop a natural curiosity. She has co-authored several papers and eight teacher resource books. Jodie has presented annually at the Mathematics Association of Victoria conference, including a keynote presentation in 2014.

Susan Paterson has been a Master Teacher working across two schools in the Darling Downs South West Region in southern Queensland since 2015. She is a qualified high 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. She has spent many years in literacy and pedagogy coaching and behaviour and curriculum support roles. This year she is working closely with the Regional Project Officer, Tania Leach, to implement a consistent pedagogy in numeracy at one school to build the capacity of staff to explicitly teach key concepts. Susan is passionate about improving students' academic, social and emotional outcomes, and about invigorating teachers to improve their pedagogy.

Joseph Paton is an enthusiastic and passionate educator who taught in regional NSW before becoming part of the Claremont College teaching team for the last six years. He holds a Bachelor of Education degree from the University of Wollongong and he has recently completed his Masters of Educational Leadership. Joseph is the Infants Co-ordinator and Head of Mathematics, and has been working alongside the whole teaching staff to refine their practice within the flexible learning spaces and co-teaching model.

Catherine Pearn is a lecturer in Mathematics Education at the University of Melbourne. Cath teaches early childhood, primary, secondary and special education students at postgraduate level. She has had extensive teaching experience in primary schools and tutored many secondary students across a range of mathematics subjects. Cath has been involved in research projects investigating how students learn mathematics at the early childhood, primary, secondary and tertiary levels, particularly students mathematically 'at risk'. Her current doctoral research is looking at the links between fraction competence and algebraic thinking. Cath is also a Senior Research Fellow at ACER.

Rachael Pelling has been the Master Teacher at Gympie West State School in the North Coast Region of Queensland for the past two and a half years. Her focus has been on improving teacher knowledge of the content and intent of the Australian Curriculum: Mathematics. As Project Manager of the Gympie Mathematics Alliance, she works closely with Rob Proffitt-White (the Principal Education Advisor for Mathematics in Queensland's Department of Education and Training), seven local primary schools and two high schools to align practice and transform how teachers teach, learn and do mathematics. Rachael supports teacher quality and instructional leadership and the consistency of teacher judgment across the Gympie district. She also co-ordinates the Teacher First professional development initiative through the Gympie Mathematics Alliance platform.

Shontelle Petterson Heard is a teacher in Darwin, NT.

Vicki Phyland is Principal at Malvern Central Primary School in Victoria.

Helen Polios is Deputy Principal at Whalan Public School. She has 27 years' experience as a primary school teacher and school leader. She has taught and led teams of teachers in a number of metropolitan schools in Sydney, NSW. Over the past eight years, she has led the creation of a strong professional community, through the use of the school-wide action learning model. Teachers at the school are a diverse group of enthusiastic educators, who are committed to improvement through collaborative practices.

Rob Proffitt-White has been a Principal Education Advisor for Mathematics in Queensland's Department of Education and Training for the past five years. His initiatives focus on aligning the right pedagogies, the right knowledge and the right team to successfully implement the intent of the Australian Curriculum. State primary and high schools commit to and invest in ongoing workshops that build teacher capability, norm effective delivery and upskill teachers in designing robust tasks and assessment tools. Awards have been given to schools enacting and sustaining this initiative: Rob and staff from Hervey Bay State High School earned an Outstanding Presentation Award at the 2016 ACER Excellence in Professional Practice Conference. Rob has presented throughout the state of Queensland and by an online platform created to reach all teachers, which has recently reached 400 000 hits. The Building Culture and Capacity initiative is flexible and under constant refinement as more schools take part and share best practice.

Stacey Quince is the Principal at Campbelltown Performing Arts High School. She is passionate about improving student learning outcomes through quality teacher professional learning and empowering students as active participants in the learning process. She has collaboratively implemented practitioner research in a range of areas including student engagement, assessment, and technology-based learning. Stacey has researched new and emerging pedagogies and professional learning as the recipient of a NSW Premier's Teacher Scholarship and NSW Department of Education Mary Armstrong Leadership Fellowship. Stacey is the recipient of the Australian Council for Educational Leaders' NSW Educational Award and the Australian Institute for Teaching and School Leadership's Award for Excellence in Teacher Leadership.

Raelee Randall began her career as an educator working in early childhood classrooms in rural Queensland schools and in the United Kingdom. After 10 years, she moved into early special education working as an ECDP (Early Childhood Development Program) Teacher before receiving a position as an Advisory Visiting Teacher for Early Special Education, where she worked in this role for 10 years. Raelee has been working at Dakabin State School since the start of 2015 and enjoys her roles as the Head of Diverse Learning Prep to Year 2 and Early Years Pedagogy Coach.

Dena Reddan is a primary school teacher, researching and learning with all at St Therese Primary School, Torquay. She has completed postgraduate study in educational administration and leadership. She has an interest in the Reggio Emilia approach to learning and a relationship with Victoria University, Melbourne, which have enabled her to visit the preschools of Reggio Emilia over the last two years with groups of teachers from St Therese. Dena's involvement in the Out and About Project is a result of thinking about the concept of the teacher as a researcher and the 'more than human' perspective on connecting to place. Dena has previously worked with undergraduate teachers from Victoria University studying early childhood and primary.

Yvonne Reilly is Leading Teacher of Maths and Numeracy at Sunshine College, Victoria. Originally a Scottish research scientist, Yvonne migrated with her family to Australia in 2006 and soon after began working as a teacher of maths and science at Sunshine College. Yvonne completed her Master degree in School Leadership specialising in Numeracy at Monash University in 2011. She has co-authored several papers and Maths in the Inclusive Classroom, which is a series of teacher resource books. She has presented annually at the Mathematics Association of Victoria conference since 2009.
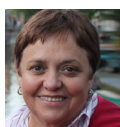
Rosalie Richards commenced work in Warburton Ranges' Ngaanyatjara Community Store prior to completing an Honours degree in Cultural Geography. She has focused her 40-year career in education on supporting, and advocacy for, Indigenous student achievement and community decision-making, in settings ranging from multicultural regional centres to remote Aboriginal and Anangu communities, in roles that have included her current Curriculum Coordinator role at Pipalyatjara, Advisor, School Principal and District Schools Development Officer. In recognition of her innovative student- and community-focused work, she was awarded the 2016 Lifetime Achievement Award by the SA Department of Education and Child Development. Rosalie is also mother of Australia's first Indigenous Rhodes scholar, Rebecca Richards.

Matthew Robertson is the Director of Professional Learning (Humanities Hub) at Knox Grammar School in Sydney. He has more than 25 years teaching experience in Catholic and independent secondary schools in Sydney. His interests include professional learning, curriculum and assessment. He has presented papers at conferences for the Association of Independent Schools of NSW and Economics and Business Educators of NSW. He convened the NSW Catholic Secondary Schools Association Trial for the Higher School Certificate Business Studies Paper from 2010–2012. He has a Masters of Commerce from Western Sydney University and will complete a Masters in Education from Macquarie University at the end of this year.
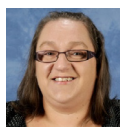
Rachel Roebuck is Master Teacher at Bribie Island State School. With more than 20 years' experience as a primary school educator, she has held many positions within the Queensland Department of Education, including class teacher, Reading Recovery teacher, learning support teacher, literacy coach and pedagogy coach. Rachel is dedicated to improving student outcomes and teacher effectiveness through evidence-based best practice, collaboration and professional learning.

Nicole Rogers is the Junior School Curriculum Coordinator and a member of the teaching and learning team at Yarra Valley Grammar, an independent school in outer-eastern Melbourne. She has worked in a range of school settings over the past 28 years. She has enjoyed working in a number school-based leadership roles including Year Level Coordinator, Head of Department, and Innovation and Excellence Coordinator. She has a keen interest in investigating effective strategies for collaboration and action-based research, and believes in building a learning culture reflective of contemporary innovation and best practice.

Dr Philip Russell is the teaching principal of Yulara School, located 20 kilometres from Uluru Kata Tjuta National Park. This is a position he has held for more than 10 years. Philip has spent the last 26 years living and teaching in remote areas of the Northern Territory, while staying connected with the latest research and innovations through distance education. Philip completed his doctorate in 2011 remotely from the University of Queensland and a Master of Education in Leadership and Administration through Deakin University in 2012. His research interests include leadership for learning and responsive pedagogies. Philip finds the role of combining classroom teaching and school leadership challenging and rewarding.

.

Emma Saal is Head of Department (English, Literacy and Learning Enhancement) at Laidley State High School, Queensland. She is passionate about supporting diverse learners through meaningful differentiation, as well as the purposeful use of data to set specific goals and inform future practice. Metacognition and growth mindset are a part of Emma's everyday practice, ensuring every student has a chance to succeed. Through effective analysis, she has designed successful context-specific intervention and extension opportunities and has increased staff motivation and capacity in data literacy. Emma is looking forward to continuing to share her experiences and findings with fellow educators and continuing her learning journey.

Tania Schmidt is the Head of Curriculum at Harristown State School in the Darling Downs South West Region in Southern Queensland. In her previous role as Master Teacher at Rangeville State School, her action research report was accepted for publication in the Queensland Department of Education and Training Evidence Hub. Tania is a primary school teacher who has worked for Queensland state government schools for the past 17 years in a number of roles including teacher, literacy support teacher and pedagogy coach. Tania's passion for working with educators to design and deliver quality teaching and learning experiences based on data is a key focus of her work. She recently worked closely with DET Regional Project Officer Wendy Luscombe and Rangeville State School Head of Curriculum Jan Burton to develop and implement a whole-school approach to writing.

Elke Schneider has been teaching Information Technology (IT) since 2001 at both secondary and tertiary levels. Elke holds an Honours Diploma in Business Administration, Information Systems and a Bachelor of Education degree with a University Medal for excellence in academic achievement. She is on the Executive Board for the Queensland Society for Information Technology in Education (QSITE) and has a passion for promoting IT in education. Elke has implemented Robotics, Game Development and App Solution units at Somerset College and she is actively involved in coaching Tech Girl Superheroes teams. Elke is driven by a digital transformational philosophy and she's a respected role model for young women in IT.

Sue Schultz is a Maths/Science Teacher and Support Teacher of Literacy and Numeracy at Laidley State High School, Queensland. Sue taught Grades 3 to 7 at the local primary school, before to moving to high school with the Year 7 transition in 2015. During this time, Sue completed her Masters in Special Education to help meet the ever-changing demands of teaching, assessing and reporting for students with learning needs. She is passionate about delivering the highest quality education while also being attuned to the social and emotional needs of junior secondary students.

Ebony Sheppard is in her third year of primary teaching and is currently working with the community of St Therese Primary School in Torquay, Victoria. Ebony has joined the 'Out and About' project in its second year and continues to research, with the students, in the areas of specific use of feedback and the articulation of theories through the use of multiple languages or resources. Ebony's interest in the 'capable' child and the inspiration of the Reggio Emilia approach to early childhood education has enabled her to embrace her role as an active pedagogical researcher.

Darren Side is the Indigenous Education Leader at Xavier College in Kew, Victoria. Prior to this, he held positions as Principal at Djarindjin Lombadina and Principal at Ngalundgunda Gibb River, both in the Kimberley, Western Australia. He was Social Justice Leader and Immersion Director at Xavier College from 2008 to 2011. Darren is an ardent advocate of Indigenous education. His originality and ability to integrate digital learning into coursework and community lifestyle has made him a leader in remote outback Australian education. In 2016, Darren was a keynote speaker alongside Barrister Julian McMahon at the Xavier College Dare to be Different forum. Darren has presented at universities, schools and sporting clubs. Darren holds a Master of Educational Studies from Deakin University, a Graduate Diploma in Education and Technology from the University of Western Australia, and a Diploma of Teaching from Australian Catholic University.

Joanne Smith is the Director of the Port Lincoln Children's Centre.

Kay Smith is a passionate educator. Over the past 18 years of teaching, she has discovered that the most effective way to engage young people in education is through relationships, positivity and relevance. She believes that at the very heart of education is the idea that young people own their own learning in their own contexts, and that teachers play a role in creating safe learning spaces where the facilitation of rich, positive learning experiences can occur.
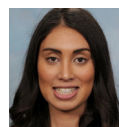
Lalynne Smith is a teacher at Whalan Public School. She is in her second year of teaching. She is passionate about teaching children and applying her theoretical knowledge into effective classroom practice. Lalynne's in-class research project was developed in response to one of her Performance and Development Plan goals to develop her capacity to effectively teach reading.

Sam Symes is Principal at Pullenvale State School in the West of Brisbane, an academically high-performing, high-socioeconomic status, independent public school. Sam has begun to challenge the models of practice and the teaching and learning processes in the school, using the methodology of the Teaching and Learning Toolkit. Sam took up this position in 2017. Previously, Sam was Deputy Principal from 2015 to 2016 at Regents Park State School in Logan City, south of Brisbane. He is an evidence-informed school leader who uses Evidence for Learning's impact evaluation cycle to make explicit improvements to the challenges in the school. Sam and his team used student achievement data combined with attendance and socioeconomic status data to identify a problem in students' maths confidence. The team turned to the Evidence for Learning's Teaching and Learning Toolkit, a free online summary of up-to-date international and domestic educational research, designed to inform practice. The Toolkit helped them to identify high-impact approaches to improve students' maths confidence, and the team selected mastery learning as a strategy.

Ana Talde is a teacher at Whalan Public School. She has been teaching young children for three years. Her interest in developing independent writers who set goals and reflect on their writing led to her in-class research project. Ana used a bump up wall for writing and the school's expert learner framework to support her young writers.

Lisa Thomson is Dean of Information Technologies at Somerset College and chairs the college's educational technology committee. Previously she was Head of Information Technology at Toowoomba Grammar School. Since her tenure, female participation in Somerset College's information technology team has increased from 20% to 45%, allowing a greater diversity of female role models working in information technology to be visible to the students. She is in interested in creating sustainable change leading to better student outcomes and in fostering STEM motivation and engagement.

John Van Dyk is a Physics teacher and the Director of Learning (Secondary) at Aquinas College, a K–12 Catholic School in Perth, WA. The insights shared in this presentation came about during his study for the Professional Certificate of Instructional Leadership through the University of Melbourne. John was born in Canada and studied at Queen's University in Kingston, Ontario. He has also completed a MEd in Leadership and Management at Notre Dame University, Fremantle. John is a proud husband, father of two and a keen adventure racer.

Hollie van Ravenstein is an Assistant Principal at Camdenville Public School. She has experience in classroom teaching, instructional coaching and developing professional learning. Hollie is passionate about supporting early career teachers (ECTs) and created a professional learning program to support the needs of ECTs from the Newtown Network of Schools. She has presented lectures at the University of Sydney on topics such as implementing alternative methods in mainstream settings and skills needed to survive your first years of teaching. Hollie is actively engaged in building collaborative teams and leading schools in implementing innovative practices that allow student voice and choice.

Dr Tanya Vaughan is Associate Director of the Evidence for Learning initiative at Social Ventures Australia. She is responsible for the Teaching and Learning Toolkit. Tanya has worked in education in policy design and implementation in the Australian Institute for Teaching and School Leadership, the Australian Curriculum, Assessment and Reporting Authority, and the Principals Australia Institute. She has consulted on international and national projects in leadership in education and evaluation with Learning First and Educational Transformations. Tanya taught at the senior secondary level in science and coordinated Biology. Tanya is an Honorary Fellow at the Melbourne Graduate School of Education at the University of Melbourne. Tanya holds a Bachelor of Science, Bachelor of Education and Doctor of Philosophy. Tanya has co-authored one international book, three chapters, four journal articles, eight media items and 19 conference presentations/workshops in educational research. Tanya has also published within her field of bioinformatics and genomics, with five peer-reviewed journal articles and eight conference presentations.

Nicole Watego-Gilsenan is an educator at Regents Park Kindergarten and Child Care. She is a Nughi Goenpul Nunukul woman and a Junobin Clan woman of the Quandamooka Nation of Moreton Bay. Nicole is an experienced early childhood educator and Principal Project Officer for the Embedding Aboriginal and Torres Strait Islander Perspectives in Early Childhood (EATSIPEC) project. She understands the importance of early childhood education and is passionate about working with Aboriginal children and Torres Strait Islander children, their families and their communities.

Dr Katie Weir is a Senior Lecturer in Assessment at Griffith University. Her expertise draws on 13 years as a secondary Science teacher and Head of Department that preceded her current academic career, which began when she undertook her doctoral studies in 2001. Katie's main role as a teacher educator is to encourage students to embrace assessment as a form of pedagogy that can improve student engagement, satisfaction and learning outcomes. Katie also works with schools wishing to improve their assessment practices and is acting as a critical friend for the three-schools external assessment project being presented at this year's ACER conference.

Erin West is a speech pathologist who has worked across the paediatric field for the past 10 years, in both Australia and the UK. She has worked in 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, with a particular interest in Auslan and bilingualism. Erin joined the team at Aurora School in early 2013 and completed her Masters 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.

Estelle Wolstencroft is a teacher at Bribie Island State School. She currently teaches Year 4 and co-leads the implementation 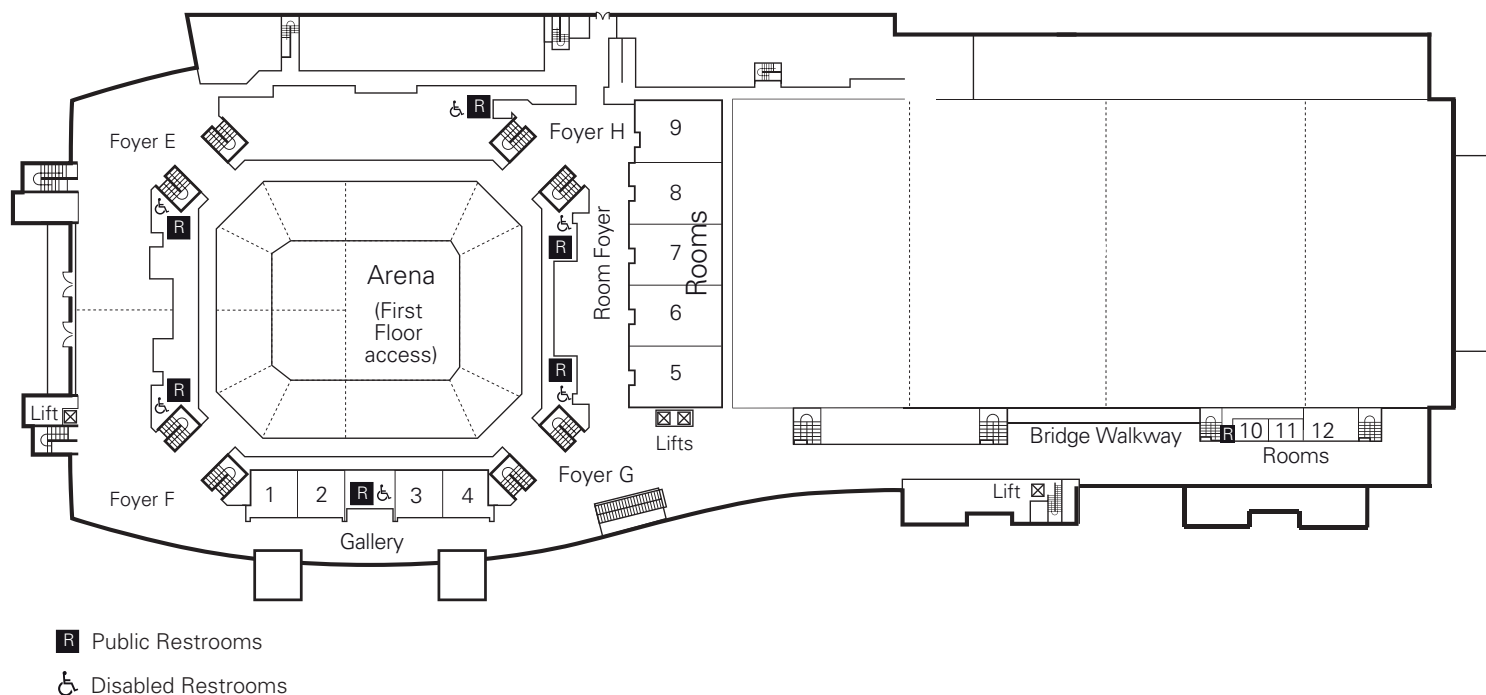of a growth mindset initiative at the school. Estelle's commitment to improving student outcomes and continual professional learning has led to her emergence as a valued teacher leader at Bribie Island State School. Collaboration with colleagues is a strength of her practice.

Karen Yager is the Deputy Head Senior School and Head of Student and Teaching Excellence K–12 at Knox Grammar School, and an English Method Lecturer at the University of New South Wales. Karen was awarded the first International Teaching Fellowship by the Singapore Ministry of Education in 2011. This involved running workshops for Master teachers and Leading teachers in Singapore focused on creativity, writing and formative assessment. Karen has been invited to present papers at numerous International Conferences. She was awarded the NSW Professional Teachers' Council Award in 2009 and the Australian Professional Teachers Association Award in 2014 for her contribution to the teaching profession. In 2003, she was awarded the NSW Premier's Literary Scholarship to research how to connect students with Shakespeare. In 2016, she was awarded the NSW State Library Fellowship.

Foyer E

Foyer H

Foyer G

Foyer F

Arena
(First Floor access)

Room Foyer

Rooms

9

8

7

6

5

Lifts

Gallery

1 2 R 3 4

Bridge Walkway

10 11 12
Rooms

Lift

Lift

R Public Restrooms

 Disabled Restrooms

touchstones

SETTING DIRECTION FOR PROFESSIONAL LEARNING

WHAT IS TOUCHSTONES?

Designed to provide direction for professional learning, Touchstones embeds a proven process of evaluation and goal setting into a unique and easy to use online environment.

Using a simple five step process the software guides staff as they gather and review feedback, set goals and reflect on their progress and achievement. The supportive coaching methodology encourages collaboration and interaction with peers.

Schools select their own measures of best practice and these act as reference points along the path of reflection and action. They are the focus for learning and growth, guiding self evaluation and goal setting and helping to align individual effort with strategic intent.

www.mytouchstones.com
touchstones@circle.education | +61 (0)2 8064 9595

Brought to you by:

www.circle.education
CIRCLE – The Centre for Innovation, Research, Creativity and Leadership in Education

BENEFITS

For Teachers

► Guides teachers along a path of reflection, dialogue and inquiry into their own practice.

► Uses multiple feedback modes to assist them to better understand their own learning needs.

► Encourages openness and collaboration as they engage with, and contribute to, each other's learning.

For Senior Leaders

► Manages the paperwork!

► Gathers, collates and presents data which adds richness to coaching conversations.

► Improves the tracking of staff professional learning.

For Principals

► Helps align individual goals for professional learning with the Australian standards and the school's priorities.

► Builds learning momentum by fostering a culture of individual accountability and success.

► Generates reports on whole school data to inform strategic planning.

Excellence in Professional Practice Conference 2018

May | Melbourne

Contribute your knowledge and expertise to a conference presented by teachers, for teachers.

Call for submissions opens Monday, 11 September 2017

Registration: **www.acer.org/eppc**
Enquiries: **eppc@acer.org**

Australian Council *for* Educational Research

ACER

RESEARCH CONFERENCE 2017

Leadership for Improving Learning:
Insights from research

27–29 August 2017
Melbourne Convention & Exhibition Centre

Enquiries and registrations: **Margaret Taylor**
T: 03 9277 5403   E: margaret.taylor@acer.edu.au   www.acer.edu.au/research-conference

Australian Council *for* Educational Research

ACER