

EDITION 2 2023

School of Education

UpdatED

RESEARCH HIGHLIGHTS

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- Using video games to get teens off the couch to build better bones and joints
 - Decor Decisions: Why leaving it up to the kids helps them learn at school
- Drawings reveal gender bias in math, but experts say the future looks bright for women in STEM

FEATURED ARTICLE

 ECU goes a step further to help aspiring teachers work in Australian classrooms

From the Executive Dean

It is my pleasure to share the second edition of UpdatED 2023 with you.



Professor Caroline Mansfield Executive Dean, School of Education.

This edition showcases thought-provoking Education research across a range of current issues from gender bias in Mathematics (Dr Vesife Haristu), to the use of video games to support bone health (Dr Julie Boston), environmental education in early childhood (Professor Mindy Blaise), and the impact of furniture on student learning (Dr Julia Morris). Building on the success of our recent Alumni event on Generative AI, Dr Sarah Jefferson shares some advice on how curation, clarity, competence and character can help guide teachers in the use of ChatGPT. We are also proud to feature Christina Holly, who recently submitted her PhD investigating how collaborative communication between families and secondary teachers can improve experiences for students on the autism spectrum.

Nationally, Initial Teacher Education continues to be in the Spotlight, with the recent release of the Strong Beginnings report from the Teacher Education Expert Panel. We celebrate the quality of the 640 ECU students who have completed their capstone Teaching Performance Assessment and successfully demonstrated the impact of their teaching on student learning. Thank you to all schools and teachers who have partnered with us to prepare the next generation of teachers for a fulfilling professional career. I hope you find some inspiration in the following pages.



Drawings reveal gender bias in math, but experts say the future looks bright for women in STEM

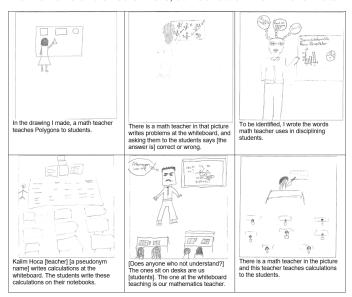


Dr Vesife Hatisaru, Lecturer, School of Education.

Two global studies which asked school students to draw their perception of mathematics have revealed children commonly associate maths teachers with women, and working mathematicians with men. However, the results revealed more females want to work in STEM industries.

Two global studies, both led by Edith Cowan University (ECU) Secondary Mathematics Lecturer Dr Vesife Hatisaru have found more than half of school children associate maths teachers with women and working mathematicians with men. Between the two studies, a total of 1500 Turkish school students were each asked to draw how they perceived mathematics in the classroom, and in everyday life.

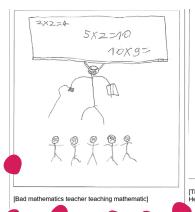
In Dr Hatisaru's first study 70 percent of the 1284 lower secondary students drew pictures of maths teachers, and most of them were female. While 20% depicted working mathematicians or scientists, almost all of them were male.



"What this shows is that most students when they think of what maths means to them, they think of it in a classroom setting which is a rather traditional view," Dr Vesife Hatisaru explained.

"When we asked the students whether they enjoyed learning about maths, more than half had impartial or neutral views and about seven percent disliked it very strongly."

Among the grade six and seven students, all aged 11 to 14, who portrayed negative feelings towards maths, drew angry or exhausted teachers.





"For the purposes of our research, we describe these as creature teachers, where students dislike maths because they didn't like their teachers," Dr Hatisaru said.

"However, there was still a portion of students who viewed mathematics as an important part of their education despite having a negative perception of the teacher."

Of the 1284 students involved in the first study, 72% found maths was an important part of their education. A total of 517 students found maths to be useful in daily life, for example paying for a bus ride, shopping and to measure objects and distances.

"Students highlighted the need for maths knowledge and skills for university too, in particular to get jobs in professions such as engineering, astronomy and even tourism," Dr Hatisaru said.

"What we also found is that children acknowledged technology wouldn't be possible without mathematics, the same goes with building robots and machinery."

The next wave: Women in STEM

With a push towards more women in STEM in Australia and around the world, there were positive insights. Out of 120 students surveyed in the second study, female students expressed more positive attitudes towards science and mathematics disciplines than males.

"Half of the students surveyed preferred to pursue a STEM career, such as an engineer, a surgeon or pilot."

"Among them, 29 females showed an interest in studying computing and other science-focussed careers," Dr Hatisaru said.

Global leader in mathematics research

Dr Vesife Hatisaru has actively participated in national and international conferences and has regularly contributed to the work of improving mathematics education.

Dr Hatisaru is a member of the executive team for the International Group on Mathematical Views (MAVI) and the Mathematical Association Tasmania (MAT), and co-editor of the International Journal for Mathematics Teaching and Learning (IJMTL). In 2023, Dr Hatisaru co-edits a Special Issue with the International Journal of Mathematical Education in Science and Technology.

This article is republished from the **ECU Newsroom**.

Read the original article **here.**



Using video games to get teens off the couch to build better bones and joints





Dr Julie Boston, Director, Partnerships and Engagement, School of Education and Professor Amanda Devine, Associate Dean, School of Medical and Health Sciences.

Osteoporosis may be associated with old age, but our lifestyles when we are young can play a big part in preventing the disease later in life — and video games could prove a surprising tool in getting teens to be more active.

Though they are often seen as being detrimental to healthy lifestyles in kids, video games may be a crucial element in teaching teens how to keep their bones and joints healthy and avoid developing osteoporosis later in life. Almost 1 million Australians have the condition, which sees a person's bones become fragile, leading to an increased risk of breaks and having a significant impact on quality of life and health in general.

Edith Cowan University's (ECU) Simulation and Immersive Digital Technology Group are partnering with the Arthritis and Osteoporosis WA Foundation and Singular Health Group on the Bone and Joint Health Project of Western Australia to try to prevent the disease from developing. A collaboration between ECU's Nutrition and Health Innovation Research Institute and School of Education, the project will see the research team develop a video game for teenagers to teach them to look after their bones and joints at a crucial point in their lives.

Professor Amanda Devine said there was a misconception about who osteoporosis affects - and how it can be prevented. "A lot of people look at it as only affecting older populations, but our lifestyles in our younger years can play a big part in our bone and joint health later in life," she said.

"There are many things kids can do to reduce the likelihood of osteoporosis when they're older, so, it's really important we teach them how to look after their bones and joints and understand how their skeletal system works - what we call 'bone literacy'."

Arthritis and Osteoporosis WA executive director Ric Forlano said the foundation always worked towards reducing the disabling effects of bone and joint conditions. "Unfortunately, they are often considered trivial and often not taken seriously by the community," he said.

"Whilst there may be no cure for many of the conditions that come under the umbrella of bone and joint disease, we can strive to maintain quality of life, through education.

"We know that very little is taught in the school curriculum and by educating at an early age we can try and reduce the risk factors as we age.

"By partnering with ECU, their expertise gives us added leverage in getting the message across."

Using video games for good

A major element of improving bone and health is increased physical activity - meaning a video game would appear to be a counterproductive method encouraging kids to move more. However, Dr Julie Boston said kids' easy access to devices such as smartphone, tablets and computers can be used to promote healthier living.

This article is republished from the **ECU Newsroom**. Read the original article **here.**

Other recent ECU projects have used digital platforms such as games and apps to educate kids on how to recognise meningococcal symptoms, or how to respond to peer pressure regarding drug and alcohol use. "Video games are increasingly appealing as a way of teaching important health messages to teens, as they are engaging and immersive: learning occurs through gameplay," Dr Boston said.

"A well-designed bone and joint digital game could allow for meaningful learning and entertainment, engaging students in a virtual world where they can gain experience and skills which can help shape their behaviours and ultimately improve their health." To make the game as effective as possible, the research team is asking for feedback from school principals, educators, sports coaches and other relevant parties.

Building better bones

Although factors such as genetics and other medical conditions can play a part in osteoporosis developing, many measures can be taken to help ward off the disease. "It's common for younger people to have the misconception that bones are inert, and not living tissue," Professor Devine said.

"And many older students don't understand that once the skeleton is fully developed, usually around the mid-20s, bone mass can decline unless we maintain a healthy lifestyle.

"Gameplay will teach these concepts to ensure sustainable health behaviours for our growing kids."

To establish the best foundation for good bone and joint health late in life, young people are urged to:

- Participate in weight bearing exercise
- Have a diet rich in calcium and vitamin D
- Maintain a physically active lifestyle
- Avoid smoking
- Reduce alcohol and caffeine intake
- Take part in balance training

Those looking to be involved can visit the project homepage.



Decor decisions: Why leaving it up to the kids helps them learn at school



Dr Julia Morris, Senior Lecturer, School of Education.

New findings from a three year study led by ECU has found a direct link between furniture, student learning and teaching. Children said they learn better when they choose what they learn on, and that includes fitballs and ottomans.

New findings from a three year study led by Edith Cowan University (ECU) researchers has found a direct link between furniture, student learning and teaching.

Visual Arts Senior Lecturer Dr Julia Morris said while there has been much debate over the efficacy of flexible and innovative furniture within schools, this research provides much sought-after evidence that the furniture children learn on, does impact how well they learn.

"Applying a single-subject research design from healthsciences, this research study empirically measured the relationship between furniture, students' engagement and how well teachers felt they were applying high impact teaching strategies," Dr Morris said.

A massive 97 percent of all of the students who took part in the study felt flexible furniture positively impacted their learning.

"Students believe that furniture supports them to improve engagement, by making them comfortable in class and assisting longer attention spans. Teachers generally feel flexible furniture results in better teaching outcomes, and they work harder to achieve the same outcomes when they only have traditional desks and chairs at their disposal," explained Dr Morris.

Creative and innovative learning environments

In terms two and four of the school year, students in four separate classrooms at Vasse Primary School in Western Australia's south-west, had the opportunity to choose the chairs, work surface and the location they sat in.

The furniture options included ottomans, or modern office chairs with wheels and back support. Others were tall tables, allowing some students choice to sit or stand. Fitballs were chosen by 6% of the students. 19% wanted to be seated at circular tables where they could chat with classmates.

"What we found most commonly is that students identified comfort as the main reason for better concentration in the classroom," Dr Morris explained.

"Some even identified how furniture supports injury management, as furniture that is flexible can allow them to move and stand, or even sit on the floor if that was more comfortable for them."

The findings revealed the children from grades two to six also preferred the flexible arrangements as it was not only an opportunity to choose what they learnt on, but with whom.

"Some students preferred sitting alone as they noticed they can't concentrate at group desks. Some would opt to sit where they faced a window, creating a retreat space for their learning.

"Others preferred to sit at round desks. These students explained that they weren't collaborating all of the time, but that a round desk supported them to access peer support if they needed it. Having other students working busily next to them also helped motivate them to stay ontask and minimised distractions," Dr Morris explained.

Students were asked to take photos of their furniture selection every three weeks and explain why they chose it. As well as comfort, students said storage, flexibility and portability as the main reasons for their selections.

"The feedback we received from teachers too was that the flexible furniture arrangements meant students showed a willingness to take risks and they undertook tasks without supervision, pro-actively making decisions about their learning direction," Dr Morris said.

"They spoke of students challenging themselves, identifying what in a topic interested them and not needing to be spoon fed."

Innovative classrooms - the future

Dr Morris said allowing children to choose the furniture in their learning environment not only aided in their concentration, but supported their comfortability, allowed better movement and personal space and encouraged self-management.

"The results of this study will not only be used to inform teaching and learning practices using innovative furniture, they will also support more user-centred design of furniture to meet the diverse needs of learners," Dr Morris said.

The idea of an innovative learning environment is to help every child find a place at school that helps them to learn best, that meets their personal needs. This research is one small step to understanding how students experience their classroom environment, and the impact it is having on their learning."

Read the full publication 'What impact does 'innovative' furniture have on student engagement and teacher practices?' Here.

This article is republished from the **ECU Newsroom**. Read the original article <u>here.</u>



Rethinking Environment Education in a Climate Change Era: Weather Learning in Early Childhood



Professor Mindy Blaise, Director, Centre for People, Place and Planet, School of Education.

Rethinking Environmental Education in a Climate Change Era: Weather Learning in Early Childhood is a new book co-written by Tonya Rooney (ACU) and Mindy Blaise (ECU). Mindy is a Professor of Education and the Co-director of the Centre for People, Place, & Planet. She is also a co-founder of the Common Worlds Research Collective.

The crisis of climate change offers both a challenge and opportunity for educators to think more deeply about human relations with worlds and how children are embedded within ecologies and weather worlds. To achieve significant change, education needs an approach to learning that:

- Redirects the focus from human-centred positioning to humans as part of multiple worlds;
- Resists certainty and containment to embrace what is uncertain, unbounded and unruly;
- Makes room to consider the ethical dimensions of living in climate worlds;
- · Allows us to re-imagine different weather worlds.

This book, based on two weather walking projects that were research collaborations between children, families, and educators at a preschool and childcare centre and university researchers provides insights about young children's capacity to imagine worlds differently. These weather walking projects focused on following and noticing children's unfolding relations with weather worlds. The project involved going on regular walks with a group of 12-15 preschool aged children and their educators. Rich stories of children's relations with weather, show how weather learning is place-situated, embodied, relational and ethical. Weather learning emphasises the inseparability of humans and weather, and challenges world views that privilege human-centric perspectives. A multitude of pedagogical opportunities of thinking, walking, and writing with weather occur through weather walking with children are explored throughout the book.

If you are interested in these ideas, please consider reading Rethinking Environmental Education in a Climate Change Era: Weather Learning in Early Childhood.

If you, a group of teachers, and/or your school are interested in taking part in a creative and transdisciplinary weather inquiry, which could potentially form part of a Masters by Research or PhD, please contact Professor Mindy Blaise at m.blaise@ecu.edu.au

RETHINKING ENVIRONMENTAL EDUCATION IN A CLIMATE CHANGE ERA Weather Learning in Early Childhood TONYA ROONEY AND MINDY BLAISE

Nominations now open for the 2023 WA Youth Awards

The WA Youth Awards were established in 1999 to recognise young Western Australians for their achievements and contributions to the community. The Awards also reward outstanding youth groups and organisations that serve and support the state's young people. If you know a young person aged 10-25, a youth worker or a youth organisation worthy of recognition, nominate them today. Nominations are open in 10 categories across arts, innovation, advocacy and community leadership, and winners receive a \$1,000 cash prize and the chance to be named WA Young Person of the Year. ECU has been a proud sponsor of the WA Youth Awards for over 16 years and is delighted to be sponsoring the ECU Community Leadership Award.



Nominations close on 15 September 2023.

To find out more and nominate someone, please visit www.yacwa.org.au/major-events/wa-youth-awards-2023/

Research in the School of Education

Written by School of Education academics, please find below a selection of recently published articles which are available to you without any subscriptions.

Associate Professor Melanie Brooks, Associate Dean - Research



In this edition, we emphasise recently conducted ECU research from across early learning, primary and secondary contexts. Please click on the links to view these journal articles which are all freely available. Find out more about our research at ECU by following the link below. https://www.ecu.edu.au/schools/education/research-activity



"I'm not from a country, I'm from Australia." Costumes, scarves, and fruit on their heads: The urgent need for Culturally Responsive Pedagogy in book sharing. Australian Educational Researcher.

Adam, H. & Byrne, M. (2023). https://doi.org/10.1007/s13384-023-00631-x



Balancing the needs of the school community: Implementing trauma-informed behaviour supports in an Australian regional primary school.

Australian Journal of Teacher Education, 47(9).

Ayre, K., Krishnamoorthy, G., Rees, B., & Berger, E. (2023). https://ro.ecu.edu.au/ajte/vol47/iss9/3



Informal sport and (non)belonging among Hazara migrants in Australia. Journal of Ethnic and Migration Studies.

Spaaij, R., Magee, M., Jeanes, R., Penney, D., & O'Connor, J. (2023). https://doi.org/10.1080/1369183X.2023.2206002



Improving the reading skills of struggling secondary students in a real-world setting: Issues of implementation and sustainability.

Australian Journal of Learning Difficulties.

Main, S, Hill, S, & Paolino, A. (2023). https://doi.org/10.1080/19404158.2023.2210588



Christina Holly PHD Candidate

Inclusive Communities? Collaborative communication practices between stakeholders supporting secondary students on the autism spectrum.

Talking was my specialty during my schooling, so this forged well with my passion for science and math into a teaching career so I could talk all day long. I loved teaching in secondary schools for 15 years before returning to ECU to complete my Master of Education and continued to teach both primary and secondary pre-service teachers. I toyed with completing my PhD for years, however, becoming a recipient of a full-time HDR ECU scholarship sealed my commitment. Submitting my PhD is my proudest academic achievement under the excellent guidance of Professor Dawn Penney and Dr John O'Rourke.

Unexpected circumstances defined my PhD pathway. Paul and I are proud parents of two beautiful daughters: Maddy is 14, and Jazzy is 18. At 18 months, Jazzy was diagnosed with global developmental delay with a subsequent autism diagnosis at six years, alongside intellectual disability, motor dyspraxia and sensory processing disorder. Our parental journey differed hugely from what I envisioned, with constantly navigating transitions from primary to secondary education and post-secondary pathways. Each shift required more knowledge and ongoing communication with schools to address Jazzy's needs. Exhausting and continuous, there were hiccups and hurdles to achieving desirable endpoints.

Jazzy is complex, extraordinary and exceptional in art and technology. While in Year 12 at Shenton College, an excellent and inclusive school, I, fortunately, crossed paths with Kane Blackman, the CEO of Good Sammy Enterprises, resulting in Jazzy transitioning from Year 12 into GSE retail upon leaving school. While this story appears seamless, Jazzy's schooling trajectory was complex, and we had moved secondary schools, and years of hard work enabled Jazzy to achieve functional numeracy and literacy to read and number sense. Jazzy's initial work placement required adjustments that GSE supported. She continues to require prompts and strategies for appropriate social behaviours and reminders to use her "inside voice" at home and at her workplace.

Regular sensory breaks must be incorporated to reduce sensory overload and regulate impulsive reactions. Jazzy will only eat a vegemite cheesy from Bakers Delight and raspberries on workdays. Her salad bowl is the same every night. If you have a child on the AS, this makes perfect sense; otherwise, this may seem perplexing. Routines and sameness are crucial. Flexibility is rare.

When communicated effectively, parents' expertise relating to their child's intense interests, routines, and environmental and sensory triggers are invaluable information for school stakeholders as secondary schooling is overwhelming for many students on the AS. The perspectives from different stakeholders about their role and feelings of value in collaborative communication networks were examined: stakeholders including parents, education support leaders, classroom teachers, education assistants, allied health professionals and, importantly, the students. I was presented with an opportunity to engage with a youth advisory council of 13 young adults on the AS aged 18-25 years who reflected on their perspectives from their secondary school experience. Refreshing, funny and brutally honest, these young adults unanimously identified their mothers and EAs as their crucial advocates discussed receiving limited support from teachers who they felt did not understand autism and were 100% adamant that they were not 'special needs' with this descriptor described as offensive.

Secondary teachers face challenges in accommodating increasingly diverse student cohorts and students on the AS and need more time and classroom assistance, adequate autism-specific professional learning and limited opportunities to collaborate with other teachers about strategies to accommodate the heterogeneous presentations of individual students. My extended time within two casestudy secondary schools uncovered disjointed collaborative communication networks between stakeholders in both case-study schools, although everyone was well-intentioned. Spending time with a family whose child on the AS attended each case-study school was invaluable in capturing their experience of collaborative communication practices. Findings supported that invested community members, regardless of authoritative positions, felt they could value-add to community solutions.

What next? Journal articles and conference presentations. Engagement with industry for post-secondary employment for disability. My family needs attention with an outing booked to see "Barbie" in Gold Class on reclining lounges ASAP!

Original Artworks provided by Jazzy:



Seagull Flying the Ocean



Sloth Valentine

Future Research & Career Pathway

Become part of a team that leads, initiates and sustains high quality research that effectively addresses pertinent issues faced by learners and educators both within and beyond educational settings.



Associate Professor Melanie Brooks

Associate Dean - Research, School of Education.

Melanie Brooks' research is recognised for not only extending the boundaries of the field through the study of Islamic school leadership, but also for investigating school leadership in complex environments impacted by ideological, geopolitical, and/or socioreligious hate, extremism, and/or violence. She is one of a handful of educational leadership scholars who travel to insecure areas (e.g., Mindanao, Philippines; Pattani, Thailand; Java, Indonesia; Pristina, Kosovo) to teach, lecture, and conduct collaborative research in situ and translate findings locally to raise education and research capacity.

She was awarded and completed a U.S. Fulbright Senior Scholar Program grant to Cagayan de Oro in Mindanao, Philippines where she conducted research within and across conflict-affected communities. She also led workshops, taught graduate students, lectured, and served as a scholar in residence at Capitol University mentoring Filipino academics on culturally responsive pedagogy, qualitative research, and writing for publication. Further to this, she has led and sustained national and international academic and industry partnerships (e.g., religious and secular organisations, institutions of higher education, government), many of which have led to new understandings of how Islamic school leaders shape (and are shaped by) socioreligious dynamics within and external to their schools, communities, and societies. She is committed to seeing the lessons of her research applied, and she has developed workshops and ongoing relationships with school systems worldwide, where her work informs practice and policy.

In 2019 she received the "Bridge People Award" from the Leadership for Social Justice Special Interest Group at the American Education Research Association for creating a bridge between herself and others through scholarship and research.

Melanie started her career as a United States Peace Corps volunteer to Thailand where she worked as an English as a foreign language teacher in a rural village school. This is where she developed her passion for educating young people. After returning to the United States, she earned a Master of Education in Secondary English Education and a Master of Library Science from the University of Missouri-Columbia. She worked as a secondary English teacher and secondary school and university librarian before earning her Ph.D. from Florida State University.

Along with publishing in the leading education journals, she is the author of Education and Muslim Identity During a Time of Tension (2019, Routledge) and co-editor of four edited books. Her most recent monograph, Great Muslim Leaders: Lessons for Education (2023, Information Age Publishing), brings to education discourse the breadth of Islamic intellectual history and shows the significance Islamic spirituality and faith bring to education and leadership. Available later in the year, Islam, Education and Freedom (Bloomsbury, in press), introduces readers to a segment of American Muslims who have adopted a progressive approach to Islam and schooling grounded in the enactment of six specific freedoms.

To help prepare future school leaders and teachers, Melanie is currently leading the development of a documentary film about Islamic schooling in Indonesia and Australia, funded by Australia's Department of Foreign Affairs and Trade. Two Schools, One Islam, highlights the similarities, differences, challenges, and successes around teaching, learning, and leading with the aim of increasing cross-cultural understanding. The documentary will have accompanying teaching materials and be shared across all social media platforms. In her free time, Melanie enjoys gardening, theatre, and spending time with family.



ECU goes a step further to help aspiring teachers work in Australian classrooms



Professor Caroline Mansfield, Executive Dean, School of Education.

ECU is further steering the charge to help produce Australia's teachers of tomorrow with the launch of the Future Teachers Fund. Thanks to public support, it will provide a \$5,000 Scholarship per student, to those who are most in need of financial support during their final year professional experience placement.

Recognised as Australia's leader in teacher education, Edith Cowan University (ECU) is further steering the charge to help produce Australia's teachers of tomorrow.

It's called the Future Teachers Fund (FTF): A \$5,000 dollar scholarship awarded to students most in need of financial help to get through their final year full-time professional experience placement. Established by ECU to help answer Australia's desperate call for more qualified teachers in classrooms by supporting future teachers to complete their degree.

"Out of 800 final year education students that graduate with Edith Cowan University each year, more than 220 report being negatively impacted by their financial circumstances in their final year of study (2021 National Student Experience Survey)," ECU School of Education Executive Dean Professor Caroline Mansfield said.

"We don't want the cost of living to be a barrier to becoming a teacher."

The Future Teachers Fund is made possible by the generous donations from the public, and from business.

'Prac' can be impractical

For many Australian university students in their final year of early childhood, primary and secondary teaching, it's the weeks of prac that pushes them to their limits financially. Maintaining casual or part-time employment while spending the entire school week working in the classroom can be an impossible juggling act, like it was for international student Phillippa Combrink, who resorted to taking out a personal loan to get by.

"The financial implications were huge, I remember driving from Tapping to Two Rocks Primary School for prac every day, and there was a time my petrol light came on and I had no money to put petrol in my car at that stage," Phillippa recalled.

Phillippa Combrink came to Perth just prior to COVID lockdowns in 2020 to be nearer her sister, niece and nephew. Under Australian law, like all international students, Phillippa is required to pay her tuition fees up front.

"I had to take on quite a lot of different jobs because as a casual worker you generally just do shifts of two to five hours, there were some days I was working three different jobs just to get in enough hours to make enough money to cover my expenses," she said.

"Having something like the Future Teachers Fund means for students we can take the focus off survival and actually engage with the experience."





A small donation for a big sacrifice

After 16 years as a plumber and gas fitter, with a steady and secure income, it was a serious back injury that prompted mature-age student Jack Lee to chase his lifelong dream of becoming a school teacher.

It's meant huge sacrifices, and for his supportive long-term partner too.

"To do this degree, the biggest sacrifice has been financial. My partner and I have downsized the house, cutdown our spending, got rid of the fancy four-wheel-drive and we now live in a duplex," Jack said. "At the moment I am taking jobs wherever I can, hoping nothing goes wrong—like the car breaks down, a pet gets sick or receiving surprise bills." Second-year teaching student Hannah Cullen said being awarded a Future Teachers Fund scholarship could be the difference between having to drop out or being able to graduate for so many struggling to juggle jobs and study. "Having that financial assistance would be incredibly helpful, not having to spend so much time working," Hannah said.

"At the moment to do this it's about 40 hours of study a week, plus 20 hours of work, you can't find the time to have a life."

Tomorrow's teachers

Executive Dean of the School of Education Professor Caroline Mansfield said it is not just the world-class education that puts ECU at the top of the list for aspiring teachers in Australia, it's also the outstanding amount of academic, social and financial support that is on offer.

But Professor Mansfield wants to acknowledge, the University cannot do it alone.

While ECU is in constant discussions with the State and Federal Governments, it is the donations from the public and WA business that could decide the future of many of tomorrow's teachers.

"Every donation will truly make a difference for our future teachers and will be a big step forward in answering the call for more qualified teachers needed in classrooms," Professor Mansfield said.

You can support the Future Teachers Fund by heading to the website to make a donation.

This article is republished from the **ECU Newsroom**. Read the original article **here**.



Support ECU's Future Teachers Fund

Help students pursue their educational dreams. Funds raised through ECU's Future Teachers Fund will provide a \$5,000 Scholarship to students of Education who are most in need of financial support during their final year professional experience placement. During this full-time compulsory professional experience placement students cannot undertake their regular paid employment. With your generous donation, we hope to ensure our future teachers avoid financial hardship during this important time and are supported to complete their degree.

Make a donation

You can make a one-off donation or establish a regular gift by clicking the links or scanning the QR codes below. You can also make a donation by calling (+61 8) 6340 2761 and/or talk to our friendly Development Team to discuss how your donation can make an impact.







Curriculum Highlight

Dr Annamaria Paolino, Lecturer, School of Education.



Language Specialisation now offered in School of Education courses

2023 marks full implementation of the mandated Languages curriculum from Years 3–8 in Western Australia. The benefits of plurilingualism and why languages education matters have been well documented, in particular by the Australian Federation of Modern Language Teachers (AFMLTA) in their Discussion Paper: National Languages – Plan and Strategy (https://nlps.afmlta.asn.au/). As well as this, the AFMLTA and the Languages and Culture Network of Australian Universities (LCNAU) highlight the need for Initial Teacher Education courses to provide training for future languages teachers to help address the language teacher shortage in schools across the country. In this edition, I am proud to share some of the things that have been happening in languages so far this year in the School of Education (SoE) at Edith Cowan University.

Languages Specialisation:

Given the challenges schools are facing in accessing languages teachers, it is timely that this year, for the first time, the SoE is offering a Languages specialisation pathway for 4th Year students in the undergraduate Bachelor of Education – Primary course. This specialisation consists of 4 units which focus on language pedagogy, implementing languages programmes in the primary school and also incorporates a Work Integrated Learning (WIL) component which requires students to work with an in-service language mentor teacher as part of their studies. Current students view the WIL experience as being an integral part of their study as it allows them to consolidate their university studies with the real-world experience of being a primary languages specialist. As well as this experience, the students will also have the opportunity to visit specialist language schools, attend guest lectures and participate in seminars with visiting scholars and teachers where they will get further insight into teaching languages in schools.

School Partnerships:

News of the languages specialisation has generated lots of interest and to provide further information to teachers, a Language Mentor Teacher Afternoon Tea was held on the 9th of May. Over 50 teachers attended the event which provided further detail on the specialisation, how to become a mentor teacher and what is required. Current students also gave their thoughts on their study and experiences. Teacher feedback was positive with comments stating that the work being done in the SoE is a positive step towards the commencement of a pathway to ensuring languages continue to grow and thrive in Western Australia. Discussions also centred around what is needed in schools and what languages teachers themselves need in terms of professional learning. It is anticipated that the School of Education will offer 2 professional learning opportunities for languages teachers later this year.

Australian Federation of Modern Language Teachers (AFMLTA) Conference:

The 24th AFMLTA Biennial International Conference was held at ECU from the 7th – 9th of July. Delegates enjoyed a lovely welcome reception at Boola Bardip WA Museum and conference dinner at Double Tree, Northbridge. Dinner guests enjoyed a very interesting talk by Louka Parry which was titled: 'Fully human: Education for fulfillment.' An interesting selection of conference papers were presented over the 2 days by local, national and international experts. Matt Absalom from the University of Melbourne was awarded the 2023 Patji–Dawes Language Teaching Award. ECU's current language specialisation students were also able to attend the conference, thanks to the generosity of the AFMLTA. They appreciated the opportunity and enjoyed working at the registration desk. Matt Absalom also kindly extended his stay to facilitate a workshop with the ECU languages students where he discussed what effective language teacher need to provide their students to ensure they succeed in language learning.



From left to right. Matt Absalom, Sarah Flanagan, Yuval Hayon, Claire Scorgie and Hong Cao.

ECU School of Education, Languages Consultative Committee:

I believe collaboration and consultation with stakeholders is essential in establishing a Languages pathway in the SoE, ECU and as a result, I established the Languages Consultative Committee in 2020. The committee consists of representatives from: DoEWA, CEWA, AISWA, SCSA, MLTAWA, AFMLTA, WATESOL and representatives of all the unilingual associations of WA. The first meeting for the year was held on the 28th of March and discussions centred around how all stakeholders can work together to ensure the provision of languages across WA as well as plans for growing the languages area in the School of Education. The committee also heard from the languages specialisation students who spoke about why they decided to complete the languages specialisation and what they have learned so far in their studies. Committee members commented that it was good to see the SoE promoting and supporting languages and agreed that the work being done is a positive step forward in providing a pathway for future languages teachers, ensuring the future of languages education in schools and giving languages a presence the broader community. The committee also supported the SoE's application to host the International Content and Language Integrated Learning Conference in 2025 which will help to showcase the language programme offered at ECU as well as promote ECU as a leader in languages education.

It's been a busy time in languages so far and we have a lot to be proud of. But, there is still so much more to do, especially as we look to the future and to growing the programme. I look forward to sharing more with you later this year.

Final year Pre-Service Teachers complete the Quality Teaching Performance Assesment (QTPA) at Edith Cowan University



Mrs Claire Hall, Lecturer, School of Education.



From left to right. Andrew Gorton (Principal), Simone Garbenis-Moe, Louise Hall (School Leader), Dr Oliva Johnston, Dimity Franks, Penny King, Louise Harper-Penman (QTPA Primary Discipline Coordinator), Dr Rozita Dass, Dr Trish Collins, Kate Hume, Greg Brice (retired Principal).

From 2020, all initial teacher institutions across Australia have been required to undertake accreditation assessments before pre-service teachers can graduate. The Quality Teaching Performance Assessment (QTPA) is one of the assessment models approved for use by the Australian Institute for Teaching and School Leadership and is aimed at ensuring all pre-service teachers entering the profession meet the highest graduate standards.

In June this year, 640 ECU students have already been assessed and interviewed by panels of two academic staff members, with more than 80 academic staff, and including retired and current Principals taking part in the process. In addition to existing academic assessments and professional experience requirements, the QTPA is a significant undertaking for staff and students alike. All ECU panel assessors also take part in QTPA refresher training each year. ECU students from both undergraduate and postgraduate teacher education courses are required to undertake the QTPA as part of a capstone assessment linked to their final professional experience in schools.

Paula Mildenhall, the Associate Dean of Teaching and Learning, stated, "it is wonderful to have our partnership Schools support our PEx students as they complete the QTPA assessment."

The QTPA comprises four components, including a personal teaching statement, planning for teaching and learning, demonstration of impact and an oral presentation. The QTPA Academic Coordinator Claire Hall said "this rigorous process requires the pre-service teachers to undertake a deep critical reflection of their teaching and how they make an impact on student learning. Their articulation of this benefits them greatly as they partake in future job interviews and as they work towards full registration once they graduate."

The QTPA assessment continues to give the public confidence in the quality of graduating teachers and lift the public profile of the teaching profession.



Mrs Claire Hall (QTPA Academic Coordinator) and Mrs Louise Harper-Penman with final year Pre-Service Teachers: Glen Adams, Lauren Conti, Samantha Vlahos and Emma Vlahov.



QTPA Panel Assessor during the oral presentations at the Joondalup campus, ECU. Mary Bizzaca (retired Principal) and Will Turner (Primary Lecturer).

A new sheriff is coming to the wild ChatGPT west

Dr Sarah Jefferson, Senior Lecturer, School of Education.

Article by Paul Kidson, Sarah Jefferson and Leon Furze.

You know something big is happening when the CEO of Open AI, the creators of ChatGPT, starts advocating for "regulatory guardrails". Sam Altman testified to the US Senate Judiciary Committee this week that the potential risks for misuse are significant, echoing other recent calls by former Google pioneer, the so-called "godfather of AI", Geoffrey Hinton.

In contrast, teachers continue to be bombarded with a dazzling array of possibilities, seemingly without limit – the great plains and prairies of the AI "wild west"! One estimate recently made the claim "that around 2000 new AI tools were launched in March" alone!

Given teachers across the globe are heading into end of semester, or end of academic year, assessment and reporting, the sheer scale of new AI tools is a stark reminder that learning, teaching, assessment, and reporting are up for serious discussion in the AI hypercharged world of 2023. Not even a pensive CEO's reflection or an engineer's growing concern has tempered expansion.

Until there is some regulation, proliferation of AI tools – and voices spruiking their merits – will continue unabated. Selecting and integrating AI tools will remain contextual and evaluative work, regardless of regulation. Where does this leave schoolteachers and tertiary academics, and how do we do this with 2000 new tools in one month (is it even possible)?!?!

Some have jumped for joy and packed their bags for new horizons; some have recoiled in terror and impotence, bunkering down in their settled pedagogical "back east". As if this was not enough to deal with, Columbia University undergraduate, Owen Terry, last week staked the claim that students are not using ChatGPT for "writing our essays for us".

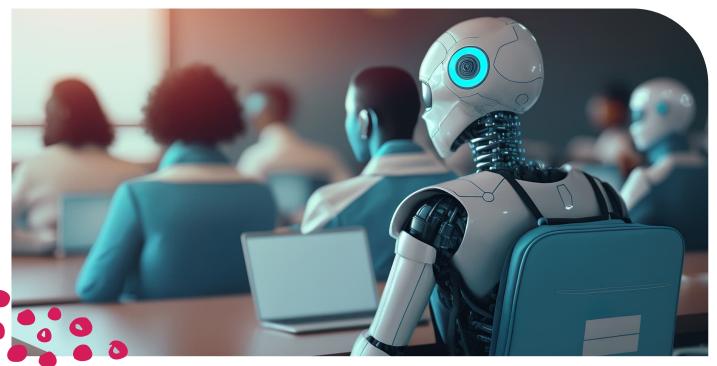
Rather, they are breaking down the task into components, asking ChatGPT to analyse and predict suggestions for each component. They then use ideas suggested by ChatGPT to "modify the structure a bit where I deemed the computer's reasoning flawed or lackluster". He argues this makes detection of using ChatGPT "simply impossible".

It seems students are far savvier about how they use AI in education than we might give them credit, suggests Terry. They are not necessarily looking for the easy route but are engaging with the technology to enhance their understanding and express their ideas. They're not looking to cheat, just collate ideas and information more efficiently.

Terry challenges us as educators and researchers to think that we might be underestimating the ethical desire for students to be more broadly educated, rather than automatons serving up predictive banality. His searing critique with how we are dealing with our "tools" is blunt – "very few people in power even understand that something is wrong...we're not being forced to think anymore". Perhaps contrary to how some might view the challenge, Terry suggests we might even:

need to move away from the take-home essay...and move on to AI-proof assignments like oral exams, in-class writing, or some new style of school work better suited to the world of artificial intelligence.

The urgency of "what do I do with the 2000 new AI apps" seems even greater. These are only the ones released during March. Who knows how many will spring up this month, or next, or by the end of 2023? Who knows how long it will take partisan legislators to act, or what they will come up with in response? Until then, we have to make our own map.



Credit: shutterstock.com



Credit: SomYuZu/shutterstock.com

Some have offered a range of educational maps based on alliterative Cs-4Cs, 6Cs-so here's a new 4Cs about how we might use AI effectively while we await legislators' deliberations:

Curation – pick and choose apps which seem to serve the purpose of student learning. Avoid popularity or novelty for its own sake. In considering what this looks like in practice, it is useful to consider the etymology of the word curation which comes from the Latin word, cura, 'to take care of.' Indeed, if our primary charge is to educate from a holistic perspective, then consideration must be extended to our choice of AI or apps that will serve their learning needs and engagement.

The fostering of innate curiosity means being unafraid to trial things for ourselves and with and for our students. But this should not be to the detriment of the intended learning outcomes, rather to ensure they align more closely. When curating AI, be discerning in whether it adds to the richness of student learning.

Clarity – identify for students (and teachers) why any chosen app has educative value. It's the elevator pitch of 2023 – if you can't explain to students its relevance in 30 seconds, it's a big stretch to ask them to be interested. With 2000 new offerings in March alone, the spectres of cognitive load theory and job demands-resources theory loom large.

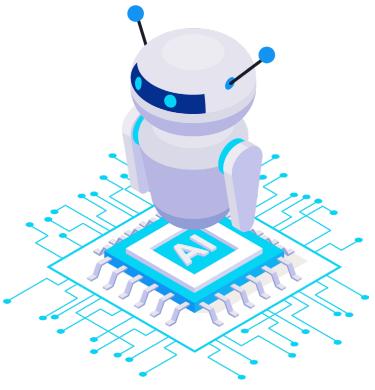
Competence – don't ask students to use it if you haven't explored it sufficiently. Maslow's wisdom on "having a hammer and seeing every problem as a nail" resonates here. Having a hammer might mean I only see problems as nails, but at least it helps if I know how to use the hammer properly! After all, how many educators really optimise the power, breadth, and depth of Word or Excel...and they've been around for a few years now. The rapid proliferation makes developing competence in anything more than just a few key tools quite unrealistic. Further, it is already clear that skills in prompt engineering need to develop more fully in order to maximise Al usefulness.

Character – Discussions around AI ethical concerns — including bias in datasets, discriminatory output, environmental costs, and academic integrity — can shape a student's character and their approach to using AI technologies. Understanding the biases inherent in AI datasets helps students develop traits of fairness and justice, promoting actions that minimise harm.

Comprehending the environmental impact of AI models fosters responsibility and stewardship, and may lead to both conscientious use and improvements in future models. Importantly for education, tackling academic integrity heightens students' sense of honesty, accountability, and respect for others' work. Students have already risen to the occasion, with local and international research capturing student concerns and their beliefs about the importance of learning to use these technologies ethically and responsibly. Holding challenging conversations about AI ethics prepares students for ethically complex situations, fostering the character necessary in the face of these technologies.

Launching these 4Cs is offered in the spirit of the agile manifesto undergirding development of software over the last twenty years – early and continuous delivery and deliver working software frequently. The rapid advance from ChatGPT3, to 3.5, and to 4 shows the manifesto remains a potent rallying call. New iterations of these 4Cs for AI should similarly invite critique, refinement, and improvement.

This article is republished from **EduResearch Matters**. Read the original article $\underline{\text{here.}}$



SHORT COURSES

Our professional learning programs have been designed with teachers in mind. The programs are delivered by qualified and experienced ECU educators with high level content and pedagogical knowledge and reflect adult learning principles. These courses are embedded in evidence-based teaching practices and are responsive to the cultural backgrounds and contextual circumstances of the participating teachers.

For more information and to register, view our current short courses here or scan the QR codes below.



Understanding Childhood Trauma: Reflecting An introduction for educators

Trauma-affected children can be found in any classroom and any school. In fact, one in four children experience a traumatic event before they turn three years old (Child, J. 2017). Trauma impacts development, behaviour and learning.

This short course is an ideal introduction to childhood trauma for all educators including parents, carers and youth workers. Providing effective support for children and young people affected by trauma begins with educators who are trauma-informed. By building your understanding and knowledge you have a better chance of making a positive difference.

Cost

- \$175 to undertake the course which includes all reading materials, case studies and online activities.
- A 10% discount is offered to ECU alumni





Trauma and Development: Understanding the impact for educators

Children and adolescents who live in adverse circumstances where there is neglect, abuse, or violence live in a state of hypervigilance and with toxic stress from experiencing ongoing, traumatic events. Toxic stress sabotages development and wellbeing – the brain and the body struggle to function effectively, the consequences of which, can be far reaching. This short course looks at the impact of adversity and toxic stress on development, focussing on the brain. Educators will build their knowledge and understanding of children and adolescents whose development has been interrupted by toxic stress and trauma.

Cost

- \$175 to undertake the course which includes all reading materials, case studies and online activities.
- A 10% discount is offered to ECU alumni





Trauma and Behaviour: Reflecting and responding for educators

Behaviour is communication. Behaviour for the child or young person living with trauma is often an expression of their struggle to cope. This may include struggling to cope with managing big emotions, struggling to cope with learning and struggling with being with others. Trauma means days are full of struggles and feelings of fear. This short course aims to build your understanding of children and young people's traumadriven behaviour and your knowledge of evidence-based strategies so you can more confidently and effectively, guide and support their development of self-regulation and behaviour competencies.

Cost

- \$175 to undertake the course which includes all reading materials, case studies and online activities.
- A 10% discount is offered to ECU alumni





The Science of Reading: Translating research to classroom practice

Have you ever wondered how the human brain translates these squiggles and dots on a page into sounds and spoken words? Part of what we know is that learning to read is a complex neurological process that humans have taken 1000's of year to figure out. Despite this, we expect children to achieve this in the first few years of school. This three-day course is designed to bridge the gap between research and practice and make explicit how evidence-based models of reading have determined the essential components required for the human brain to efficiently build a reading circuit and for a brain to learn to automatically recognise words.

Cost

- \$889 including GST (Course includes all reading materials and case studies).
- A 10% discount is offered to ECU alumni.



Teachers Mutual Bank Limited Postgraduate Education Scholarship



Mastering Education: Meet TMB scholarship recipient, Kelly Barker.

Kelly Barker, school Principal at Leda Education Support Centre and passionate special education teacher of 23 years, has been awarded the Teachers Mutual Bank Limited Postgraduate Education Scholarship, enabling her to pursue her Master of Education (Behaviour and Wellbeing) at Edith Cowan University (ECU).

This scholarship is awarded to a student who demonstrates drive and a commitment to teaching, despite financial challenges. Kelly is grateful for the scholarship and is thrilled to have been given the opportunity to further her studies to support her career.

"Receiving this scholarship from Teachers Mutual Bank will ensure that I continue with completing my Master of Education at Edith Cowan University, without having to stress about how I can pay for the degree and everything that life throws at you when times are challenging," Kelly shared.

Kelly's approach to teaching is supportive and inclusive. Having spent her career teaching students with special needs, she has a vested interest in supporting the unique challenges of every one of her students.

The scholarship allows Kelly to challenge her own thinking, and to support her colleagues to challenge their beliefs around what is a highly proficient educator, which ultimately sees benefits for the students.

"This course specifically focuses on two areas that I am passionate about for students with special needs as they often require significant levels of support and understanding from their teachers," Kelly said. "Delving into what is behaviour, how to support each child and how I can influence a student's wellbeing, is what drives me to complete my Masters."

Teachers Mutual Bank has been a proud supporter of the education community since its humble beginnings more than 55 years ago.

Teachers Mutual Bank's Head of Strategic Partnerships, Jodie Haydon, congratulated Kelly on receiving the scholarship.

"Congratulations to Kelly on her scholarship success. It's always so rewarding to see educators like Kelly investing in their own professional development, for the betterment of their students and the community as a whole," Jodie said.

"Teachers Mutual Bank is so proud to support passionate and influential educators, like Kelly, to further their career and make a positive impact."

Kelly added her words of advice to other students thinking about pursuing further studies at ECU, "I would highly encourage anyone to apply for a scholarship with Edith Cowan University. When I received the phone call to inform me that I was selected, I was quite speechless and honoured to have been selected. It truly is worth having a go and applying!"

For more information about Teachers Mutual Bank:

Join Us | Teachers Mutual Bank (tmbank.com.au)

For more information about scholarships at ECU:

www.ecu.edu.au/scholarships





ECU Education Alumni spotlight:

Lara Bowler

Bachelor of Education, 2022.

Outstanding Early Childhood Teacher Award - <u>Early Childhood Learning and</u> <u>Development Sector Awards 2023.</u>

"Growing up in rural New Zealand I always wanted to be a teacher", recalls Lara Bowler, who graduated from ECU's Bachelor of Education in 2022. "I used to make pretend worksheets and exams for my brothers and sisters"

But goals can often change for young people, and when she finished high-school, Lara's focus shifted to seeing the world. She spent time travelling around Asia and South America, working a few different part-time jobs in between to save for more travel.

"It was not until my mid-twenties that I realised I would need to work full-time. I worked in aged care, before studying the UniPrep (Education Assistant Program) at FCII"

UniPrep would not only serve as Lara's entry pathway into the Bachelor of Education, but also to enable her to work part-time in Education while studying her undergraduate degree.

"Working in the industry while I was studying really allowed me to develop my passion for teaching and gave me the chance to practice what I was learning at uni."

"During my degree, I had the opportunity to do a professional experience in an early education setting and I immediately fell in love with the Early Childhood Education Sector."

The lead to Lara beginning to work for the Atlantis Group as an Educator and Educational Leader full-time, while studying part-time online.

"I've worked at the Atlantis Group for almost five years now, and since graduating I have been promoted to the role of Pedagogical Leader for the company. I oversee ten of Perth's leading early learning centres in their educational program and practice."

"I'm incredibly lucky to get to work with a company whose values and vision aligned so closely with mine! Working for the Atlantis Group I get to mentor and collaborate with the most knowledgeable and passionate educators and teachers in the sector."

"I get to be a 'sprinkler of magic' and bring joy and fun to children every day-in my opinion it's the most rewarding job you can ever possibly do!"

This passion for making learning fun was recognised recently, with Lara named Western Australia's Outstanding Early Childhood Teacher in the inaugural Early Childhood Learning and Development Sector Awards.



Lara credits the Reggio Emilia pedagogy as a source of inspiration to her own teaching style. Under the Reggio Emilia approach, children are viewed as active, capable and valuable members of the community.

"I would love to travel to Reggio Emilia on a study tour, to meet with and observe teachers, pedagogistas and atelieristas."

"It'd be amazing to be immersed in this philosophy and bring knowledge and insights back to share with my team."

Her advice for teachers just starting out?

"Progress not perfection - you still have so much to learn and your professional development has only just started!"

And, "There are endless possibilities waiting for you on the other side of your comfort zone. Personally, sometimes I'm shy or nervous in new situations (especially when it comes to public speaking), but there's so much to gain from putting yourself out there".

This article is republished from **Alumni News**. Read the original article **here**.





SHOWCASE

A selection of some of the recent stunning creative works by Pre-Service Teachers in the fields of Technologies and Art Education.



Ceramic Coil Pot Jacinta Taylor Foster



A Shiver of Sharks Rainyful Sein Myaing



Ceramic Bust Brooke Evans



Sidetable - Victorian Ash Lisbet Thorarinsdottir

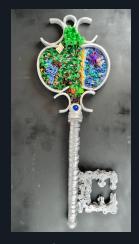


Ceramic Bust (White Male) Lauren Rodriguez



Ceramic Bust (Dobby)

Sophie Lawrence-Brown



The Polysemous Key Vanessa Derecki



Sidetable & Mirror - Mixed Timber Duncan Veitch



Ceramic Chocolate Bowl Carla Hughs



Father and Son Lion Zanelle Du Preez

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