Linking Research to the Practice of Education

Contents:

Lead Editor

Dr. Nadya Rizk
School of Education
nrizk3@une.edu.au

Assistant Editors

Dr. Sue Elliott
School of Education
sellio24@une.edu.au

Dr. Marg Rogers
School of Education
mbaber@une.edu.au

Also available at:
https://www.une.edu.au/about-une/faculty-of-humanities-arts-social-sciences-and-education/school-of-education/research/school-of-education-research-newsletters

Editorial

Welcome to this edition of *Linking Research to the Practice of Education*, a UNE School of Education research newsletter for all educators.

Four articles are presented in this issue. First, Genevieve Thraves describes how the Ganma metaphor was used in a Darwin school to negotiate and develop a broader notion of talent and giftedness, one that reflected both Aboriginal and Western educational priorities. The second article is by Kirsty O'Neill and Pep Serow. The authors present a novel initiative funded by the Australian government to assist people from culturally and linguistically diverse backgrounds to build their physical activity levels and improve their holistic health through new friendships and social connections. In the third article, Nadya Rizk and her colleagues describe an innovative model for professional learning that uses videoconferencing technology to enable teachers to access classroom-based peer observations. An application of the model is described in a primary science teaching context. The last "article" presented in this issue is an invitation for educators and students to participate in a Song Verse Writing Competition. The authors, Marg Rogers and her colleagues, are seeking individuals and groups of children, parents, educators, family workers and community members to help write a verse for their "We Remember" song. This is part of the Early Childhood Defence Programs project, designed to help Australian Defence Force families, and other families where a parent works away, navigate some challenges associated with parents working away and frequently relocating.
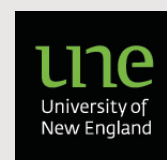
We hope that you find something engaging in this issue. The next issue will be published in August, 2021.

Nadya, Sue and Marg

A realisation of Ganma

Dr Genevieve Thraves (UNE)

The *Ganma* metaphor underscores Yolŋu approaches to education and learning that incorporate both Western and Aboriginal epistemologies. *Ganma* is the point where saltwater (non-Aboriginal knowledge) and fresh water (Yolŋu knowledge) meet to form a lagoon (Marika, 2000). The different bodies of water churn beneath the foam-striped surface, and this "great sharing" supports a "rich habitat of its own" (Bat & Guenther, 2013, p. 128), thus revealing the benefits of the collaborative approach to knowledge generation. This metaphor, shown in Figure 1, can be used as a foundation for negotiating culturally contested knowledge areas, and was the basis for a research project conducted in a Northern Territory Boarding School in 2019.

Figure 1

Ganma *Note. Reprinted from Marika (2000)*

The study site was a K-12 school located in Darwin with an established history of providing educational opportunities to remote Aboriginal boarding learners with limited access to secondary education in their home communities. This school also serviced the local Darwin community on a fee-paying basis, and thus the student body was a mix of remote Aboriginal students (30%) with the remainder mostly from affluent middle class backgrounds. The school's educational offerings included an academic extension and enrichment program for gifted and/or talented learners. At the time this project commenced, there had been no Aboriginal students selected to participate in these talent development streams.

In an attempt to address this issue, Yolŋu Elders talked with classroom teachers to design a talent development model that would reflect both Yolŋu and Western priorities in relation to giftedness and talents (high ability). This co-constructed model needed to reflect the fact that gifts and talents are culturally mediated, and the Yolŋu have their own understandings in relation to high ability. It was

theorised that if talent development leaned into the cultural realities of the students, then this would support their achievement and would lead to a greater number of remote Aboriginal students gaining access to the extension programs on offer at the college.

What emerged from the project was *Ganma* in action. The conversation participants represented each of the different tributaries to the lagoon; the Yolŋu Elders brought the Aboriginal knowledge (fresh water), and the classroom teachers brought the Western knowledge (the salt water). The conversation itself was the "great sharing" (Bat & Guenther, 2013), and the co-constructed talent development model represented by the lagoon.

The model itself certainly managed to bridge the two knowledge streams. This was achieved through definitions of giftedness and talents informed by both cultural perspectives, identification protocols relevant to both cultural contexts, and a series of practices and processes reflective of both Western and Yolŋu views of accomplishment. Both Yolŋu and Western participants expressed high levels of satisfaction with both the dialogue and the resulting co-constructed model. This realisation of the Ganma metaphor is exciting and promising, but it was the transformational journey that this process generated for the researcher that proved most important.

I started this article by positioning the research problem as stemming from the fact that Aboriginal learners were underrepresented in gifted and talented education programs at the study site. When I first conceived of the project, I imagined that my success would depend on whether or not there was an increase in Aboriginal participants in the gifted programs that existed at the school in question. I believed that incorporation of local culture would improve

achievement for remote Aboriginal learners. It had not occurred to me that successful talent development for Yolŋu people would fall outside the narrowly conceived gifted programs that were on offer, and that the solution to the issue was, in fact, to re-define that very issue. It was not then, simply a matter of re-working the school-based program to enable Yolŋu leaners the opportunity to be more successful in that context, but rather a matter of also re-designing the existing programs for Yolŋu learners to develop both their academic talents as well as those talents valued within their own cultural context. In essence, I came to realise that there was a need to expand the research problem to address the fact that culturally gifted Yolŋu youth were not being afforded the opportunity to engage in appropriate cultural talent development whilst attending school. I am excited by the fact that the talent development program created by the Yolŋu Elders and the teachers in this study addressed this urgent problem, whilst also speaking to the development of academic talent – a true manifestation of Ganma. Embedded structural issues such as this need to be examined in educational settings to open up opportunities for shared knowledge and promote greater opportunities for all students.

If you are interested in this project and would like to know more, please contact Genevieve Thraves via gthraves@une.edu.au

References

Bat, M., & Guenther, J. (2013). Red dirt thinking on education: A people-based system. *The Australian Journal of Indigenous Education, 42*(2), 123–135.

Marika, R. (2000). Milthun Latju Wana Romgu: Valuing Yolŋu knowledge in the education system. *TESOL in Context, 10*(2), 45–52.

Driving social inclusion through sport and physical activity (DSISPA) – the Armidale newly arrived migrant, refugee and friends regional sport network

Dr Kristy O'Neill (UNE) and Professor Penelope (Pep) Serow (UNE)

The 2020-21 DSISPA project led by Dr Kristy O'Neill and co-investigator Professor Pep Serow will deliver a free, flexible and community based opportunity for Armidale residents from culturally and linguistically diverse (CALD) backgrounds to build their physical activity levels. Funded by the Australian Government Department of Health ($224,677), the program aims to promote increased moderate-vigorous physical activity (MVPA) levels and improve holistic health through building new friendships, social connections and capacity building towards independently accessing existing local sporting providers. Sport and physical activity are central aspects of Australian culture, particularly in regional areas as a primary means of social connection. It is important that our newest citizens from CALD backgrounds have the skills, knowledge and confidence to share in these activities as part of building a sense of belonging within the Armidale community. Overall, people from CALD backgrounds Australia-wide can be less likely to participate in local sport or meet recommended physical activity guidelines for several cultural, financial and/or linguistic reasons.

'Sport 2030' (Department of Health, 2019) objectives state that every Australian regardless of gender, ability, ethnicity or geographic location should be able to exercise in safe, fun and inclusive ways. Furthermore, the vital nature of learning to swim and water safety cannot be underestimated in Australian society given the widespread interest in recreating around pools, beaches, lakes, dams and creeks among families. Alongside providing enjoyable and productive ways to utilise spare time, opportunities for children and young people to maintain regular MVPA engagement and sporting participation is essential. Increased fitness, enhanced mental health, better school concentration and performance, creativity and the development of social skills are just a few of the key learning and wellbeing benefits (Dudley et al., 2021; Miller, 2018). Out of school community sporting experiences also have the added benefit of reinforcing key curriculum learning in Health and Physical Education (ACARA, 2021), as well as *Belonging, Being, Becoming*: *The Early Years Learning Framework for Australia* (Department of Education, Employment & Workplace Relations, 2009) regarding Fundamental Movement Skills (FMS) and motor development. Each of these areas have demonstrable impact on subsequent lifelong physical activity levels.

The program will be available during Terms 1 – 4 for two years and will include activities such as gym memberships, fitness classes, swimming lessons, team-based sports (e.g. volleyball, futsal, soccer and netball) and be targeted towards families and individuals of all ages. The range of activities will expand based on available providers and community interest as the project develops. In late 2020, a community advisory group comprising Armidale-based support services for migrants and refugees, sport and recreation providers and Ezidi youth met with the DSISPA team to strategise an action plan and shortlist of activities considered most beneficial to potential participants. Collaborating with other organisations is a valuable process in community-based work, while also reinforcing the benefits of community partnerships to

building equity in health; a central tenet of the 1986 Ottawa Charter that continues to be of relevance today (WHO, 2017).

Research and evaluation will run concurrent to the DSISPA program and we seek to inform best practice approaches for helping migrants and refugees transition to a new community. It is intended these findings may be used Australia-wide, particularly to benefit regional areas in their long-term goals of settling new residents who have experienced former hardship, and often trauma. This project will regularly employ multiple data collection strategies across the two years (8 school Terms) via pre/post interviews and Photo Voice methods.

Using sport and physical activity as a vehicle, the DSISPA grant opportunity ultimately aims to contribute towards developing resilient, cohesive and harmonious Australian communities. Collaborating to find positive strategies to enhance health, bolstering physical and mental wellbeing, and increasing local social networks is a critically important shared goal in the current global climate of the Covid-19 pandemic.

If you are interested in this project and would like to know more, please contact Dr Kristy O'Neill via kristy.oneill@une.edu.au

Master of Applied Leadership

The School of Education at UNE is excited to offer a new Masters level course in the field of Applied Leadership. This course has been designed to provide an exploration of leadership principles and practices as they are applied across a wide range of fields. The cutting edge content is packaged within units such as 'Foresight, insight and hindsight in leadership' and 'Agency in leadership: Planning and policy'. The Master of Applied Leadership is aimed at existing and aspiring leaders in the public sector and other education organisations. It provides readily transferrable knowledge and skills in the ever-changing landscape of organisational quality and efficiency.

From within the Master of Applied Leadership, UNE has developed a specialisation in School Leadership, which attempts to address the specific leadership needs and practices required in schools. The focus is to support school leaders in their day to day practice, and as such, this variation of the course is designed for existing school leaders and comes with a generous Advanced Standing for eligible applicants.

Further information regarding this exciting new course is available on the UNE website at: https://www.une.edu.au/study/courses/master-of-applied-leadership. Alternatively, should you wish to discuss what suits you best, please feel free to contact Associate Professor Brian Denman (bdenman@une.edu.au). If you are interested in discussing eligibility requirements for the School Leadership specialisation, please contact Genevieve Thraves (gthraves@une.edu.au)

References

Australian Curriculum Assessment and Reporting Authority (ACARA). (2021). *F-10 curriculum: Health and Physical Education structure.* https://www.australiancurriculum.edu.au/f-10-curriculum/health-and-physical-education/

Department of Education, Employment & Workplace Relations (2009). *Belonging, Being & Becoming - The Early Years Learning Framework for Australia.* https://www.dese.gov.au/national-quality-framework-early-childhood-education-and-care/resources/belonging-being-becoming-early-years-learning-framework-australia

Department of Health. (2019). *Sport 2030: National Sport Plan.* Commonwealth of Australia. https://www.sportaus.gov.au/__data/assets/pdf_file/0005/677894/Sport_2030_-_National_Sport_Plan_-_2018.pdf

Dudley, D., Telford, A., Stonehouse, C., Peralta, L., & Winslade, M. (2021). *Teaching quality health and physical education [2nd edition].* Cengage AU.

Miller, J. (2018). The foundation of movement skills. In J. Miller, S. Wilson-Gahan & R. Garrett (Eds.), *Health and Physical Education: Preparing educators for the future* (pp. 34 - 64). Cambridge University Press.

World Health Organisation (WHO). (2017). *Advocating intersectoral action for health equity and well-being: the importance of adapting communication to concept and audience.* https://www.euro.who.int/__data/assets/pdf_file/0017/330560/Advocating-intersectoral-action-ljubljana-report.pdf?ua=1

Remote Classroom Modelling: A professional learning model for in-service primary teachers of STEM working in Regional, Rural and Remote Schools

Dr Nadya Rizk (UNE), Dr Subhashni Taylor (JCU) and Adjunct Professor Neil Taylor (UNE)

The foundations of STEM competence develop in the primary years of schooling when students begin to develop a self-belief in their ability as STEM learners. Therefore, it is essential to ensure that primary school teaching of STEM is adequately equipping students with the creative problem solving, critical thinking, active learning and quantitative skills they need for engaging with STEM. Nevertheless, primary teachers are often generalist teachers who lack the specialised knowledge, skills and confidence in STEM disciplines. Furthermore, primary teachers are most vulnerable in their first years of teaching when they adjust to the demands of their new teaching role. These vulnerabilities are pronounced further when the workplace is in Rural, Regional or Remote (RRR) contexts.

To support primary teachers in delivering engaging and sustained STEM lessons, we have designed and prototyped an innovative Professional Learning (PL) model that builds on existing teachers' capabilities in teaching STEM and that is delivered via remote classroom observations. According to Desimone (2011), some of the most influential professional learning experiences occur via peer observation of teaching within classrooms. The benefits of peer observations are numerous and include improving student outcomes, reducing isolation, encouraging teachers' self-reflection and providing exposure to a multitude of teaching

approaches, building practitioner confidence, generating excitement among teachers, and cultivating collegiality.
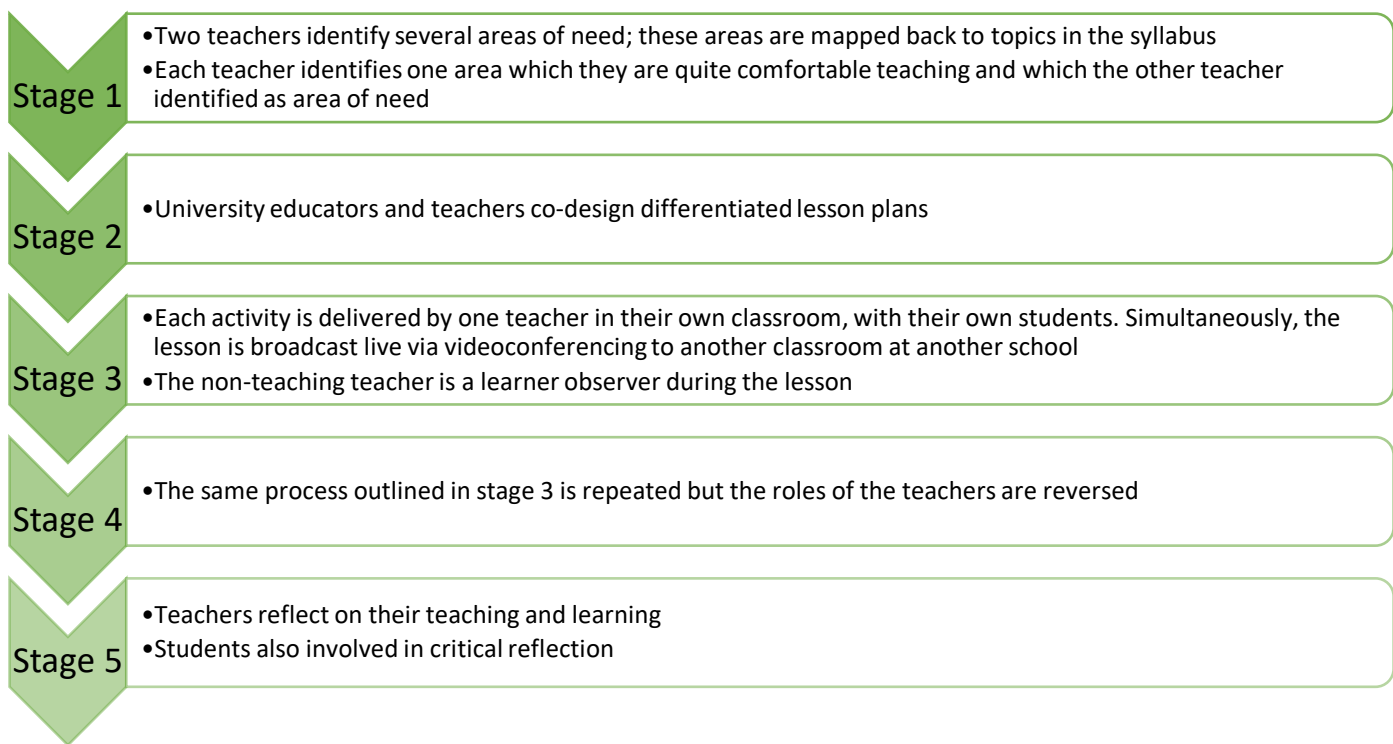
Peer observation requires that teachers have access to peers available and willing to engage with them in this practice. RRR contexts pose significant barriers to access to quality peer observations. Therefore, in this reported project, we used video conferencing technologies to enable RRR primary teachers of STEM subjects to access classroom-based Peer Observations as a means for their own PL. We trialled the Remote Classroom Modelling (RCM) model that uses peer observation as a formative PL mechanism for building teacher capacity in STEM primary teaching.

The design of the RCM was informed by research on effective PL as presented by Darling-Hammond et al. (2017) in their summary of the design elements of effective professional learning. The RCM model involved two schools working in pairs, and comprised five stages as illustrated in Figure 1.

Figure 1

Stages of the Remote Classroom Modelling professional learning model

Stage 1	• Two teachers identify several areas of need; these areas are mapped back to topics in the syllabus • Each teacher identifies one area which they are quite comfortable teaching and which the other teacher identified as area of need
Stage 2	• University educators and teachers co-design differentiated lesson plans
Stage 3	• Each activity is delivered by one teacher in their own classroom, with their own students. Simultaneously, the lesson is broadcast live via videoconferencing to another classroom at another school • The non-teaching teacher is a learner observer during the lesson
Stage 4	• The same process outlined in stage 3 is repeated but the roles of the teachers are reversed
Stage 5	• Teachers reflect on their teaching and learning • Students also involved in critical reflection

In stage 1, two teachers, one from each school, identified several areas of need where they thought PL would be beneficial for them. These areas were then mapped back to topics in the science syllabus. Each teacher was then individually asked to identify one area which they were comfortable teaching and which the

other teacher identified as an area of need. In stage 2, the two teachers were offered support in developing their lessons; while not mandatory, university educators offered to collaborate with them via individual video conferencing to co-design differentiated lesson plans and/or activities that teachers had identified as an area of strength. This process involved multiple discussions via individual video conferencing between the university educators and the teachers until the teachers appeared comfortable to teach their lesson plan.

In stage 3, each activity was delivered by one teacher in their own classroom with their students. Simultaneously, the lesson was broadcast live via video conferencing to another classroom at the other participating school. Students in that "remote" class actively participated in the lesson, completing the same activities and interacting with the "teaching" educator and students via the screen. Both groups of students had access to the same activity equipment. During that lesson, the non-teaching educator acted as a learner and observer. In stage 4, the same process outlined in stage 3 was repeated, but the roles of the teachers were reversed. In the final and fifth stage, educators were invited to reflect on their teaching and learning using a scaffolded open-ended questionnaire. Students were also involved in this process of critical reflection via participating in focus groups and completing an open-ended questionnaire.

In this research, we investigated how the RCM was perceived by primary teachers of STEM and what factors potentially helped or blocked implementation. Our findings are based on feedback data from two experienced primary teachers and Year 5 students (N=25) from two schools in regional and remote NSW. Two professional learning sessions were held as part of this pilot. In the first, a teacher from a regional school delivered a lesson about electrical circuits to her students and her teaching was broadcast live to a remote school in NSW, some 300Km away. In the remote school, the teacher and her students were participating in the learning activities via video-conferencing. After a couple weeks, the roles were reversed and it was the remote teacher who delivered a lesson about mechanical levers in her school, and remotely to the regional school.

The findings suggest that RCM can have benefits beyond teacher networking, including (1) teachers' development of technological pedagogical content knowledge (TPACK) in STEM, (2) teachers' development of leadership in STEM through building their capability in modelling and mentoring in STEM, and (3) teachers' access to relevant classroom-ready resources. Students and teachers alike reported excitement and enthusiasm towards working with students from another school via video-conferencing. The pilot suggests that the RCM has notable strengths, being affordable, relevant and potentially sustainable. The model needs further development to address potential weaknesses relating to teachers' hybrid teaching via videoconferencing.

If you are interested in being involved in this project, please contact Dr Nadya Rizk via nrizk3@une.edu.au.

References

Desimone, L. M. (2011). A primer on effective professional development. *Phi Delta Kappan, 92*(6), 68-71.

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development.* Learning Policy Institute.

Early Childhood Defence Programs Song Verse Writing Competition

Dr Marg Rogers (UNE), Dr Jo Bird (UNE), Dr Amy Johnson (CQU), Dr Ingrid Harrington (UNE), Professor Pep Serow (UNE), and Dr Vanessa Bible (UNE)

The Early Childhood Defence Programs project was developed to address the gap Marg Rogers found in the resources and programs available for parents, educators and family workers who support young children from Australian military families. The 3-year project is funded by The Ian Potter Foundation and UNE. Programs are currently being developed, along with digital resources to be trialled in 2021-22. The free, online research-based programs and resources will be adapted after the trials and then released online early 2023.

The research team has gathered ideas from parents, educators and family workers to include in the project and welcome any further ideas. In 2020, we invited children and parents to add their art and craft ideas to some of our children's eBooks. This year, we are seeking individuals and groups of children, parents, educators, family workers and community members to help write a verse for our 'We Remember' song for a chance to win one of 3 x $50 vouchers.

Our local Armidale musician, Massiel Barros-Torning has written a song especially for our project called 'We Remember'. You can watch and listen to Massiel's song here: We Remember and enjoy the beautiful fabric artwork of our Armidale children's storyteller, Helen Evans.

Educators can download the words and guitar/piano keyboard chords and listen to an audio recording. More information about the Competition Rules and an Entry Form are available on our website. Entries are welcome until April 1st, 2021.

The song was written to accompany one of our research-based children's eBooks. The eBook is called 'We remember: Australia's story' and is for all Australian children, not just those from defence families. The eBook can be read to younger children by just reading the text in red on each page, and for older children by reading both the red and black text.

The eBook explores ways we remember and commemorate service during war and peacetime. It also explores some of the difficult issues about remembering, and what we choose to remember and forget, such as Australia's Frontier Wars. Other topics that lead to further discussion and research include conscription, POWs in Australia, immigration and care for veterans. Many historical photographs feature people remembering and commemorating from different time periods.

The eBook will be available as a static eBook, along with an interactive eBook with practical digital learning activities, video and audio read-along recordings, and a Key Word Sign version with Auslan signs. The interactive eBook also includes practical ways families can care for those in our community who need extra support. Other resources for children, parents, educators and family workers can be found on our website https://ecdefenceprograms.com/

Interested in further study in education?

Do you want to return to study? Do you want to know more? The University of New England offers a wide variety of programs to assist teachers to upgrade their skills. Within many courses you can specialise in the area in which you are interested. For more information, visit some of the links below:

School of Education Postgraduate Study

Graduate Certificate in Education Studies

Master of Education

Master of Education (Research)

Doctor of Education

PhD

Interested in Becoming a Teacher? The career opportunities for education graduates are increasing every year, especially in regional, rural and remote areas of Australia. By studying at UNE you will be well equipped to perform in these often-demanding contexts, plus you'll be more likely to obtain a permanent teaching position if you work in an area of teacher shortage. The NSW Government even offers a variety of targeted scholarships to help you study and gain employment:

www.teach.nsw.edu.au/getpaidtostudy

UNE has developed undergraduate courses in Early Childhood and Primary and K-12 Teaching to expand employment prospects by qualifying you to teach across two sectors.

What Teaching Courses are Available? UNE offers a number of undergraduate Education courses including:

Bachelor of Education (Early Childhood Teaching)

Bachelor of Education (K-6 Teaching)

Bachelor of Special and Inclusive Education (Primary)

Bachelor of Education (Secondary Arts)

Bachelor of Education (Secondary Mathematics)

Bachelor of Education (Secondary Music)

Bachelor of Education (Secondary Science)

Bachelor of Education (Early Childhood and Primary)

Bachelor of Education (K-12 Teaching)

You can find out more about all UNE Education courses via the Handbook.

Worried About the New "Three Band Five" Requirements? Many of our Initial Teacher Education courses are structured to include one year of "discipline studies" (i.e. subject/s that you will go on to teach in schools) in the first year of study. Successful completion of this first year also gives all students, irrespective of their educational backgrounds, the opportunity to demonstrate they meet the Government's academic standards for studying teaching.

Try our online 'Teaching Solution Finder' at www.becomeateacher.com.au, which makes it easy to understand the entry requirements of our Early Childhood Education and Initial Teacher Education degrees, and design a study pathway based on your personal circumstances.

Want to stay informed about our School activities? Join our UNE School of Education community on Facebook to keep up with our news and happenings in research, teaching and learning: facebook.com/UNEeducation