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RAVENSWOOD
INSTITUTE
PROFESSIONAL
LEARNING SERIES

Generating insights in the way we think about learning and teaching

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Ravenswood

Ravenswood School for Girls

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Boarding from Year 7

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Foreword *Anne Johnstone*

I am delighted to introduce this edition of our professional development magazine, *RIPLS*. In an ever-evolving educational landscape, our commitment to continuous learning and growth is more crucial than ever.

This magazine is a celebration of our shared passion for education and the profound impact that we make as educators by continually innovating our practices, from building on our world-class Positive Education and wellbeing program and our leading educational neuroscience approaches (including recent collaborations in the area of curiosity) to harnessing new technology, such as virtual reality, or implementing Socratic learning practices to further enrich student learning.

Each contribution reflects our dedication to empowering young women – fostering critical thinking, problem-solving, creativity and resilience in a world that demands innovation and adaptability. From Mathematics to Visual Arts and research-practice partnerships, it is wonderful to read the reflections of staff members who have sought to refine their practice and who so generously share their expertise and wisdom.

As you delve into these pages, I encourage you to embrace the wealth of knowledge and inspiration they offer, so we continue to cultivate an educational environment that inspires curiosity, nurtures confidence and ignites a passion for lifelong learning.

Thank you for your unwavering dedication and for the vital role you play in shaping a brighter future.

Mrs Anne Johnstone
Principal

Foreword *Jennifer Richardson*

At Ravenswood School for Girls, we are committed to educational excellence and view learning as a lifelong journey of acquiring and applying knowledge, skills and understanding. Learning, driven by curiosity and joy, is both challenging yet hopeful, and inspires individuals to use new knowledge creatively and for the benefit of others.

This philosophy of learning is the foundation of the engaging and rigorous learning opportunities we provide for our students. It also sets a framework for our Ravenswood Institute, established to support our exceptional teaching staff as they engage in continuous professional growth, research and development to enhance learning and wellbeing outcomes for Ravenswood students.

The Ravenswood Institute supports our teachers to access individual, departmental and whole-school professional development opportunities, as well as opportunities focused on key career stages through our Internship, Fellowship and Leadership Programs.

Over the past four years, our focus on research has gone from strength to strength, and we now support teachers from across the Junior and Senior School to conduct their own educational research, in addition to participating in a range of external educational research projects aligned with our mission and purpose.

This edition of the Ravenswood Institute Professional Learning Series (RIPLS) celebrates our passionate teachers and their commitment to lifelong learning, highlighting the diverse, rich and engaging learning opportunities they have undertaken throughout the year.

Articles offer insights to how Ravenswood staff members are fostering positive professional relationships to learn from and with others – and how they share generously with colleagues and embed what they learn in their daily practice and our teaching and learning programs.

We are grateful to every staff member who has contributed to this publication, and to Mr Ken Wong, for his unwavering support of all staff at the School and his leadership of the Ravenswood Institute.

Jennifer Richardson
Deputy Principal – Teaching and Learning

KEN WONG
Head of Professional Practice, Ravenswood Institute

The Power of the Professional Learning Plan Program

As Head of Professional Practice and the Ravenswood Institute, I am honoured to coordinate the professional learning programs and events at Ravenswood, with the School's support and leadership.

Our aim is to improve teaching and learning by providing professional learning (PL) opportunities for staff, including targeted subject- or pedagogy-focused PL and whole-school collaboration through the Professional Learning Program (PLP) offered at the Ravenswood Institute.

The PLP at Ravenswood has been a cornerstone of our commitment to continuous improvement and professional development. Over the past year, our staff have engaged positively in various teams, working diligently to develop themselves, their teams and, ultimately, to enhance learning and wellbeing goals for our students. Here, I hope to highlight the successes and collaborative spirit that has driven our PLP forward.

Integrating the PLP Platform

One of the key factors contributing to the success of the PLP has been its integration into our School platform. This digital integration has made the process of progressing through the program and making the expectations visible much more efficient and accessible.

Teachers can easily track their progress, access resources and collaborate with their peers, all within a unified system. This seamless accessibility has empowered our staff to take ownership of their professional development journey.

I would like to thank the ICT team, particularly Liesl Coope, Coordinator of Intranet Services, for assisting in setting up the PLP platform on RavoConnect.

Professional Conversations, Peer Observations and Goal-Setting

Central to the PLP are the professional conversations, peer observations and goal-setting activities. These elements have provided our teachers with structured opportunities to plan, reflect and grow.

Through professional conversations, teachers have engaged in meaningful dialogue about their practices, challenges and successes.

Peer observations have allowed for the sharing of best practices and constructive feedback, fostering a culture of continuous improvement.

Goal-setting has been particularly impactful, giving teachers clear targets to strive for and a sense of direction in their professional growth. As renowned education researcher Professor John Hattie emphasises, teachers need to

adopt evidence-based teaching strategies. This principle has been at the heart of our goal-setting process, encouraging teachers to research and reflect on their impact and strive for excellence.

The Importance of Teamwork and Collaboration

Teamwork and collaboration have been vital components of our PLP.

Working together in teams has not only strengthened our professional bonds but also enhanced our collective capacity to support student learning & wellbeing. Each team has brought diverse perspectives and expertise to enrich the learning experience for everyone involved.

The PLP Expo: A Celebration of Learning

The culmination of the PLP this year was the Expo, a celebration of the hard work, dedication and growth of our staff throughout the year. Each team presented their achievements, challenges and lessons – inspiring, involving and informing their colleagues. The Expo was a profound testament to the power of collaboration and the positive impact it has on our professional community.

Indeed, our experience overall this year of professional learning opportunities has reinforced that collaboration and teamwork are not just beneficial – but essential for professional growth and student wellbeing.

As we look to the future, we remain committed to fostering a collaborative culture that supports continuous improvement and excellence in education.

KATE NOACK
English Teacher

Lessons from My First Year

> “Things won are done;
> joy’s soul lies in the doing”
>
> *Troilus and Cressida*, Shakespeare

Teaching is a unique profession where the outcome often remains unseen. Unlike sculptors, who can admire their works in public places, or tilers, who can show off their mosaic bathrooms, we educators rarely witness the impact we have on our students’ lives. Shakespeare sagaciously informs us that true joy is found not in the end result but in the ‘doing’. As someone still very early in their teaching career, I can safely say that the joy I have found in the ‘doing’ of teaching is unlike any joy I have ever experienced.

I owe much of this joy to Ravenswood. Awarded the 2023 University of Sydney Graduate Teacher Scholarship, I observed classes and completed my internship under the wise guidance of Ravenswood’s Alahna Richmond-Yunn and Greta Craighead. Each Monday for three terms, I sat in on classes all day, taking notes and observing teaching styles, classroom cultures and methods of differentiation.

The pure exposure to such a vast array of intelligent professionals across different subject areas left me with a bank of strategies, lesson ideas and, most importantly, a developing understanding of how students learn best. My experiences provided me with more insights than any university class ever could.

My observations made some things abundantly clear. Students learnt best in classrooms where they felt comfortable and had strong relationships with their teachers. Students also learnt best when thinking was visible and activities were built on from each other and well thought-out.

I will never forget one of Greta’s classes, where she had students draw Catherine the Great on whiteboards, then identify why

they drew her in a particular way. Students subsequently sat down and wrote analytical paragraphs: all were smiling.

To me, this was evidence of the true genius of teaching. Just as parents hide vegetables in spaghetti bolognese, Greta hid deep learning in an engaging activity that was stimulating for both the teacher and students. The learning was apparent and effective: it was quite literally making everyone smile.

I’m aware I may sound idealistic – and yes, I’m young and perhaps naïve! There are certainly points in the school term where we are run off our feet, and it’s hard to always make learning ‘interesting’.

But it's what we should be striving towards every day – bringing joy into the classroom, in whatever form that takes, so that students learn to love what they do. Personally, I find it deeply satisfying to watch students fall in love with English. While some may initially dismiss Shakespeare as 'random', I get such a kick when they ultimately become enthralled with his intelligence, wit and sheer artistry.

It's even more satisfying when the classroom learning makes its way into the playground. This was the case when I found myself having to interrupt a lunchtime quarrel. I had been teaching Year 7 about the concept of a 'subversive protagonist' and an argument had erupted in the playground about who was the most subversive in the friend group. Classic.

While teaching demands an insatiable appetite for challenge, the rewards are immense and lifelong. I was warned about the 'first-year blues', but am happy to say that they haven't battered me down yet. If anything, I am feeling more motivated, inspired and driven than I was this time last year.

One of the most valuable lessons I've learned to avoid the first-year doldrums (mainly thanks to Oleeta Fogden) is the importance of efficiency. This was crucial at the start of the year, as I was balancing my role as a House Patron (and running my first HPAF) with navigating my first few terms of teaching.

I've come to realise that to truly love teaching and to do it well, efficiency behind the scenes is essential. When the administration is done, the papers are marked, the reports are written and Synergetic (low and behold) is tabulated, then you can stand in front of your students with a full heart and a fierce mind, ready to inspire and provoke. This is when the greatest learning happens and both sides of the room can feel it. It's the armour needed to teach purposefully.

While English will always be my passion, I am developing a growing interest in Gifted Education – something that would not have emerged without close collaborative relationships at Ravenswood, as well as our Professional Learning groups. I have completed a Mini Certificate in Gifted Education and started a Master in Education at UNSW, which is reaffirming my belief that the demands of gifted students need to be highlighted and not neglected. Positive Education plays a central role here – because realistically, even our brightest students have barriers that stop them from reaching their full potential. It is our duty as educators to identify these barriers and remove them as quickly as possible. Not just for the good of the student, but for the good of the world.

As a once ardent and slightly chaotic teenager myself, I received wise advice when wavering about my life course. Echoing Sylvia Plath's warnings in *The Bell Jar*, a relative proclaimed at a family gathering: 'Decide on a life course you love, and stick to it with tenacity.'

Indeed. I have always loved people and have always felt a calling to teach. Ravenswood has set me on a trajectory to follow this calling and for that, I am truly grateful.

KATHRYN MINKLEY
Head of Visual Arts Department curator and judge
of the Ravenswood Australian Womens' Art Prize

Fostering Creativity Through Artistic Practice and Discovery

Creativity is a *process*, not a single event, and requires continual evaluation.

Creative processes involve critical thinking as well as imaginative insights and fresh ideas. Bloom's theory suggests that to engage in deeper levels of thinking, such as creativity, students need to have a foundation of knowledge to draw upon to succeed. The teacher's role is to gradually guide students to these higher-order thinking skills and to provide opportunities that facilitate their use.

This includes linking creative practice and theory and designing lessons to highlight the connections where students discover the challenges of art-making practices with a practical activity.

Teachers, through their own learning, support students to articulate their reasoning to facilitate their artistic practice. Selecting professional learning programs designed to address identified student learning needs creates a culture of high expectations where teachers model and set challenging learning goals.

The Visual Arts field is constantly evolving, with new technologies, techniques and artists emerging regularly. Ravenswood enthusiastically supports professional development for Visual Arts teachers, which allows us to stay informed about these trends and incorporate them into our teaching practices.

Practical workshops expose teachers to the latest artistic approaches, enabling us to present students with a contemporary and relevant curriculum. Teachers explore new and traditional art forms, fostering a deeper understanding of the creative possibilities within the ever-changing world of art.

Opportunities also enable Ravenswood teachers to share ideas, discuss challenges, and learn from one another's experiences. This collaborative environment allows teachers to expand their teaching and learning repertoire and refine their classroom practices through shared knowledge and best practices.

Teachers learn about strategies that encourage active participation, critical thinking and creativity in their students. By embracing student-centred practices, teachers cultivate a dynamic learning environment where individuals are actively involved in the learning process and feel empowered to explore their artistic potential.

department has been for all teachers to upskill in ceramics processes. By attending the 3-day intensive practical workshop with internationally renowned ceramist Juz Kitson, I was able to immerse myself in artmaking and further develop my technical ability and knowledge of hand building 3D forms from clay. It was wonderful to have the opportunity to be the learner. During the workshop I collaborated with other artists to share ideas, created my own objects as exemplars, took many notes and photographs and embraced the rich experience of artmaking to reignite my passion. Once back at school, during staff meeting time, I happily shared my newfound knowledge with the Visual Arts

Three-day intensive ceramic workshop with acclaimed contemporary Australian artist Juz Kitson

Ravenswood teachers developed ceramic practices to support all students to achieve excellence with their own work. New artistic techniques, themes and concepts, allow for dynamic and relevant learning experiences, ensuring that teaching remains current and engaging for students, improving learning outcomes.

Teachers create dynamic and stimulating learning environments that foster student curiosity, creativity and passion for the arts. A focus in the Visual Arts

teachers through conversation and practical demonstration. This in turn equipped teachers to share exciting new techniques to embed into units of work and inspire all students. After surveying year 7 and 8 Visual Arts students it was discovered that their favourite artmaking is with clay. From my learning experience we have now created two dedicated spaces specifically for ceramics, streamlined supplies and equipment to enhance teaching and learning of this medium.

ZITA DAMAJ
Head of the Social Science Department

The Wellbeing Revolution: Why Teachers Hold the Key to a Healthier Future

Wellbeing is a multifaceted concept that depicts how individuals feel and operate both personally and socially, as well as their overall assessment of their lives.
(Mental Health Commission of NSW 2017)

Human wellbeing has emerged as a critical health, social and economic issue this century, making it one of the most pressing global challenges of our time – including in the realm of education and schools.

The World Health Organization (WHO) has published research showing that an estimated 5 to 15% of children worldwide have psychological disorders that affect their personal, family, social and school environments (Chan 2010, in Porras 2020). A further 7 to 8% face difficulties in psychosocial or educational functioning (Porras 2020).

The Australian Institute for Teaching and School Leadership (AITSL) wrote in its 2022 report Wellbeing in Australian Schools that wellbeing 'is the shared responsibility of students, educators, families, and their broader communities'. This emphasises that teachers and schools play a role not only in developing students' personal, social and academic skills, but also building the wellbeing of students through wellbeing programs and interventions designed to strengthen young peoples' character, build their resilience and enable them to flourish and lead a happy life.

Given that teachers are instrumental in shaping the wellbeing of future generations, I believe it is essential for every teacher to have sound understanding and knowledge of Positive Psychology.

As such, I would like to share my journey developing my knowledge and understanding of Positive Psychology through Ravenswood School for Girls' Positive Education Framework. I will also explore the evolution of the Positive Psychology movement and discuss the benefits for both teachers and students.

Don't conflate 'Positive Psychology' with 'Happiology'

Positive Psychology (PP) is a branch of psychology that explores the positive 'conditions and processes that contribute to the optimal functioning of peoples, groups and institutions' (Gable and Haidt 2005) that makes life worth living.

Wellbeing, optimism and human flourishing were key concepts in the first wave of PP, which led many critics to describe it cynically as 'happiology' (Huta 2017).

Lay people and teaching

colleagues outside of Ravenswood thought PP was a 'new approach to mainstream psychology', a 'new program to develop a growth mindset' and a 'resilience-building program'. These incomplete views reinforce the need to educate teachers about PP.

Professor Martin E. P. Seligman and Mihaly Csikszentmihalyi pioneered first-wave PP in 2000 as a response to the traditional focus of psychology on mental illness and dysfunction. Due to our inherent negativity bias, psychologists devoted greater attention to human weaknesses and how unhappiness could be ameliorated, preventing an appreciative positive perspective about human flourishing (Kristjánsson 2012).

Unfortunately, our traditional education curriculum mirrors mainstream psychology. We judge students by their academic abilities; we identify their weaknesses and implement strategies to fix problems such as behaviour, engagement and cognition. In doing so, we miss the opportunity to recognise and nurture students' strengths and develop their capabilities.

Watching a family member struggle with his wellbeing at school and witnessing the significant increase in the number of students in my classes languishing rather than flourishing propelled me to act and learn about PP. This knowledge has enabled me to become a better parent and more effective teacher.

My journey began when I joined Ravenswood during the COVID-19 pandemic and was introduced to the Positive Education framework. I was inspired by Seligman's mission to develop people by building the three pillars of wellbeing: positive traits and strengths, positive emotions and positive institutions such as schools (Kristjánsson 2012). Wellbeing research indicates that these factors contribute to subjective wellbeing – that is, 'people's perceptions of their life experiences in a positive versus negative way' (Diener et al. 2018), which leads to flourishing.

Seligman's 2018 PERMA model (Positive Emotions, Engagement, Relationships, Meaning and Accomplishment) is the foundation for Positive Education (PosEd). It created a framework for implementing PP in schools, providing a tool for understanding, enhancing and measuring holistic wellbeing (social, emotional and psychological).

Positive Psychology is Not a Fad

In my postgraduate course in Positive Psychology at Melbourne University, I explored the second wave of PP introduced by Dr Paul Wong, which offered a more nuanced and inclusive approach. In his 2011 paper 'Positive Psychology 2.0', Wong highlighted that both positive and negative experiences are essential aspects of human existence, and that true wellbeing comes from diverse experiences, including confronting and overcoming challenges. His views were supported by Lomaz and Ivtzan (2016), who argued further that a focus on positivity undermines peoples' ability to learn from hardship.

This PP 2.0 wave proposed four pillars of wellbeing: virtue, meaning, resilience and wellbeing. I liked the expanded focus on building resilience and finding meaning in adversity, and found it complemented Seligman's aims of 'healing the worst and building the best' (as cited in Wong 2011). I think the duality of this approach is more representative of reality and true human experiences. It is particularly relevant to teachers' roles in supporting students and colleagues to overcome teaching and learning challenges, enhancing wellbeing in schools and the wider community.

But it was the third wave of PP that truly resonated with me. Led by Tim Lomas, it features broader scope and methodology beyond the individual, encompassing the sociocultural factors, systems and processes that impact wellbeing (Lomas et al. 2021). This interdisciplinary approach is highly useful for schools, allowing teachers to understand, for example, how family expectations in Asian cultures, or trauma experienced by refugee students, shapes and influences student wellbeing. Furthermore, the incorporation of qualitative and implicit methodologies encourages new areas of investigation in PP, providing teachers with more tools to support students' wellbeing.

No More Cynicism – Positive Education is Powerful

Despite the growth and increased adoption of PosEd in schools, the framework has attracted criticism – just as PP has – due to its focus on positivity and optimism. There has also been scepticism about its effectiveness given limited empirical research in schools (Green et al. 2011). However, recent studies have shown that positive education can significantly enhance students' wellbeing, academic performance, and resilience. For instance, Waters and Loton (2019) found that PosEd interventions led to improved emotional well-being and academic outcomes in students. Additionally, a review by White and Kern (2018) highlighted that schools implementing PosEd programs reported reductions in student anxiety and depression, alongside increased engagement and motivation. These findings suggest that, when effectively integrated, PosEd can address both academic and emotional needs of students, fostering a more holistic educational environment.

Moreover, as a teacher at Ravenswood, I have seen the transformative effects of PosEd on both student and teacher wellbeing. For students, increased academic achievements, improved mental health, closer connections and development of life skills are noted benefits. Teachers also report enhanced wellbeing, increased job satisfaction, professional growth and improved work relationships.

Ravenswood's PosEd is a whole-school approach that brings together Seligman's PERMA model of PP and Lee Waters' Visible Wellbeing approach to support students' wellbeing and academic success. Building character strength is a major intervention used at Ravenswood. This strength-based approach to wellbeing encourages students to use Value In Action classification to identify signature strengths, then set goals to develop this trait. Research shows that character strength is the foundation of optimal lifelong development and thriving (Park and Peterson 2006).

Evidence from Ravenswood initiatives such as the Gratitude Wall, Cadet Program, Perseverance Walk and RAVO Ripple Effect support this view. Furthermore, research (and Ravenswood students' testimonials) indicate that when students use their character strength in new ways they feel happier, healthier and more connected, at school and beyond (Park and Peterson, 2009).

The Visible Wellbeing program is another aspect of PosEd at Ravenswood. The explicit teaching of wellbeing during weekly PosEd classes increases students' wellbeing literacy, while wellbeing techniques (such as mindfulness, breathing and journal reflections) help identify and regulate students' emotions, building resilience.

The design of the school's learning spaces and grounds also play an important role in promoting student and teacher wellbeing. The Wellbeing Path, Wellbeing Centre (including its psychologists and two therapy dogs, Daisy and Penny) and Ravenswood's sports facilities provide safe spaces for students and staff to access wellbeing services.

Positive Psychology Interventions have helped to increase student and teacher wellbeing at Ravenswood, cultivating positive feelings, cognition and behaviours Subsequently, PosEd and PP have been instrumental in helping schools such as Ravenswood and Geelong Grammar to move from 'a welfare model towards a wellbeing model' (Seldon, 2017, cited in Team 2017), placing it as the leading school in 'Innovative Education' since 2018. A true testament to the effectiveness of PP and PosEd approaches in promoting wellbeing in schools.

Wellbeing is undeniably one of the most pressing issues of our time, especially in the educational sector. By understanding the evolution of PP and implementing its principles, teachers can create a more positive and supportive learning environment in schools and beyond. This not only benefits their own wellbeing but also equips students with the tools they need to thrive and flourish, academically and personally.

For all the teachers and educators who remain sceptical about the merits and usefulness of PP, I hope my journey inspires you to explore PP and its potential for improving wellbeing. Together, we can unlock the door to a healthier future.

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ELIZABETH WESTLEY
Director of ICT

Immersive Learning with Virtual Reality Technology

Virtual Reality (VR) has evolved from a futuristic, space-age technology seen only in movies to an increasingly useful classroom technology that can add value to teaching and learning through experiential learning.

Since 2016, Ravenswood has been exploring the potential of VR to enhance engagement, motivation and learning outcomes for students from Kindergarten to Year 12.

Ravenswood won Best use of Technology at the 2024 Australian Education Awards, in recognition of its innovative VR program.

We've needed to consider two components of VR: hardware and relevant K–12 VR content.

Our first use of the technology involved basic VR headsets with iPods inserted. This was a simple and cost-conscious solution: iPods were an affordable alternative to phone handsets (then the most common hardware being used with VR headsets). The iPods were connected to the School wireless network and managed centrally using our mobile management platform.

In these early stages, it was hard to find suitable K–12 educational VR content relevant to the curriculum, which limited the use of the VR solution. Fortunately, platforms such as Google Expeditions, Google 360 and VR apps in the iTunes store started providing content that allowed teachers to trial and experience the potential of VR technology for student learning.

For the VR solution to be successful, the ICT Team needed to be part of the learning team to ensure the VR hardware could connect reliably to the School's wireless network. In addition, the School's firewall needed to be configured to allow secure access to the Cloud-based VR administration/teacher console, which pushes the VR learning activities to each headset. This required some network changes and testing to get the VR solution working safely and reliably.

From this initial implementation, we identified some key factors to successfully integrating VR technology into effective learning activities. The VR platform requires a variety of high-quality cross-curricular and stage-based content. The ability to manage the delivery of this content reliably to each headset to allow the teacher to control the activity was also considered important, as this would enable the teacher to focus the students' learning. VR hardware, in terms of headsets and iPods, needed to be durable, reliable and easy to use.

From this evaluation, we implemented an educational-based VR solution called ClassVR. The platform is a holistic solution with K–12 educational VR content, an integrated headset and viewer and a content management and delivery administration console. The ClassVR platform allows teachers to procure and design immersive learning activities that engage students.

One of the benefits of VR is its ability to replicate experiential learning opportunities that are otherwise impossible (such as experiencing historical events), dangerous (such as exploring a beehive, or swimming with sharks) or expensive (such as travelling overseas).

A great example of this at Ravenswood is when students in Year 1 used VR technology to immerse themselves inside a beehive, full of bees – experiencing this from the bees' perspective!

Kolb's (1984) Experiential Learning


CLASSVR

Theory suggests that learning is most effective when students can actively engage with the material, reflect on their experiences and apply new knowledge. The immersive nature of VR allows students to not only see and hear the experience, but feel the emotion of the experience too.

As American poet Maya Angelou has been quoted as saying: 'I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel.' The immersive and experiential aspects of VR – how the technology makes us feel – is perhaps its most powerful benefit for learning.

The immersive nature of VR has been seen to boost engagement and motivation, especially among our Junior School students. Research supports this observation: VR can enhance students' engagement by making lessons more interactive and enjoyable (Freina and Ott 2015).

Our Year 6 students were immersed in the effects of the 2015 earthquake in Nepal using the VR technology platform. Of course, it would never ordinarily be possible for students to explore and experience such an environment in person, but through VR they have experienced the sights, sounds and cultural impact of environmental disasters on towns and populations globally.

VR allows students to 'walk in someone else's shoes' by exploring different cultures and experiencing situations such as natural disasters through a first-person perspective. Research has found that VR's immersive experience can significantly enhance students' emotional awareness and empathy, helping them develop a deeper understanding of global issues and perspectives (Herrera et al. 2018).

VR in education facilitates differentiation by supporting students to understand complex concepts relevant to their age and ability. Many subjects in K–12 education, such as Science, Mathematics, History and Geography, involve abstract concepts that can be difficult to grasp through traditional pedagogy alone (Makransky et al 2019). VR can bridge this gap by providing 3D visualisations and interactive simulations that can make these concepts more accessible for students.

VR enables students to experience phenomena first-hand, deepening their understanding of complex subjects (Makransky and Lilleholt 2018). For example, our Year 2 students who explored ocean biomes and marine life using VR witnessed intricate ecosystems that would be more difficult to understand and access as a 2D static image or text.

As noted earlier, the availability of quality K–12 VR content and curriculum resources has increased considerably. The ClassVR platform has a wealth of curriculum content and integrates with several third-party content providers, further enriching the VR content library for teachers.

While VR technology is predominantly being used with students in Years 1 to 6, there are several examples in the Senior School of the technology's benefits. Year 8 students have used the VR platform to 'visit' the Globe Theatre as part of their Shakespeare curriculum, and Year 9 PDHPE students have learned about anatomy by exploring inside the human body in the VR environment.

Of course, teacher buy-in and ICT support are crucial for the successful adoption of VR. Studies indicate that teachers' confidence

in using VR tools and their ability to align VR content with curriculum requirements are key factors influencing the success of VR integration (Huang et al. 2020). Implementing any new technology requires training and support for teachers.

Ravenswood worked with an external training provider to train key teaching and ICT staff on using the VR platform in a train-the-trainer model. This approach reduces costs and will facilitate the broader adoption of VR technology across the school.

The integration of VR technology at Ravenswood has provided opportunities for immersive, interactive learning activities that

can significantly enhance student engagement and motivation. From virtual historical field trips to 'being a bee' in a beehive, VR offers students opportunities to explore new worlds, old worlds and different perspectives in ways that were previously unimaginable.

We look forward to broadening the use of the VR platform across multiple year groups and learning areas.

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Igniting Curiosity Through Object-Based Learning in the History Classroom

Silence.

Two white-gloved hands slip into a large box as a collective breath is drawn across the space. A silent buzz electrifies the air as 26 pairs of young eyes stare intently – focused, excited and yearning to be involved. What is yet to be revealed? What are we about to see?

An object. Awe. Intrigue.

Does it matter what the object is?

No. The young eyes still stare intently.

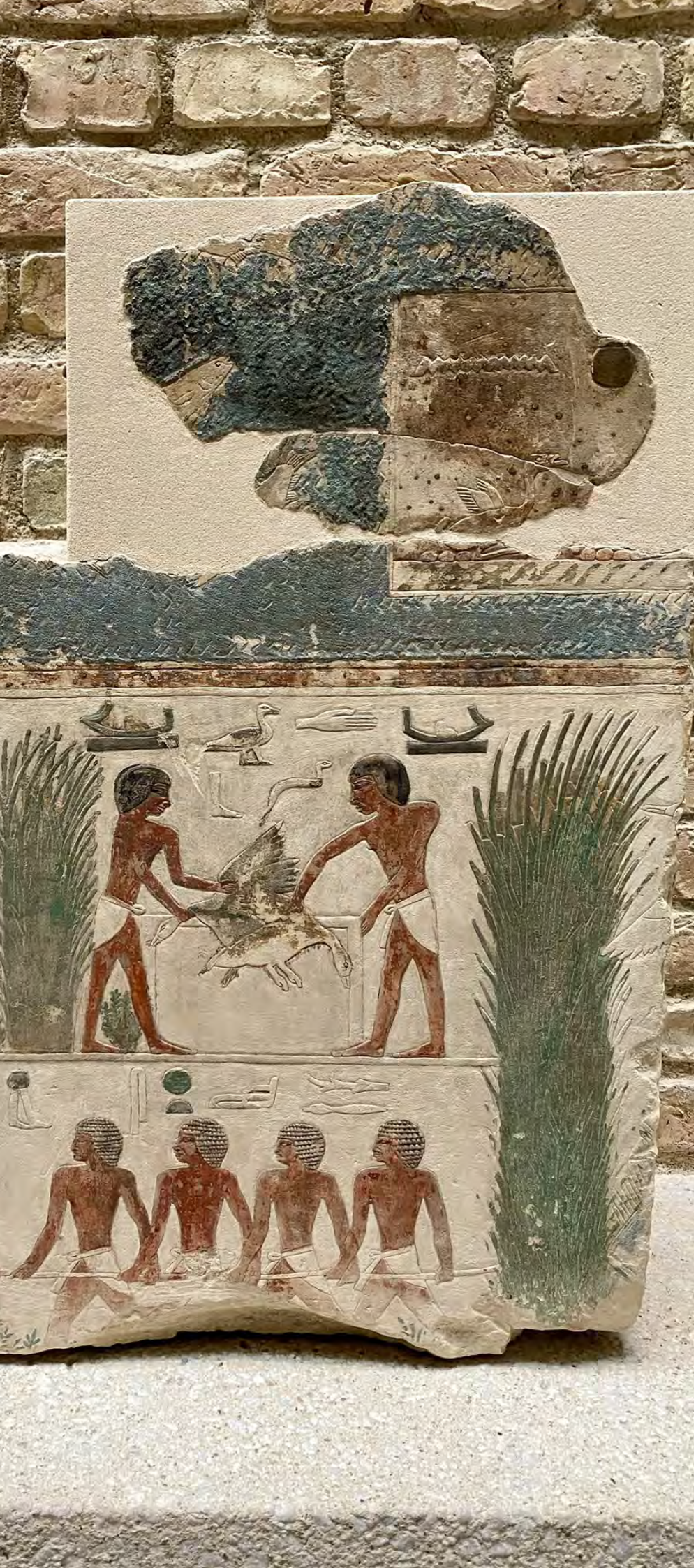
The teaching of History is intertwined with storytelling, breathing life into the past. Tangible relics, both primary and secondary sources, awaken imagination and elevate critical thinking.

As History educators, we transform these artifacts into conduits of knowledge, curiosity and understanding. This is the essence of Object-Based Learning (OBL), a dynamic approach that immerses students in the past through hands-on exploration of historical objects.

OBL ignites passion for history, unlocks deeper critical thinking and provides opportunities for all learners to succeed. As Museums and Galleries of NSW (2024) explains:

> Objects can be used to stimulate curiosity, deepen understanding, improve retention of knowledge, unlock the imagination, promote social learning and evoke memories from young and old alike.

In January 2024, I embarked on a Ravenswood Fellowship trip to Berlin, Oxford and London, where I explored museums, met with curatorial staff and discussed strategies for integrating OBL into the classroom. I also met with world-renowned OBL specialists Dr Thomas Kador from University College London and Dr Jim Harris, the Ashmolean Museum's Teaching Curator at Oxford University.



During my time in Berlin, I wandered through halls filled with ancient, medieval and modern artefacts. I visited the Altes Museum, Neues Museum, Jewish Museum, Topography of Terror, and Sachsenhausen Memorial and Museum. At each, I engaged with a range of objects to enrich my teaching of History, while also studying the nature of museums and how they connect different audiences with their subject matter.

Observing staff and visitors, I noted the draw of certain objects, such as Nefertiti's bust, the 'undisputed star of the Neues Museum' (Stiftung Preußischer Kulturbesitz 2024). This object, a vision of beauty from a distant time, inspired in me wonder and imagination, leaving a lasting impression.

This is the power of objects. A visitor may have no prior knowledge of Nefertiti or her role alongside Pharaoh Akhenaten in New Kingdom Egypt. Yet, people are drawn to this ancient artefact, and the memory of this experience lingers. For me, the bust of Nefertiti left me in awe and inspired my teaching of a Year 8 Global History Studies unit on the Mysteries of Nefertiti. That is the power of an object – creating a sense of connection and inspiration that endures beyond the time spent with it.

My exploration of museums extended beyond Berlin's 'museum district'. Prior to my trip, I had been in discussion with the education department at the Sachsenhausen Memorial and Museum, and was hence able to meet with a member of their team for a private tour of the site, along with a detailed briefing and discussion of OBL in the context of Holocaust education.

The contrast between objects from the concentration camp and the SS training camp was striking. Images of 'Aryan' men enjoying camaraderie starkly contrasted with Nazi propaganda, prisoner artworks, and survivor testimonies. Witnessing this evidence and learning from the educators at Sachsenhausen reaffirmed my research on the role of objects in Holocaust education. It highlighted how objects facilitate meaningful conversations about dark histories, fostering empathetic understanding and stronger connections to both the past and contemporary contexts.

In Oxford, I met with the Ashmolean Museum's Dr Jim Harris to discuss the museum's approach to Object-Based Learning (OBL) and enjoy a guided tour. Our discussion reiterated the practical strategies and implications of OBL theory, emphasising the following for success:

- Focus on a single object to allow time for exploration and discovery.
- Begin with observation rather than inference to facilitate early success and enhance later judgments.
- Curate the learning space to provide a sense of atmosphere.
- In OBL, a teacher is a curator and guide, not the font of all knowledge.

In London, key highlights included meeting Nadine Wright at the Imperial War Museum and exploring the British Museum.

My time at the Imperial War Museum was extensive. I learned about the museum's educational programs and opportunities for embedding objects into learning experiences. The few hours I had allocated turned into a full day, immersed and inspired as I was by the displays connected to my teaching of World War I and World War II.

Similarly, my time at the British Museum expanded as I explored historical topics and discovered objects from Sutton Hoo, an Anglo-Saxon burial site. These experiences have since inspired my teaching and an OBL research task for Year 8 Global History Studies.

While all elements of my trip were highlights, being invited to observe an OBL seminar by Dr Thomas Kador at University College London was incredible. Dr Kador has published numerous journals and books alongside the renowned Dr Helen Chatterjee, and both are regarded for their research and practical application of OBL strategies in the GLAM sector (Galleries, Libraries, Archives and Museums). Their work first gave a name to what I aimed to achieve in the History classroom and inspired my Fellowship trip. During the seminar, university students learned about the nature of objects, their classifications and handling processes. This experience has enhanced my practical application of OBL strategies in the classroom and inspired further research, collaboration and professional learning tied to my Ravenswood Fellowship experience.

Ravenswood's History Department has fully embraced the benefits of OBL across the 7–12 curriculum. We have collaborated on object-focused starters, reframed language for historical source analysis, devised OBL lessons and created object-focused assessments.

Observations and feedback have been overwhelmingly positive. Since embedding OBL into the Year 7 History program, 91% of students rated their enjoyment of OBL lessons as 'Good' or 'Great'. Additionally, 86% reported feeling more engaged, and 77% said they developed good relationships with peers when using objects. Our enthusiastic and collegial team has enriched student learning experiences, showcasing the success of a stronger focus on OBL in the History Department.

So, next time you seek that spark of curiosity and the buzz of young minds, ask yourself – could you use an object?

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Bridging the Gap: Researchers and Teachers Collaborating for Better Outcomes

Research and practice in education have often been conceptualised as a one-way 'bridge', across which insights travel from academic research to classroom practice.

Yet this unidirectional model tends to oversimplify the complex dynamics of educational environments and underestimates the value of educators' contributions to the research process.

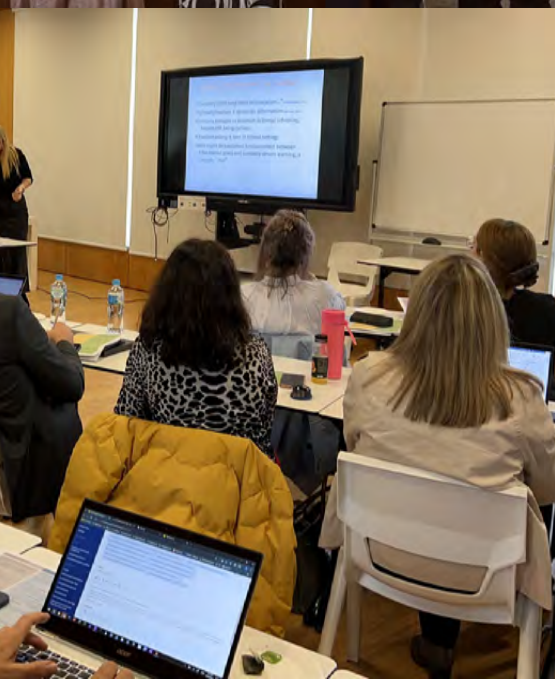
Recent work on research–practice partnerships (RPPs) demonstrates an alternative approach that encourages bi-directional, collaborative relationships between researchers and educators. Drawing on the Ravenswood Curiosity Project, which has engaged in a sustained RPP with the University of Queensland for the past four years, this article explores how such partnerships can address some of the long-standing challenges of translation between research and practice.

Lessons from History: Bridging Complexities

In 1944, Operation Market Garden was launched by Allied forces with the hope of quickly ending World War II by securing key bridges in the Netherlands. However, as depicted in the 1977 film *A Bridge Too Far*, the operation failed due to a series of critical misjudgements – communication breakdowns, underestimation of the complexities on the ground and a lack of flexibility in overcoming unexpected obstacles.

The 'bridge too far' was the bridge at Arnhem, which proved beyond reach and led to the operation's failure with tragic consequences (Beevor 2018).

While the scale and stakes of education are difficult to compare to a military operation, the lesson is that overly rigid, top down approaches often fail. This is especially true when leaders do not account for on-the-ground realities or provide the flexibiulity to adapt to evolving conditions.



The Traditional Model: Strengths and Limitations

In education, the traditional bridge metaphor assumes that researchers develop findings that can be transferred directly into school contexts, with teachers serving as the users and implementers of these academic findings.

This model, however, underestimates the variability of school environments and often leaves educators to interpret and adapt nuanced findings on their own.

Coburn and Penuel (2016) argue that research–practice gaps persist not because of a lack of valuable research, but because of misalignment between research and the situated needs of teachers. As a result, the bridge model often leads to inconsistent application and limited impact for improving student learning outcomes.

Research–Practice Partnerships: A Collaborative Model

Research–practice partnerships (RPPs) offer a more sustainable, flexible model than traditional research approaches. Unlike top-down unidirectional models, RPPs ensure teachers are equal partners in the research process, fostering bi-directional communication.

Such collaboration allows research questions to be shaped by the needs of schools while also ensuring that teachers have access, support and professional development to critically analyse and implement research findings effectively for their context (Penuel et al. 2017).

Over the past four years, the Ravenswood Curiosity Project has involved Ravenswood School for Girls and the University of Queensland collaborating through the Partner School Program (PSP) to co-develop research that directly informs classroom practice and research knowledge.

The goal of the PSP is 'to understand and action approaches that bridge the gap between research and practice in actionable, meaningful, and sustainable ways, building teacher capability and efficacy and positively impacting student outcomes' (MacMahon et al. 2022). By engaging teachers as co-researchers, the partnership not only addresses authentic challenges within the school, but also enhances the knowledge and expertise of both the participating teachers and researchers by encouraging meaningful dialogue and building professional identity and capability.

Encouraging and prioritising intentional listening, ongoing conversation and continuous feedback between researchers and teachers opens the possibility of identifying knowledge gaps and breaking down barriers that limit the effectiveness of researchers and teachers working well together (MacMahon et al. 2022). It recognises that research and practice are complex and that such an iterative approach must be based on mutual respect for each other's knowledge and expertise, be continuously informed by each other, and seek promising practices that move schools beyond being consumers of knowledge to opening opportunities to be co-designers in knowledge mediation and knowledge production.

Advancing Knowledge Through Meaningful Dialogue

While the bridge metaphor no longer adequately captures the dynamic, reciprocal relationship

needed between research and practice (Whitman and Kelleher 2018), it still dominates approaches to research.

The recent International Mind Brain Education Conference (IMBES) in Leuven, Belgium was a case in point. (Mind Brain Education's mission is to bring together the fields of education, neuroscience, biology, psychology and developmental and cognitive sciences to improve the state of knowledge and dialogue between these fields).

The conference's overarching goal was 'to advance knowledge and foster meaningful dialogue between scientists, practitioners, and policymakers'. Yet while there are fascinating studies taking place in these fields – and some presenters alluded to the desire for more collaborative, reciprocal partnerships between researchers and practitioners – only the University of Queensland's presentation truly showcased how research–practice partnerships are addressing the barriers, understanding the gaps and using promising practices to advance knowledge and practice.

The University's presentation demonstrated how co-creation of research is practical, adaptable and responsive to classroom realities. Their PSP draws on Levin's (2013) conceptualisation of knowledge mobilisation that considers the interacting domains of knowledge use, mediation and production (MacMahon et al. 2022; MacMahon 2024).

The presentation provided on-the-ground examples of collaborative partnerships with practitioners

(Ravenswood Curiosity Project and Westbourne Grammar Agency Project) where teachers, researchers and even students have co-designed the research project. Researchers provided teachers with access to literature that is often not available to them, to help frame their school problem and inform their research design. They also went further: through giving teachers voice and opportunities for continuous feedback, knowledge was mediated for the school context and opened the possibilities for producing knowledge such as the Ravenswood Curiosity Framework.

This stood in contrast to many other presentations at IMBES, which continued to reflect a more one-way, researcher-led dissemination of findings for schools to use – of research on teachers and students, rather than with them.

Building Capacity and Shared Ownership

One of the key strengths of RPPs is their focus on building capacity within schools. Rather than leaving teachers isolated to implement research findings independently, RPPs emphasise the importance of providing professional development, continuous support and an accumulation of knowledge over time.

Many schools have created research centres for their schools, but true success can only be realised if these schools are doing such research in partnership with universities.

The Ravenswood Curiosity Project and partnership with the University of Queensland has engaged teachers and researchers in regular professional learning, deepening our collective understanding of curiosity, the research process and professional relationships with researchers. This has in turn enhanced our ability to question, create, interpret and apply research findings for amplified impact in our school context.

This approach fosters shared ownership of the research process and confidence to challenge misapplications of research. It also empowers teachers to take an active role in shaping educational practices and knowledge production (Harris and Jones 2019).

Conclusion

Research–practice partnerships are a flexible, collaborative approach to 'bridging the gap' between research and practice in education. By fostering meaningful dialogue, RPPs create a dynamic feedback loop that ensures research remains relevant to the needs of educators and students. The Ravenswood Curiosity Project, in collaboration with the University of Queensland, exemplifies how such partnerships can lead to meaningful and sustainable improvements in educational practice, professional identity and research literature.

The gap between research and practice – once considered a bridge too far – can be successfully closed through structured, reciprocal and respectful collaboration. This empowers both researchers and educators to co-create solutions to real-world challenges, reminding us of the importance of flexibility and responsiveness to on-the-ground realities and changing conditions.

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How to Effectively use Formative Assessment in the Classroom

The benefits of formative assessment on student learning and knowledge retention have been widely demonstrated in numerous studies and academic literature. The NSW Education Standards Authority defines formative assessment as 'the ongoing use of information about students' knowledge, understanding and skills to target teaching and address student learning needs' (NESA 2024).

Most educators would classify tasks such as quizzes, exit slips and teacher observation, among other tasks, as types of formative assessment that they regularly use in their classrooms. However, these cannot be considered formative assessments according to the definition above as they do not involve the deliberate use of student data to target teaching.

In essence, a task cannot be considered a formative assessment unless we use the data gathered to modify and improve our teacher practice. Hattie (2015) elucidates that the true purpose of assessment – to inform teaching – is often overlooked by educators. This article explores strategies for educators to use formative assessment more effectively by utilising student data to transform and improve their pedagogical approaches.

Improving Teacher Feedback

Teacher feedback to students is a critical part of Use Formative Assessment. Typically, it focuses on students' strengths, weaknesses and misconceptions.

However, can this type of feedback be considered good feedback? Does merely highlighting gaps in knowledge and misconceptions lead to meaningful, long-term improvements in students' learning and performance?

As a Mathematics teacher, I frequently outline to students their errors and explain the methods to achieve correct responses to questions. While I can see that students understand my explanation in the moment, they often reproduce their errors months later.

Simply informing students about their misconceptions often does not change their thinking or result in long-term retention or behavioural change (Taylor and Kowalski 2014). To truly refine our use of formative assessments, we must evaluate and enhance both the manner and substance of the feedback we provide, ensuring that it fosters genuine understanding and lasting behavioural change.

The purpose of feedback is to bridge the gap between current understandings and desired outcomes (Hattie and Timperley 2007) – a definition that has aided me in differentiating my feedback to students as either effective or ineffective.

For example, when teaching algebra to a Year 9 class, I observed that several students in the class had the common misconception that x+x=x^2, despite having learnt algebra for the past two years. I immediately addressed this incorrect thinking and believed that this was enough to permanently dispel the misconception.

A few months later, two students in the class again made the same error while attempting a question involving algebra. This recurrence highlighted that my feedback had not successfully narrowed

the gap between their existing understanding (thinking that x+x=x^2) and the desired outcome (realising and understanding that x+x=2x). In short, my feedback was ineffective.

I contemplated how I could have improved my explanation to attain the desired learning outcome, since merely telling them they were 'wrong' was unsuccessful in the long run. Olivier's 1989 article, 'Handling Pupils' Misconceptions' , clarifies:

'it is not possible that knowledge can be transferred ready-made and intact from one person to another … although instruction clearly affects what children learn, it does not determine it, because the child is an active participant in the construction of his own knowledge.

Olivier rationalises that learning involves the interaction between a child's existing knowledge and new knowledge. In other words, a child cannot acquire new information or refute their misconceptions unless the new knowledge can be explained by their current knowledge base.

This knowledge base is known as 'schema', a concept defined by the psychologist Cross (1999) in her educational research. I had mistakenly assumed that by simply stating x+x=x^2 was wrong, and providing a brief reason why, I would have done enough to rectify students' incorrect knowledge. However, because my explanation did not relate to any of their existing schema, a handful of my students continued to maintain this misconception in the long term.

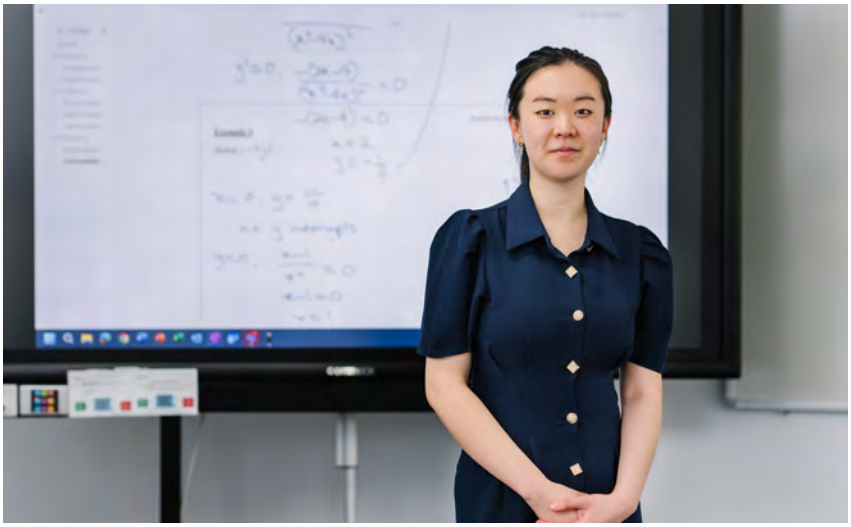
Olivier explains that such explanations and teaching results in rote learning:

'because it is not linked to any previous knowledge it is not understood; it is isolated knowledge, therefore it is difficult to remember. Such rote learning is the cause of many mistakes in mathematics as pupils try to recall partially remembered and distorted rules.

Instead, I should have asked students why they believed x+x=x^2. By doing so, I would have been able to identify their incorrect schema and mould it to address the root of the problem.

Asking students why they think a certain way seems like such an easy thing to do, yet I am certain many teachers forget to do this. As teachers, our instinct is to immediately correct a student's incorrect thinking, rather than probe the reasoning behind it. Teachers must recognise that telling students new information does not guarantee they will learn it. When teaching new content, we must understand students' schema first, then explain the new content using it.

So, what I should have done was



ask my Year 9s if they thought that 5+5= 5^2. Their existing understanding of basic arithmetic would have led them to recognise that this is incorrect – and thus by extension, x+x=x^2 must also be incorrect.

This is but one example of how to explain new information using students' knowledge base, for long term retention. However, being able to do this consistently and effectively requires thorough understanding of students' schema.

One of the best and easiest ways to enhance our comprehension of students' schema is by using teacher questioning in class. The next section will explore a style of teacher questioning that I have implemented in my classes that has enabled me to better understand my students' schema and hence their learning needs.

An Effective Teacher Questioning Style

In an effort to improve the quality and efficacy of my student feedback, I implemented a new strategy with my Year 11 class. I began assigning a few exam-style questions as their weekly homework, in addition to their regular homework. Instead of distributing the solutions after each week passed, I marked each student's responses in front of them and immediately gave verbal feedback on any incorrect solutions or working.

This allowed me to have a brief discussion with each student about their mistakes and thought processes. I recorded some of their misconceptions and used it to prepare for future lessons (explained in the final section of this article).

I have observed that this type of individualised, prompt feedback is superior to feedback given to the entire class. Not only can I develop my understanding of each students' schema and use this to inform future lessons, but the students themselves are more eager to receive and learn from the feedback.

Some students willingly completed this homework ahead of schedule and requested my feedback before the due date. Despite being given this extra task on top of their existing homework load, the students did not complain and were willing to complete it and seek my feedback. After the first week, I could sense that the students were aware of the benefits of the task and of receiving feedback – a benefit I did not predict.

Of course, it is more efficient time-wise for teachers to give general feedback on formative assessments, rather than specific targeted advice to each student. However, there are time-efficient practices, such as the use of peer feedback, that can produce similar effects on student learning.

Research has demonstrated that training students in the art of providing feedback, followed by engaging them in feedback about anonymous work, significantly enhances learning outcomes – for both the recipients and the contributors of feedback (Ahmed et al., 2022).

Improving Teacher Questioning

Teacher questioning is a largely underutilised type of formative assessment, especially in STEM subjects. In these types of classrooms, where there is usually only one 'right' answer and not much to deliberate about, you will not find the type of deep, philosophical class discussions that you might find in a History or English classroom.

For instance, you would not walk into a Science lesson and have a student question whether Newton's laws are correct. Students accept these ideas as correct and undebatable, hence there is often limited room for discussion.

As a Mathematics teacher who strongly advocates for the use of explicit instruction, I have often underutilised the value of questioning and class discussions in lessons. While I ask questions frequently to gauge student understanding, I have rarely initiated whole-class discussions with the students or probed their thinking with deeper questioning.

I wondered if there was a way for me to improve my questioning skills so that I could better understand my students' schema. Chian's (2020) study on targeting student misconceptions revealed that Socratic questioning, a constructivist learning approach, can be used in the classroom to build conceptual knowledge – something that many students lack in Mathematics and other STEM subjects. Results indicated that in a group of chemical engineering diploma students, where most were able to perform calculations correctly, those who were exposed to Socratic questioning by the instructor were better able to answer conceptual questions.

The following table lists the types of Socratic questioning that were used in the study, alongside examples that I have used in my lessons, and their observed effect on teacher and student understanding.

Socratic questioning types	Examples used in the Mathematics classroom	Effect on teacher understanding of student schema	Effect on students' knowledge
Questions for clarification,e.g. 'Can you give me an example?'	When teaching Algebraic fractions to Year 9 Student: How do you simplify when there is an x in the denominator? **Me:** Can you give me an example? **Student:** Like that one question in the Mathspace task you set us. **Me:** [Looks at the question in the Mathspace task and answers her question.]	Asking for an example enabled me to understand exactly what the student was asking and where her gaps in knowledge were. Had I not probed for an example, I would have given a general response that probably would not have been able to address her specific question.	Students realise that x is simply a replacement of a number. Students can connect their existing schema on numeral denominators to answer this question, instead of thinking there is a 'new method' for questions involving x.
Questions that probe assumptions, e.g. 'What is being assumed?'	When teaching probability to Year 11 **Me**: What if this question did not tell us what *P(V u W)* is? Can we find *P(V u W)* by multiplying the probabilities of V and W? **Student:** [Shakes head.] Me: Why is that? **Student:** Because the question doesn't say that V and W are independent, so we can't assume that.	This question helped me to gauge if the students had any incorrect assumptions.	Most students appeared not to know the answer to my question, indicating they were not aware of their underlying incorrect assumption. The one student who did answer correctly was able to dispel the other students' assumptions.
Questions that probe implications and consequences, e.g. 'How would this affect (blank)?'	When finding the shorter side using Pythagoras' theorem with Year 9 **Me:** My answer seems reasonable. How do I know that this number is a reasonable answer? **Student:** Because it's smaller than the hypotenuse. **Me:** That's right … so what if your answer wasn't smaller than the hypotenuse, what would you do?	I could gauge whether the students knew what we were doing in the context of the question.	Students understood what we were finding and that we weren't just plugging numbers into a formula. They learnt to use logic and knowledge on the context to assess the reliability of their answers.
Questions about the question, e.g. 'Why do you think I asked this question?'	When teaching parabolas to Year 10 **Me:** How did I know that I could not use 'intercept form' to do this question, before even looking at the equation? **Students:** [Silence.] **Me:** Let's read the question again … the question says to round the x-intercepts to two decimal places.	The students' silence meant the students were clueless. This highlighted a lack of conceptual knowledge at the cost of high proficiency in algebra.	Most students would just solve the equation without further thought, to the detriment of their conceptual understanding. My question highlighted the need for students to think about what can be deduced from the question itself before solving the question.

Using Data from Formative Assessments to Modify Teaching

Teachers often struggle to use student data to modify and refine their teaching methods. Every day and every minute in the classroom, teachers are exposed to a wealth of student data, ranging from their written responses to verbal cues, attitudes and facial expressions.

Despite the extensive collection of data, only a small fraction of that data is used. One significant example of this is NAPLAN data. While NAPLAN results are collected and thoroughly analysed, the data is not used in any way to inform teaching practice at the classroom level.

One approach I have implemented to develop my data-informed teaching is creating a list of things that I need to 'action' in future lessons. These actionable items are based on observations of students, data on student responses and feedback from students. The list is updated in real time, during or outside of lessons, as each actionable item presents itself.

The list includes any of the following:

- Questions students tend to answer incorrectly or fail to answer at all
- Incorrect or incoherent working out written by students
- Common careless errors made by students
- Student misconceptions
- Words or terminology that students do not understand
- If a misconception is specific to a student, then the name of student
- Meaningful questions from students

As I was teaching my Year 11s how to simplify a trigonometric expression, I realised they struggled with handling fractions within fractions. Recognising this gap in their knowledge, I added this to my list and addressed this in more detail in a future lesson. I also ensured I incorporated similar example questions in other future lessons and formative tasks.

While creating and updating such a list may seem like a simple task, many teachers will find it challenging to maintain due to the myriad of things that need their attention. And while there are teachers who claim they can maintain a mental list of such things, the demanding nature of the profession means that the constant influx of daily data will take priority over other less important, actionable items in their mental to-do list.

I advocate for maintaining a physical list, which allows teachers to gradually actualise and improve their pedagogy when time permits. Furthermore, teachers must realise that students fail to realise gaps in their own knowledge (Dunning 2007). Thus, it is necessary for teachers to determine and address this, with this list being one of the most effective methods, in my experience.

As mentioned previously, I provided my Year 11s with individualised verbal feedback on their responses to examination-style questions. To ensure the feedback is genuinely heard and utilised, I require the students to reattempt the questions and record these questions in a study book for future reference, which I then regularly review. This approach helps mitigate the risk of students forgetting or disregarding feedback.

While teachers naturally expect students to correct their errors, engagement in this process hinges on students' intrinsic motivation to improve their understanding (Hattie and Timperley 2007). By employing this method, I am reinforcing the application of feedback and ensuring that misconceptions are corrected.

The students have recognised the value of this practice, and I have observed a notable increase in their enthusiasm for studying and maintaining study notes. This effect aligns with what Roediger observed in his 2011 study, that students who are quizzed frequently 'tend to study more and with more regularity … and focus study efforts on difficult material'. One of my students even requested another blank study book so that she could apply this method of notetaking to her other subjects.

When students can see the effects of a certain practice on their learning, they are more inclined to commit to the practice regularly. This underscores how student intrinsic motivation to learning correlates with the effectiveness of our teaching practices.

While this article has discussed the importance of effective feedback, questioning and use of data to target teaching, there are certainly other ways to enhance our use of formative assessments. However, we must realise that improvement in teaching practice will only occur with a growth mindset, and with the effort we exert to transform our pedagogy.

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ELISE MCDONALD
Tertiary Education and Careers Advisor

Gaining an Edge on UK University Enrolments

Interest among our students in pursuing tertiary studies overseas, particularly in the United Kingdom, has surged in recent years. Recently, I had the opportunity to attend two international conferences that gave me valuable insights to the UK education landscape and the intricacies of the application process there.

It's unsurprising our academically inclined and ambitious students are increasingly looking to the UK, with its globally renowned institutions, multicultural society and rich academic heritage.

Over the past two years, Ravenswood students have received offers from prestigious universities such as Oxford University, King's College London, Imperial College London, University College London, University of the Arts London, University of Edinburgh, Durham University, Royal College of Music, and Royal Academy of Music.

With experience of the nuanced, dynamic and competitive international university application process, Ravenswood warmly supported my attendance at the inaugural UK Universities and Colleges Admissions Service (UCAS) international conference and the World Class Study in London Counsellors' Conference.

Understanding the processes and desired competencies, developing connections with key admissions staff, and promoting the School's academic strengths were all tremendously valuable achievements from my trip, made with a delegation of Sydney-based career advisors.

The UCAS conference brought together international admissions and recruitment professionals, along with people from a broader network of universities, for networking and knowledge-sharing events. UCAS provided a unique platform to gain valuable insights to the UK education landscape and the intricacies of the application process.

One of the key 'takeaways' from the conference was the importance of understanding the competencies that different universities look for in applicants – essential for effectively guiding our students with their applications. The conference also offered advice on how to support our students to make informed decisions about their education and future careers.

Next, I attended the World Class Study in London Counsellors' Conference 2024 (International). This event was specifically designed to support counsellors to understand the admissions processes and policies at four of London's leading universities: University College London, Imperial College London, the London School of Economics, and King's College London.

The conference offered comprehensive training on the application processes, including detailed workshops and seminars. We were also given extensive campus tours, allowing us to experience the university environments first-hand. Meetings with key admissions staff provided valuable insights (directly from

those responsible) to what these prestigious institutions look for in prospective students. Meanwhile, I spoke to counsellors from other countries about their student processes and readiness when applying to UK colleges.

I also had the opportunity to visit other renowned institutions. Oxford and Cambridge universities continue to be the most sought-after international education destinations for our students. We arranged meetings and tours at the campuses of both, where we interacted with university staff and explored their extensive academic and residential facilities. These visits were instrumental in understanding the unique offerings and environments of these historic universities.

The UK is also celebrated for its exceptional arts education. To explore this further, we arranged meetings and tours of the University of the Arts London and the Royal College of Music. These visits highlighted the diverse and rich opportunities available for students interested in pursuing arts and music education in the UK.

My overall experience was incredibly enriching. It equipped me with tools and knowledge to better support our students in navigating the complex world of international university admissions. The insights gained will undoubtedly enhance Ravenswood's guidance processes and help our students make informed decisions about their higher education pathways, as well as provide valuable networks in the UK for students.

Ravenswood

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