



**Annual
Conference**

4-7 July 2023

Brisbane Convention
& Exhibition Centre
Brisbane, Australia



Poster abstract book

www.conference.herdsa.org.au/2023

#HERDSA2023

P101**Fostering psychological capital as a strategy to address the mental health crisis in doctoral education****Dr Lynette Pretorius¹**¹Faculty of Education, Monash University, Clayton, Australia

Background/context. An increasing number of studies quantitatively demonstrate that there is a mental health crisis in doctoral education (Evans et al., 2018; Lau & Pretorius, 2019; Levecque et al., 2017). Very few studies explore individual PhD students' experiences of mental illness more qualitatively, so this study explored the experiences of a second-year PhD student (Em) as she discovers that she is mentally unwell.

The initiative/practice. This study uses psychological capital as a theoretical frame to explore Em's discovery of her mental illness, its impact on her research, and her efforts to overcome it. This is interwoven with my own experiences to demonstrate ways to improve educators' pedagogical practices to better support the wellbeing of doctoral students.

Methods of evaluative data collection and analysis. Data relating to Em's experiences were collected as part of a larger mixed-method study of 29 participants that included closed and open-ended responses from an online survey, email-based conversations, and field notes. This dataset was combined with my experiences using narrative ethnography as an autoethnographic methodology. Using Zoom, I engaged in conversations with myself using reflective prompts. This allowed me to describe my past experiences, explore my thoughts and feelings, and consider how these experiences informed my pedagogical practices. Data were analysed using reflexive thematic analysis and are presented as stories.

Evidence of outcomes and effectiveness. The study demonstrates that doctoral educators should promote students' psychological capital by developing their efficacy, optimism, hope, and resilience. Practical strategies to build these types of educational environments are provided, including open conversations about mental health, sharing successes and failures, and fostering collaborative learning to build a sense of belonging. Therefore, this study demonstrates how educators can contribute to making academia more welcoming, compassionate, inclusive, and growth-focused.

References.

Evans, T. M., Bira, L., Gastelum, J. B., Weiss, L. T., & Vanderford, N. L. (2018). Evidence for a mental health crisis in graduate education. *Nature Biotechnology*, 36(3), 282-284. <https://doi.org/10.1038/nbt.4089>

Lau, R. W. K., & Pretorius, L. (2019). Intrapersonal wellbeing and the academic mental health crisis. In L. Pretorius, L. Macaulay, & B. Cahusac de Caux (Eds.), *Wellbeing in doctoral education: Insights and guidance from the student experience* (pp. 37-45). Springer. https://doi.org/10.1007/978-981-13-9302-0_5

Levecque, K., Anseel, F., De Beuckelaer, A., Van der Heyden, J., & Gisle, L. (2017). Work organisation and mental health problems in PhD students. *Research Policy*, 46(4), 868-879. <https://doi.org/10.1016/j.respol.2017.02.008>

P103**Messy leadership: Case studies from learning leaders in higher education****Prof Lisa Cary¹**, Assoc Prof Renee Desmarchelier², **Dr Gayle Morris³**¹Charles Sturt University, North Wagga, Australia, ²University of Southern Queensland, Toowoomba, Australia, ³University of Auckland, Auckland, New Zealand

Background/context. Excellence, professional development, and educational leadership – all of these terms can be seen as unstable, dereferentialised, or empty signifiers - as their meaning (or the work they do) is not fixed (Readings, 1996). These terms are products of what Foucault (1977) termed regimes of truth, and they have become focused on meeting the perceived needs of the neoliberal marketplace. In this showcase we address the regime of truth that is entitled: – Educational Leadership.

The initiative/practice. We will present three case studies of Messy Leadership to provide specific examples in the higher education context in Australian and New Zealand (Stake 1995). This will include breaking down the cases by thematic analysis and revealing the challenges of leadership in these cases. The findings will lead to the discussion of ways to negotiate the internal and external forces at work.

Methods of evaluative data collection and analysis. The three case studies are informed by a poststructural feminist methodology. Using the lens of the model of Messy Leadership (Author, In press) we have drawn upon the work of Hargreaves (2007) and Author (2004) to investigate this epistemological construction with an increasing sense of urgency. Indeed, as cis-gendered white women we have turned back to the poststructural feminist theoretical understandings that enable us to theorise what 'messy leadership' might look like in this space, as a strategic move to work within/against these external reductive forces (Britzman 1991, Jones 1993, and Lather 1992).

Evidence of outcomes and effectiveness. The leadership challenges and emergent themes will be discussed as part of case study findings. We will discuss the settings and context of the cases (two Australian universities and one New Zealand university) to look for incomplete stories and consider typicality and relevance of the cases as a basis for generalisation (Stake, 1995).

References. Author (2023). Messy Leadership: Interrupting Marketplace Responses to Leadership in Learning and Teaching. *Journal of School Leadership*, 0:0, 1–16. <https://journals.sagepub.com/doi/epdf/10.1177/10526846221148633> Author (2004) The professional development school model: unpacking knowledge. *International Journal of Leadership in Education: Theory and Practice*, 7:4, 319-337. Stake, R. (1995). The art of case study research. Thousand Oaks, CA: Sage.

P104**Postdoctoral scholars surviving isolation and wayfinding social support****Dr Elizabeth Jach¹, Ms. Stacey Hansen¹, Ms. Chelsea O'Brien¹**¹University at Albany, State University of New York, Albany, United States

Background/context. Previous research has revealed that postdoctoral scholars report employment experiences in which they encounter a lack of sense of belonging (Moors et al., 2014) and even mistreatment (Flaherty, 2022).

The initiative/practice. Our study sought to examine postdoctoral scholars' experiences with sense of belonging and inquire what improvements might improve postdocs' experiences.

Methods of evaluative data collection and analysis. Interviews with postdoctoral scholars employed full-time in the United States (n=30) occurred via zoom in late 2022. Participants included 12 postdocs who held U.S. citizenship and 18 who held citizenship outside of the U.S. All interviews were recorded and transcribed. The research team employed thematic analysis as outlined by Braun and Clark (2006). Development of themes occurred through searching, reviewing, defining, and naming themes.

Evidence of outcomes and effectiveness. Interview themes identified postdocs' experiences of "surviving isolation" and "wayfinding social support". These themes illuminated the nuanced liminality of the postdoctoral scholar experience. In addition, postdocs identified strategies for improving experiences with belonging at the three levels of an ecological framework. Postdocs called for: increased compensation and job security at the macro level; improved institutional supports and systems for research collaboration at the meso level; and higher expectations and accountability for principal investigators and mentors at the micro level. The research team hopes that showcasing these findings can provide opportunities for considering improvements to postdoc experiences from global perspectives.

References.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.

Flaherty, C. (2022b, August 10). Seeking protections against bullying. *Inside Higher Ed*.

<https://www.insidehighered.com/news/2022/08/10/postdocs-within-u-california-system-allege-bullying>

Moors, A. C., Malley, J. E., & Stewart, A. J. (2014). My family matters: Gender and perceived support for family commitments and satisfaction in academia among postdocs and faculty in STEMM and non-STEMM fields. *Psychology of Women Quarterly*, 38(4), 460-474. <https://doi.org/10.1177/0361684314542343>

Moyo, Z. (2020). Towards enacting social justice in higher education: A case of postdoctoral research fellows. *International Journal of African Higher Education*, 6(1), 77-96.

P105**Perspectives on professional threshold concept development in graduating speech language pathology students****Ms Lauren Sullivan¹, Dr Jane Bickford¹, Ms Nicola Fanning¹, Mrs Lilienne Coles¹, Ms Jane Taylor Matison¹**¹Flinders University, Bedford Park, Australia

Background 'Threshold concepts' (TCs) are considered as transformative, troublesome and integrative concepts which are essential to a discipline (Barradell and Fortune, 2020). Nine TCs specific to speech pathology (SP) have emerged from previous evaluations involving students, placement educators and academics. These key TCs include; 1. Meta-awareness about communication 2. Role of speech pathology 3. Discipline specific knowledge 4. Personal responsibility for learning 5. Holistic practice 6. Self-awareness/reflection. The students identified a 7th concept, "Applying theory to practice" not identified by the clinicians and academics, who identified the associated, but more complex understanding of "transferability of skills and knowledge". The students did not identify "liminality of speech pathology practice" and "client-centredness", reflecting the later acquisition of these concepts.

Initiative Understanding the perspectives of SP graduands of the factors influencing the development of these key TCs will assist educators to design curriculum to ensure timely mastery of these concepts (Meyer and Land, 2003).

Method A 2nd focus group interview was conducted with n= 5 students at completion of their undergraduate program (4th year). These students participated in the first focus group interview in the 2nd year of their program. The participants were asked to discuss the nine emergent TCs and provide their perceptions regarding the factors influencing the development of threshold concepts in speech pathology competency development and practice. The transcript from the interview has been analysed thematically (Braun and Clark, 2006) and interpreted using the previously captured data and the 'TC' literature.

Results Participants confirmed the 6 TCs previously identified. Students also discussed what these TCs meant to them and reflected what factors may have assisted them to reach these TCs earlier in their studies. Participants discussed and confirmed the 7th and 8th concepts not previously identified by students. They reported that in their opinion, the 9th threshold concept "client centredness" was captured by "holistic practice". Focusing speech pathology education and supervision activities on these speech pathology specific threshold concepts will assist educators to make appropriate decisions regarding what is vital for students to understand to support their development and practice (Cousin, 2006).

References. Sharples, M., et al. (2014) 'Innovating pedagogy 2014'. *Open University Innovation Report*. Milton Keynes: Open University. Meyer, J., & Land, R. (2003). Threshold concepts and troublesome knowledge: Linkages to ways of thinking and practicing within the disciplines. <http://www.ed.ac.uk/etl>. Barradell, S. & Fortune (2020) 'Bounded – the neglected threshold concept characteristic. *Innovations in education and teaching*', 57(3), 296-304. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.

P106**Developing critical thinking skills through pedagogical interventions in intermediate-level tertiary accounting**

Dr Ellinor Allen¹, Assoc Prof Colin Jevons¹, Assoc Prof Nell Kimberley¹, Prof Michaela Rankin¹

¹Monash University, Caulfield East, Australia

Background/context. A critical thinking skills competency gap exists within many professions including accounting, threatening graduate employability and creating recruitment challenges for employers despite calls for action over the last three decades. The business environment is changing, and consequently the role of the accounting professional increasingly demands higher-level cognitive skills at the entry level.

The initiative/practice. Critical thinking is a skill that is both broad and complex, neither well defined nor easily evidenced, yet so important. This creates uncertainty around how best to develop students' critical thinking skills within a tertiary environment, exacerbated by the focus on technical rules in the accounting curriculum. Transference of knowledge is a common element among many definitions of critical thinking in the literature. Within this study, instruction was directed at fostering students' recall of prior accounting knowledge as they learned new content, in an effort to develop their critical thinking skills alongside the construction of meaningful disciplinary knowledge. The study addresses two research questions: (1) How can students' critical thinking skills be stimulated through a pedagogical intervention that emphasises knowledge construction? (2) What limitations are associated with the design of the critical thinking intervention, and what other factors associated with critical thinking should be considered in making design modifications to the intervention?

Methods of evaluative data collection and analysis. This predominantly qualitative study, using a design-based research approach, reports on two iterations of an intervention designed to develop accounting students' critical thinking skills through integration of prior knowledge. Data were gathered via interviews and questionnaires that investigated student motivations for studying accounting and attitudes towards critical thinking before and after the intervention.

Evidence of outcomes and effectiveness. We find that the greatest barrier to successfully stimulating critical thinking in accounting students concerns their inexperience with tasks drawing upon prior knowledge and with students perceiving little value in the intervention activities, especially when their prior accounting knowledge is weak.

References.

Design-Based Research Collective (2003). Design-Based Research: An emerging paradigm for educational inquiry. *Educational Researcher*, 32(1), 5-8.

Rebele, J. E., & St. Pierre, E. K. (2019). A commentary on learning objectives for accounting education programs: The importance of soft skills and technical knowledge. *Journal of Accounting Education*, 48(1), 71-79.

Wolcott, S. K., & Sargent, M. J. (2021). Critical thinking in accounting education: Status and call to action. *Journal of Accounting Education*, 56, 100731.

P108**Reclaiming constructive alignment: Examining the tensions between quality assurance and higher education practice****Mr Colin Loughlin²**¹Lund University, Lund, Sweden, ²Brunel University London, Uxbridge, United Kingdom**Background/context.**

Constructive Alignment (CA) is a widely used curriculum and educational theory in higher education, conceived for educators to enhance their practice (Biggs & Tang, 2011). However, when implemented solely for accountability or quality assurance purposes, its administrative potential can undermine its effectiveness as an educational tool (Gallavara et al., 2008). As a result, CA and learning outcomes are often criticized by academic staff as detrimental to learning and teaching (Fransson & Friberg, 2015). The use of alignment and learning outcomes for validation and audit can create a false sense of quality control that does not reflect the reality of teaching and student learning (Schoepp, 2019). This presentation examines the conflicts that have arisen as CA has evolved from an educational theory to a policy and practice in higher education, with the goal of restoring its original purpose as a tool for professional academic teaching.

The initiative/practice. This critical reflection draws on a range of sources, from educational theory, policy documents, government reports, journal articles, and opinion pieces.

Methods of evaluative data collection and analysis. This presentation argues that CA is a qualitative tool, whose success in practice is dependent on skilled, professional educators. When the terminology is used externally, for QA or audit purposes, the meanings diverge materially; one concerned primarily with the process of learning and teaching, and the other with only its product. The intention behind using one framework for both enhancement and accountability may be well-intentioned, but in practice, these two uses are often incompatible.

Evidence of outcomes and effectiveness. The results of this research inform the scholarship of learning and teaching in higher education. The outputs are being used worldwide in academic development programmes.

References.

- Biggs, J., & Tang, C. S. (2011). *Teaching for quality learning at university: What the student does* (4. ed). McGraw-Hill, Society for Research into Higher Education & Open University Press.
- Fransson, O., & Friberg, T. (2015). Constructive alignment: From professional teaching technique to governance of profession. *European Journal of Higher Education*, 5(2), 141–156. <https://doi.org/10.1080/21568235.2014.997264>
- Gallavara, G., Zadeh, M. S., Sorskar, A. K., Solvhjelm, C., Lindesjoo, E., Kajaste, M., & Hreinsson, E. (2008). *Learning Outcomes: Common Framework*.
- Schoepp, K. (2019). The state of course learning outcomes at leading universities. *Studies in Higher Education*, 44(4), 615–627. <https://doi.org/10.1080/03075079.2017.1392500>

P109**What is the link between employability and undergraduate research, and how much undergraduate research are we missing?****Prof Dawn Bennett¹, Dr Russell McPhee¹**¹Bond University, Varsity Lakes, Australia

Background/context. Undergraduate research has long been appreciated for its value in engaging students in research, scholarship and creative inquiry. It is also acknowledged as a pedagogical approach through which learners and faculty collaborate to contribute to knowledge (Healey & Jenkins, 2009). National and international associations of undergraduate research are garnering interest and hosting conferences which enable students to share, learn and gain confidence in their research experiences (Little, 2020). Surprisingly, undergraduate research is rarely discussed in terms of learning and teaching or career readiness. Moreover, the featured research is most often associated with for-credit activities in courses such as psychology, with placements in the science disciplines, and of course with honours degrees.

The initiative/practice. This presentation considers the skills development inherent within the research process and maps this against a social cognitive employability framework. Using practical examples, it also highlights the prevalence of research processes within the hidden curriculum, within assessment tasks, and within not-for-credit activities.

Methods of evaluative data collection and analysis. This is a showcase presentation led by teaching practice and guided by social cognitive theory. No data were collected.

Evidence of outcomes and effectiveness. By bringing undergraduate research into broader conversations about career- and self-development, the presenters demonstrate opportunities to grow learners' confidence, encourage faculty uptake, further the incorporation of research and scholarship into mainstream undergraduate pedagogies, and identify and emphasise research and scholarship practices that are already there. The presenters highlight the value of students learning to recognise and articulate skills such as critical thinking, working with others, problem-solving and data analysis, both for their studies and in positioning themselves for professional life. The presenters also propose that aligning research, study, and career helps to communicate the relevance and value of learning tasks.

References.

- Healey, M., & Jenkins, A. (2009). *Developing undergraduate research and inquiry* (p. 152). Higher Education Academy.
- Little, C. (2020). Undergraduate research as a student engagement springboard: Exploring the longer-term reported benefits of participation in a research conference. *Educational Research*, 62(2), 229–245.

P110

The state of doctoral programs in Christian higher education: Trends and issues in Australia and overseas

Dr Roy Y. Chan¹¹Lee University, Cleveland, United States

Context/background. Research on doctoral education development and support from Australian universities at the Group of Eight (Go8), Association of Pacific Rim Universities (APRU), and Universitas 21 has been well documented (Manathunga et al., 2022; Sarrico, 2022). In contrast, research that examines doctoral education development and support from religiously affiliated institutions at the Council for Christian Colleges & Universities (CCCU) is nearly nonexistent (CCCU, 2022). One reason doctoral and professional education has not been given much attention from religiously affiliated institutions is that the doctorate is much more specialized in scope, is less selective in admissions, is typically not diverse (in terms of faculty of color and staff of color) and is often categorized as a teaching institution (than research) (Yudkevich et al., 2020). While these points are valid, this paper suggests that Christian institutions in Australia and overseas would benefit from a strong and unified field of doctoral education studies, built around a community of practice (Chan, 2022). A unified doctoral education would serve incredibly well in the global south and would help strengthen research and development (R&D) at all levels (McKenna & van Schalkwyk, 2023).

Methods of Data Collection. An online survey was sent to faculty and program directors between July 2022 and December 2022 to understand the trends and issues facing doctoral programs at CCCU institutions worldwide. A total of 362 online survey invitations were sent via email, with 68 respondents (19% response rate).

Point for debate/focus of the work-in-progress/topic for discussion. Point for debate.

Intended outcome. The results suggest that 120 of the 185+ CCCU member institutions offer a doctoral or terminal degree, and that at least more than half of the CCCU doctoral programs (52%) emerged within the last 10 years. In total, 326 doctoral degree programs were offered worldwide. The top three CCCU doctoral degree program offerings were Ph.D. ($N = 117$), Ed.D. ($N = 59$), and D.Min. ($N = 41$). A growing number of professional or specialized degree programs ($N = 209$) were worth noting. The most common types of delivery format were Fully Online ($N = 109$), followed by Hybrid ($N = 95$), and Fully Residential ($N = 78$). In the United States, Texas had the most faith-based doctoral degree programs ($N = 74$), followed by California ($N = 36$) and South Carolina ($N = 20$). Outside the United States, Kenya offered the most doctoral degree programs ($N = 20$), followed by Australia ($N = 7$) and Canada ($N = 6$). The top three challenges identified by doctoral faculty and program directors were: 1) insufficient faculty or overloaded faculty, 2) difficulty attracting faculty of color, and 3) lack of time or resources for faculty development for doctoral programs.

References.

- CCCU. Council for Christian Colleges & Universities. (2022). *2021-2022 Annual Report*. CCCU. https://www.cccu.org/wp-content/uploads/2023/01/2021-22-Annual-Report_FINAL_spreads.pdf
- Chan, R. Y. (2022, November). [Review of the book *Trends and issues in doctoral education: A global perspective*, by Maria Yudkevich, Philip G. Altbach, & Hans de Wit]. *Global Studies Literature Review (GSLR)*, 12, 30-31.
- Manathunga, C., Qi, J., Raciti, M., Gilbey, K., Stanton, S., & Singh, M. (2022). Decolonising Australian doctoral education beyond/within the pandemic: Foregrounding Indigenous knowledges. *Scholarship of Teaching and Learning in the South*, 6(1), 112–137. <https://doi.org/10.36615/sotls.v6i1.203>
- McKenna, S., & van Schalkwyk, S. (2023). A scoping review of the changing landscape of doctoral education. *Compare: A Journal of Comparative and International Education*. <https://doi.org/10.1080/03057925.2023.2168121>
- Sarrico, C. S. (2022). The expansion of doctoral education and the changing nature and purpose of the doctorate. *Higher Education*, 84, 1299–1315. <https://doi.org/10.1007/s10734-022-00946-1>
- Yudkevich, M. M., Altbach, P. G., & de Wit, H. (Eds.). (2020). *Trends and issues in doctoral education: A global perspective*. Sage.

P111**The impact of implementing a virtual simulated learning environment on students' cognitive and affective skills in optometry education**

Dr Amanda K Edgar¹, Ms Elisa J Kiddell¹, Assoc Prof Susie Macfarlane¹, Prof James A Armitage¹, Dr Ryan J Wood-Bradley¹

¹Deakin University, Waurn Ponds, Australia

Background/context. Virtual simulation offers advantages over traditional teaching methods. These include creating a safe and controlled environment for learners as well as providing and allowing for immediate feedback in performance. (Kato et al., 2022; Zhang et al., 2020) These advantages can be harnessed to support health students to become work-safe and work-ready graduates by fostering the development of other core-competence skills such as cognitive and affective skills. (Zackoff et al., 2021) This study investigated the perceived effect on the development of cognitive and affective skills within a virtual simulated learning environment during the pre-clinical phase of optometric training.

The initiative/practice. A virtual representation of the Deakin Collaborative Eye Care Clinic was developed to enhance students' learning and development of professional and clinical skills in optometry at Deakin University. The virtual simulated environment enabled case-based approaches to teaching first year students within an active learning environment led by clinical experts who provided debriefing discussions which prompted students to reflect on their performance.

Methods of evaluative data collection and analysis. 80 students studying the Bachelor of Vision Science/Master of Optometry program at Deakin University were invited to complete an anonymous survey after participating in the virtual simulated teaching activities. 51 students (65%) responded to the 21-item evaluation survey that asked them to rate their experience and self-improvement in optometry skills. Qualitative (non-parametric analysis of 5-point-likert scales) and qualitative (thematic) analyses were performed on open ended responses.

Evidence of outcomes and effectiveness. Student insights on the fidelity and realism of the virtual simulation identified design considerations that contributed to their perceived motivation, learning and skills development. By integrating and embedding teaching and learning activities in virtual simulations, this teaching approach motivated participants to learn and develop cognitive and affective skills. In this study, participants reported development of professional identity and increased skills through self-appraisal.

References.

- Kato, K., Kon, D., Ito, T., Ichikawa, S., Ueda, K., & Kuroda, Y. (2022). Radiography education with VR using head mounted display: proficiency evaluation by rubric method. *BMC medical education*, 22(1), 579. <https://doi.org/10.1186/s12909-022-03645-8>
- Zackoff, M. W., Young, D., Sahay, R. D., Fei, L., Real, F. J., Guiot, A., Lehmann, C., & Klein, M. (2021). Establishing Objective Measures of Clinical Competence in Undergraduate Medical Education Through Immersive Virtual Reality. *Academic Pediatrics*, 21(3), 575-579. <https://doi.org/https://doi.org/10.1016/j.acap.2020.10.010>
- Zhang, B., Li, S., Gao, S., Hou, M., Chen, H., He, L., Li, Y., Guo, Y., Wang, E., Cao, R., Cheng, J., Li, R., & Zhang, K. (2020). Virtual versus jaw simulation in Oral implant education: a randomized controlled trial. *BMC medical education*, 20(1), 272. <https://doi.org/10.1186/s12909-020-02152-y>

P112**Unlocking the Power of Assessment: Discovering Student Perspectives and Transforming Practice****Dr Amanda K Edgar**¹, Mr Antoine Goarin¹, Assoc Prof Trish Mccluskey¹¹Deakin University, Waurn Ponds, Australia

Background/context. Examinations have long been the standard for assessments at the end of a teaching period in Higher Education. However, the COVID-19 pandemic brought about a shift in practice, sparking a rethinking of traditional assessment paradigms. We took this as an opportunity to move away from memorization-focused exams and towards assessments that truly measure higher order cognitive skills. We conducted a quality assurance survey to gain a better understanding of student perspectives and shed light on why a change in practice was desirable. Feedback from students can allow the academic to choose the assessment strategy that enables worthwhile learning rather than use examinations that poorly predict the students' success in the workforce, or subsequent assessments (Gibbs & Simpson, 2005). By stepping away from traditional closed book invigilated assessments focused on memorisation learning experiences we can assess higher order cognitive skills (Entwistle, 2017).

The initiative/practice. A regular quality assurance survey was distributed to students to understand their perspectives on their end of unit assessment experiences. Students provided five-point Likert scale responses on their level of agreement or satisfaction with a set of statements and detailed comments in free text response questions. This initiative aimed to draw together the students' perceptions on their previous experiences with the transition in assessment practice by unpacking *why* a change of transdisciplinary practice was desirable and to enable the innovation of informed staff capacity – capability building resources.

Methods of evaluative data collection and analysis. Pre-existing anonymized data from an electronic survey distributed university wide to students that completed assessments in the final weeks of a trimester from 2019-2022 were analysed. The data were interpreted using descriptive statistics and thematic analysis.

Evidence of outcomes and effectiveness. The results provide insight to the students' perception of assessments at the end of a unit of study and advocates for the renewal of assessment practice to supported, inclusive, digital, and authentic forms of assessments.

References.

Entwistle, N. (2017). *Teaching for understanding at university: Deep approaches and distinctive ways of thinking*. Bloomsbury Publishing.

Gibbs, G., & Simpson, C. (2005). Conditions under which assessment supports students' learning. *Learning and Teaching in Higher Education*(1), 3-31.

Kuzich, S., Groves, R., O'Hare, S., & Pelliccione, L. (2010). Building team capacity: Sustaining quality in assessment and moderation practices in a fully online unit. *ATN Assessment*

P113**Virtual simulated international optometry clinical placements enabling expansion of the classroom****Dr Amanda K Edgar**¹, Prof James A Armitage¹, Dr Luke Chong¹, Dr Anuradha Narayanan²¹Deakin University, Waurn Ponds, Australia, ²Elite School of Optometry, India

Background/context. The use of technology to expand the classroom is perhaps the most positive outcome from the coronavirus pandemic. One key challenge for educators developing clinical curricula is to develop resources that develop and refine cognitive and affective skills such as clinical reasoning. With experience, clinicians develop mechanisms to run through these metacognitive steps with unconscious capability. To support students develop their own mental models, a learner-centered approach can be taken by enabling them to engage in deliberate reflective practice while they work through a virtually simulated clinical scenario or patient presentation. (Garcia-Cabrero et al., 2018) The aim of this study was to evaluate the impact of a virtual simulation platform, the International Eyecare Community (IEC) on optometric education.

The initiative/practice. An innovative delivery method was designed to replicate the unique learning activities students complete whilst participating in physical international placements. A virtual simulator replicated authentic clinical environments where student would complete branching scenarios and collaborative discussions. Optometry students, (n=167), from Deakin University in Australia and the Elite School of Optometry in India participated in the program.

Methods of evaluative data collection and analysis. A mixed methods study was performed with deidentified data collected from teaching activities within the optometry programs in combination with students and facilitators perceptions from focus group discussions. Descriptive statistics and qualitative thematic analysis were used.

Evidence of outcomes and effectiveness. Students reported that this innovative activity delivers a unique teaching and learning environment which is relevant and motivates them to apply theoretical knowledge to clinical contexts. In the post-pandemic world, it is important we carry through the lessons learned, and the results show this resource can develop students clinical learning in a collaborative, inclusive and accessible learning environment in a novel way.

References.

Garcia-Cabrero, B., Hoover, M. L., Lajoie, S. P., Andrade-Santoyo, N. L., Quevedo-Rodriguez, L. M., & Wong, J. (2018). Design of a learning-centered online environment: a cognitive apprenticeship approach [Report]. *Educational Technology Research and Development*, 66(3), 813. <https://doi.org/10.1007/s11423-018-9582-1>

P114**Scholarship in private higher education providers: Managing stakeholder expectations whilst achieving measurable outputs****Prof Shannon Kennedy-Clark¹**¹*Central Institute of Technology and Innovation, Sydney, Australia*

Background/context. Implementing a scholarship framework in a private Higher Education Provider (HEPs) that results in measurable outputs is often confounded by the differing understandings of scholarship by key stakeholders. Although TEQSA's (2022) understandings of scholarship do provide opportunities for HEPs to engage with scholarship, stakeholders often hold different and, at times, conflicting views on the nature and value of scholarship. Stakeholders, in this context, include owners and Chief Executive Officers (CEOs), corporate and academic board members, academic leaders, and academic staff.

The initiative/practice. We argue here that tangible outputs can be achieved if the focus of scholarship is on quality assurance activities, maintaining industry knowledge, and engaging in learning and teaching endeavours (Alemida, 2010). For a HEP, the focus of scholarship should be on learning and teaching activities that contribute to improving the quality of student learning. The Scholarship Activities and Outputs (SAO) Framework that is put forward here meets the rigour required by TEQSA while providing academic leaders with a nuanced set of parameters that can result both in professional growth for the academic team and measurable scholarship outputs.

Methods of evaluative data collection and analysis. This study adopted a mixed methods data collection approach. Simple descriptive analysis of the data has been used to make sense of the data. Data sources include staff scholarship surveys, student evaluation of unit surveys, and unit moderation surveys.

Evidence of outcomes and effectiveness. The positive impact of the SAO Framework is seen in changes at a course and unit level and through the increased satisfaction of staff due to their engagement with scholarship activities within the provider.

References.

- Almeida, P. (2010). Scholarship of Teaching and Learning: An Overview. *The Journal of the World Universities Forum*, 3(2), 143-154. <https://doi.org/10.18848/1835-2030/CGP/v03i02/56669>
- Tertiary Education Quality and Standards Authority (TEQSA) (2022). *Guidance Note on Scholarship, Version 3.0* (04 May 2022). Retrieved from: [Guidance note: Scholarship | Tertiary Education Quality and Standards Agency \(teqsa.gov.au\)](https://www.teqsa.gov.au/guidance-note-scholarship)

P115**Reflections of third space academics on their epistemic beliefs during the covid-19 pandemic****Dr J. Aleta Villanueva¹**, Dr Douglas Eacersall¹¹*University of the Philippines Open University, Los Banos, Philippines*

Background/context. The work-and-learn-from-home scenario during the COVID-19 pandemic presented an opportunity for third space academics to reflect on their epistemic beliefs and their actions in providing academic language support and learning advising. Epistemic beliefs bear influence on pre-service and practising teachers, but not much research has been undertaken among third space academics engaged in dialogic interactions with students.

The initiative/practice. Epistemic beliefs focus on the nature and sources of knowledge which affect day-to-day teaching and decision-making in addressing student's needs. Epistemic beliefs are viewed as occurring in developmental stages or as personal theories with dimensions on the nature of knowledge and ways of knowing.

Methods of evaluative data collection and analysis. This qualitative study involved an online survey and interview of three learning advisors in Australia and seven learning support experts in the Philippines. A novel self-reflection protocol was developed to highlight their sources of knowledge as they reviewed their stored data of individualized consultations.

Evidence of outcomes and effectiveness. Through thematic analysis, the findings revealed epistemic aims and virtues as the participants transitioned to increased online consultations. Their sources of knowledge include prior family and school experiences, mentoring and informal learning with colleagues, formal training, and inspiration from literature on constructivist teaching and the universal design for learning. Common values of respect, inclusivity, and empathy were indicated. These findings, which emerged during the pandemic, are also significant post-pandemic. The theme of constancy and adaptability in knowledge and skill sets is highlighted to inform professional learning of teachers to improve work around personalized instruction. The study proposes the development of an online short course which integrates epistemic beliefs to develop a reflective practice among para-teachers and would-be learning advisors. The course includes self and collaborative reflection on the roles and epistemic beliefs of third space academics engaged in explicit skills instruction, strategy-building, and language counselling. The course is to be delivered through an open university with a micro-credentialing scheme to equip a workforce ready to provide high-level learning support to secondary and tertiary-level students. A significant positive impact to student's success is foreseen, especially for those with learning difficulties or have experienced learning loss due to the pandemic.

P116**The development of short courses in UPOUs continuing education program****Dr J. Aleta Villanueva**¹¹*University of the Philippines Open University, Los Banos, Philippines*

Background/context. Recent results of the Edu-Hack -K12 Teacher Journeys and EDUKussion webinars revealed the far reach of the UP Open University while also indicating teacher interests and concerns in programs and pedagogies suited to the needs of K-12 students and teachers during the COVID-19 pandemic. Quick survey results indicate areas the Faculty of Education can directly engage in through the offering of non-formal short courses and in collaboration with K-12 education experts. As such, non-formal short courses were conceptualized in touch with the realities of full-time community-based education workers, para-teachers and teacher-leaders who may benefit from non-formal course offerings which serve to address their on-the-go professional development needs.

The initiative/practice. As such, non-formal short courses have been developed and implemented to potentially serve as a flexible pathway to a full-time study in the formal degree programs, and at a time deemed suited for the course participants. The poster seeks to present the non-formal short courses in the area of language and literacy development which are in keeping with the Sustainable Development Goal 4: Quality Education by contributing to the supply of qualified teachers especially in least developed countries.

Methods of evaluative data collection and analysis. The development of these short courses entailed implementing a varied set of webinars during the pandemic and post-webinar surveys and a review of existing short courses abroad to ascertain the types of short courses which may be developed to cater to the local setting. Additionally these short courses are premised on an experiential learning and constructivist approach to learning how to teach by recognizing the experience-rich, workplace and community setting as a seedbed of lived experiences on learning how to teach.

Evidence of outcomes and effectiveness.

Through the institution of these short courses, the open university responds to the call of inclusivity by creating pathways of entry to university-based teacher education in support of equal access for all types of lifelong learners. The short course becomes a venue for validating these learnings while acquiring a set of practical skills to teach better and address the diverse needs of students already experiencing learning loss due to the pandemic.

P117**A Partnership in Portfolio Pedagogy: Recommendations for an ePortfolio roadmap supported by a (anon) Education Focused (EF) Academic Fellowship program****Prof Patsie Polly¹**¹UNSW Sydney, Kensington, Australia

Background The Education Focused (EF) Fellowship program was introduced by the (anon) Pro Vice-Chancellor Education and Student Experience (PVCESE) Portfolio to support EF academics from various faculties to work on strategic projects addressing the student experience (Blevins and Brill, (2017); Jones, (2018)). One such strategic theme was ePortfolio pedagogy and practice. ePortfolio pedagogy and practice offers a 'mechanism' to address the 'gap' for why students may not connect their coursework in an LMS to lifelong skills development by capturing experiential learning (Watty et al., (2015), Conefrey and Smyth, (2020)). University learning and teaching during COVID-19 times, highlighted that building student capabilities for ownership of/and lifelong learning is needed and was therefore identified as important for enhancing the student experience (Jorre de St Jorre and Oliver (2018); Hammer, et. al., (2021)).

The Initiative and Approach Each EF Fellow was awarded funding equivalent to 0.4 FTE for Term 3, 2021. This supported approach allowed EF Fellows to work in teams (5-7; with a nominated lead) and leverage their combined academic skillsets/experience. Importantly this PVCESE-funded EF Fellowship program enabled connection of institutional strategic initiatives and processes (top-down) to course and practitioner (bottom-up) systems. Connection and alignment of various elements and stakeholder needs are important when considering strategic ePortfolio implementation in universities (Slade et al., (2013); Slade et al., (2017); Thibodeaux et al., (2017)). The ePortfolio EF Fellow team findings recommended a roadmap toward a hybrid format of faculty-focussed, discipline relevant curriculum mapping to address skills, student learning experiences/reflection/assessment-feedback artefacts to a set of harmonized (anon) GAs.

Outcomes This unique partnership between the PVCESE and EF Fellow teams facilitated by the EF Fellowship program leveraged a cross-faculty skill set in educational expertise and awareness that enabled EF Fellows to collaboratively work together to address university-wide strategic projects.

References

- Blevins, S & Brill, J. (2017). Enabling systemic change: Creating an ePortfolio implementation framework through design and development research for use by higher education professionals. *International Journal of Teaching and Learning in Higher Education*, 216-232.
- Conefrey, T. & Smyth, D. (2020). Reflecting, Integrating, and Communicating Knowledge through ePortfolios to Increase Civic and Scientific Literacy. *International Journal of ePortfolio*, 1-18.
- Jorre de St Jorre, T & Oliver, B. (2018). Want students to engage? Contextualise graduate learning outcomes and assess for employability. *Higher Education Research & Development*, 44-57.
- Hammer, S, Ayriss, P, & McCubbin, A (2021). Style or substance: how Australian universities contextualise their graduate attributes for the curriculum quality space. *Higher Education Research & Development*, 508-523.
- Slade, C, Murfin, K & Readman, K, Evaluating Processes and Platforms for Potential ePortfolio Use: The Role of the Middle Agent. *International Journal of ePortfolio*, v3 n2 p177-188 2013
- Slade, C., Murfin, K., & Trahar, P. (2017). A Strategic Approach to Institution-Wide Implementation of ePortfolios. In: Rowley, J. (eds) *ePortfolios in Australian Universities*. Springer, Singapore.
- Thibodeaux, T, Cummings, C. & Harapnuik, D. (2017). Factors That Contribute to ePortfolio Persistence. *International Journal of ePortfolio*, 1-12.
- Watty, K & McKay, J. (2015). Pedagogy and ePortfolios: purpose aligned to design (*or the why and how*). *International Journal of Pedagogies and Learning*, 194-207.

P118**The effects of educational backgrounds on freshmen's adjustment and achievement at a Singapore university**

Ms Zi Hui Yeo¹, Dr Melvin J. Yap

¹National University of Singapore, Singapore

Background/context. Katartzi and Hayward (2020) claim that, *internationally*, university freshmen with vocational qualifications (henceforth VQ freshmen) are more likely to drop out than those with academic qualifications (henceforth AQ freshmen). One reason for this, they propose, is that VQs as compared to AQs do not prepare students to be epistemic agents and learners at the undergraduate level. No study to date has investigated these in the Singaporean context.

The initiative/practice. Our study tested Katartzi and Hayward's (2020) claims using data from 71,289 undergraduates who matriculated between 2007 and 2020 on the basis of an Advanced-level certificate (i.e., AQ) or a Singaporean polytechnic diploma (i.e., VQ). These data came from the university's repository housing educational data for over 300,000 students and alumni.

Methods of evaluative data collection and analysis. In Analysis 1, logistic regression analysis was conducted to test if the type of academic qualification attained (AQ or VQ) predicted freshmen dropping out (yes or no), after controlling for various demographic variables. In Analysis 2, linear regression analyses were conducted to see if, after demographic variables are controlled for, VQ students were associated with a lower Cumulative Average Point (CAP), before and after students exercised pass/fail (S/U) options.

Evidence of outcomes and effectiveness. Analysis 1 showed that VQ freshmen were almost twice as likely to drop out than AQ freshmen, after demographic variables were controlled for. This confirms Katartzi and Hayward's (2020) claim that, *internationally*, VQ freshmen are more likely to drop out than AQ freshmen. Analysis 2 showed that VQ freshmen were found to have lower pre- and post-S/U CAPs than AQ freshmen. This is consistent with Katartzi and Hayward's (2020) proposal: VQ freshmen are more likely to drop out because VQs, as compared to AQs, do not adequately prepare students for undergraduate education. Follow-up studies examine if both pedagogic and epistemic aspects of their proposed reason apply in our context.

References.

Katartzi, E., & Hayward, G. (2020). Conceptualising transitions from vocational to higher education: bringing together Bourdieu and Bernstein. *British Journal of Sociology of Education*, 41(3), 299-314. <https://doi.org/10.1080/01425692.2019.1707065>

P119

The dark mirror: Emotional labour, change fatigue and the impact of Covid-19 on enabling educators

Dr Angela Jones¹, **Dr Joanne Lisciandro**², **Anita Olds**², Assoc Prof Susan Hopkins³, Juliette Subramaniam⁴, Marguerite Westacott⁵, Ana Larsen⁶, Dr Rebekah Sturniolo-Baker²

¹Edith Cowan University, Mount Lawley, Australia, ²Murdoch University, Murdoch, Australia, ³University of Southern Queensland, Toowoomba, Australia, ⁴Western Sydney University, The College, Penrith, Australia, ⁵University of the Sunshine Coast, Sippy Downs, Australia, ⁶Central Queensland University, Brisbane, Australia, ⁷University of Newcastle, Callaghan, Australia

Background/context. The 2020 Novel Coronavirus (COVID-19) pandemic brought global disruptions to the way universities operate. The “dark mirror” of online learning abruptly took priority, as the physical campuses in Australian universities became deserted (Olds, et.al, 2022). Staff had to instantly adapt to major changes in work practices, whilst continuing to support students’ engagement and maintain quality teaching and learning.

The initiative/practice. This poster demonstrates how change fatigue during the pandemic impacted the wellbeing of staff working in the enabling education sector. Auto-ethnographical reflections of eight practitioners at six Australian universities working in teaching, leadership and professional practice in enabling education, were thematically analysed. The aim was to collate the lived experience of those working in a high-needs space in an extremely challenging socio-cultural moment, supporting non-traditional students, in their transition to university during a global pandemic.

Methods of evaluative data collection and analysis. Autoethnography was the qualitative approach selected for this project. Reflections were de-identified and collated into a “story pot” (Bennett et al., 2016), where a systematic data analysis was undertaken using Braun and Clarke’s thematic approach (2006, p. 87).

Evidence of outcomes and effectiveness. Emergent data highlights the superordinate theme of change fatigue and sub themes of time, online fatigue, and emotional labour (Olds, et.al, 2022). Moreover, during the disruption caused by the pandemic, our findings demonstrate that practitioners prioritise their workload and students, to the detriment of their own wellbeing. Through excerpts from the auto-ethnography reflections, thematic diagrams, the cycle of change fatigue and an illustrated depiction of weight of “change”, this poster visually articulates the impact of workload intensification and change fatigue on educators.

References.

- Bennett, R., Hobson, J., Jones, A., Martin-Lynch, P., Scutt, C., Strehlow, K., & Veitch, S. (2016). Being chimaera: A monstrous identity for SoTL academics. *Higher Education Research & Development*, 35(2), 217-228.
<https://doi.org/10.1080/07294360.2015.1087473>
- Braun V & Clarke. V (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
<https://doi.org/10.1191/1478088706qp063oa>
- Olds, A., Hopkins, S., Lisciandro, J., Jones, A., Subramaniam, J., Westacott, M., Larsen, A., Sturniolo-Baker, R., & Scobie, H., (2022, Dec 5-6). *Enabling Educators in a Covid Context: Pressure for Practitioners and Avenues for Agency and Change*. [paper presentation]. NAEEA: Reimagining Enabling in Higher Education Conference. Adelaide, Australia.

P120**Shaping the business school of tomorrow: through an innovation partner ecosystem and 4P partnership model****Mr Peter Komsta¹**¹Melbourne Business School, Carlton, Australia

Background/context. Melbourne Business School has set up a new Learning Innovation capability, responding to learner, customer, and business challenges. Within this division, an Innovation Lab is scanning future learning trends and inviting ed-techs, and other partners, into the School's community to help shape the future of business education.

The initiative/practice. By leveraging an emerging kinship economy, the Lab is bringing together and orchestrating a diverse ecosystem of learning pioneers, who will help redefine how curious learner and organisations grow. One of the Lab's key enablers will be adopting a partnership approach which is Future-of-Learning orientated, as distinct from re-seller partnerships, university-to-university alliances, or traditional education partnerships which may have a greater focus on teaching, research, or learner experience. This FoL orientation also acknowledges that the School faces similar challenges to other education institutions i.e., skills shortages, competition for students, etc., in addition to future 'relevance' as a business education player, and therefore is open to forging, diverse partnerships which as Dawn Gilmore and Chinh Nguyen suggest, "can make the university nimbler during uncertain times and faster when opportunities arise to diversify". In addition, given the Lab's overall focus on innovation across adjacent and transformational horizons, the partnership ecosystem needs to 'keep up' with the pace and direction of the Lab, and is supported with a partnership model built upon the pillars of People, Process, Purpose, and Partnership Experience (PX), also called the 4P partnership model.

Methods of evaluative data collection and analysis. Key insights from the 4P partnership model will be explored in this presentation, which includes metrics from partner ecosystem engagement, focus groups, and ecosystem health.

Evidence of outcomes and effectiveness. The Lab has been stood up and funded by the School's board, and an initial partner ecosystem has been built. The impact of the 4P partnership model, will also be assessed at the conclusion of the Lab's next Ventures Program.

References.

Gilmore, D., & Nguyen, C. (2022, May 25). *Times Higher Education: Could 2022 be the year of partnership models, and should you get involved?* THE - Times Higher Education Website Publisher Name.

<https://www.timeshighereducation.com/campus/could-2022-be-year-partnership-models-and-should-you-get-involved>

P121**The undergraduate psychology program director team's strategies for building graduate outcome capacity**

Dr Karen Murphy¹, Dr Amanda Duffy¹, Dr Sharon Scrafton¹

¹*School of Applied Psychology, Griffith University, Gold Coast, Australia*

Background/context. Many undergraduate psychology students aspire to become registered psychologists (Over, 1983), which requires completion of an Honours and Masters degree in psychology (APHRA Psychology Board). Some students decide not to pursue a career as a psychologist and others do not meet the academic standards to be accepted for these competitive entry degrees, and therefore must reconsider their career goals. This is challenging for students as they are often unaware of relevant alternate study or career options available to them (Thomas & McDaniel, 2004).

The initiative/practice. Given the importance of students receiving appropriate career guidance throughout their entire degree (Scott & Ciani, 2008), the Undergraduate Psychology Program Director Team has developed an extra-curricular program and suite of resources for students in years 1 to 4 of the psychology degrees. The program and resources aim to enhance students' awareness of and access to alternate study pathways and career options, with a particular focus on students graduating with a 3- or 4-year psychology degree. The program includes a webinar series (e.g., external speakers discussing career pathways and volunteering opportunities, student graduate speakers, discussion of alternative postgraduate study options), a targeted online employment resource, a bespoke online postgraduate study options resource, and awards to recognise students' community volunteering and academic high achievement.

Methods of evaluative data collection and analysis. The ongoing evaluation uses qualitative and quantitative survey questions to gather student feedback on the study pathways and career options program and resources.

Evidence of outcomes and effectiveness. To date, students have provided positive quantitative and qualitative feedback regarding the informativeness and range of topics in the webinar series (e.g., majority agree/strongly agree on value of the webinars for enhancing knowledge about alternate career and study options, comments such as *great to see the various career options I can have*). This preliminary evidence suggests this is an effective approach to enhance our students career self-efficacy (Komarraju, Swanson & Nadler, 2014).

References APHRA Psychology Board <https://www.psychologyboard.gov.au/Registration/General.aspx>

Over, R. (1983), Training and Career Preferences of Undergraduates Majoring in Psychology. *Australian Psychologist*, 18,377-384. <https://doi.org/10.1080/00050068308255408>

Komarraju, M., Swanson, J., & Nadler, D. (2014). Increased career self-efficacy predicts college students' motivation, and course and major satisfaction. *Journal of Career Assessment*, 22(3), 420-432. <https://dx.doi.org/10.1177/1069072713498484>

Scott, A. B., & Ciani, K. D. (2008). Effects of an undergraduate career class on men's and women's career decision-making self-efficacy and vocational identity. *Journal of Career Development*, 34(3), 263-285. <https://dx.doi.org/10.1177/0894845307311248>

Thomas, J. H., & McDaniel, C. R. (2004). Effectiveness of a required course in career planning for psychology majors. *Teaching of Psychology*, 31(1), 22-27. https://dx.doi.org/10.1207/s15328023top3101_6

P122

Interdisciplinary reflection using teaching squares to enhance Nursing and Midwifery practice for student learning

Dr David Birbeck¹, Dr Joanne Harmon¹, Dr Angela Brown¹, Assoc Prof Maurizio Costibile¹, Dr Josephine Crockett¹

¹University of South Australia, Adelaide, Australia

Background/context. Safe, open spaces for the sharing of teaching practice is a critical component to sustaining professional learning and change in academic practice (Zeng, 2020; Chester, 2012). There is a paucity of research focusing on teaching squares (Mueller and Schroeder, 2018) as a mechanism for creating safe spaces where interdisciplinary reflection within the disciplines of pharmacy, nursing, midwifery and bioscience may occur. Based on a synthesis of a systematic scoping of the literature an action research project was implemented.

The initiative/practice. Interdisciplinary teaching squares for reflection was developed and trialled as a pilot study to better understand the experiences of staff and was crucial in understanding the barriers and enablers to broad implementation. Participants were newly appointed casual, fixed term and continuing staff.

Methods of evaluative data collection and analysis. Action research, involving rounds of observation, interviewing and focus groups (n= 12 participants 3 focus groups). Stage one of data collection involved a pre and post intervention survey, followed by focus groups and interviews to identify additional aspects of how the teaching square approach can be further enhanced. Outcomes from this stage are discussed. Stage 2 will be a longitudinal study on the personal reflections of those who participated, including their student led feedback and evaluations, with peer-to-peer evaluation. Ethical approval has been gained.

Evidence of outcomes and effectiveness. We identified the development of increased social capital and mentoring networking across the four separate disciplines. Despite the intention to create safe spaces the personality of some observers at times created tension by providing feedback where it was not sought. The importance of training to ensure shared expectations as described in Chester (2012) is key.

References.

- Chester, A. (2012). Peer partnerships in teaching: Evaluation of a voluntary model of professional development in tertiary education. *Journal of the Scholarship of Teaching and Learning*, 12(2), 94-108. <https://scholarworks.iu.edu/journals/index.php/josotl/article/view/2019>
- Mueller, R., & Schroeder, M. (2018). From seeing to doing: Examining the impact of non-evaluative classroom observation on teaching development. *Innovative Higher Education*, 43, 397-410. <https://link.springer.com/article/10.1007/s10755-018-9436-0#Tab1>
- Zeng, L. M. (2020). Peer review of teaching in higher education: A systematic review of its impact on the professional development of university teachers from the teaching expertise perspective. *Educational Research Review*, 31, 100333. <https://doi.org/https://doi.org/10.1016/j.edurev.2020.100333>

P125

Supporting high-quality peer review – improving the quality of reviewer feedback in one Australian academic journal

Assoc Prof Gail Wilson¹, **Dr Jo-Anne Kelder**², Dr Prue Gonzalez³, Ms Carmen Vallis⁴

¹Southern Cross University, Gold Coast, Australia, ²University of Tasmania, Hobart, Australia, ³Charles Sturt University, Port Macquarie, Australia, ⁴University of Sydney, Sydney, Australia

Background. Peer review is deeply embedded in the social fabric of the academic scholarly communication system and plays an essential role in the scholarly communication enterprise. Although new technologies and communication methods have disrupted this system, peer review remains the “gold standard” for ensuring the validity and reliability of research and protecting reputations. The journal editor’s role is critical in setting and enforcing standards for peer review.

The initiative. As editors in one Australian academic journal, we initiated an investigation to address the quality of the double-blind peer review function feedback provided by reviewers to prospective authors. In 2022, we undertook a significant review of the literature and conducted a desktop survey of journal websites to identify peer review approaches, outcomes, and criteria for quality peer review practice, which was published as an editorial. We identified reviewer feedback as a quality focus for ensuring a respectful and constructive response to author’s submissions and provide effective advice on manuscript development for publication.

Methods of evaluative data collection and analysis. Based on the literature review and desktop survey, we designed a template for reviewers’ use that codified a good practice review structure and provided guidance for comments. This template was complemented by redesign of the online reviewer application form and induction information given reviewers in the welcome email, highlighting the educative role of reviews and value of constructive, formative feedback.

Evidence of outcomes and effectiveness. Criteria for developmental and constructive feedback identified. Resources for peer reviewers are planned for 2023. (264 words)

References.

- Allen, K., Reardon, J., Walsh, L., Waters, L. E., & Wehmeyer, M. L. (2022). The ecology of peer review: Person-centred, strength-based, and self-determination perspectives. *Journal of University Teaching & Learning Practice*, 19(5). <https://ro.uow.edu.au/jutlp/vol19/iss5/02/>
- Gonzalez, P., Wilson, G. S., & Purvis, A. J. (2022). Peer review in academic publishing: Challenges in achieving the gold standard. *Journal of University Teaching & Learning Practice*, 19(5). <https://ro.uow.edu.au/jutlp/vol19/iss5/01>

P126**Professional development in an uncertain world****Mrs Elizabeth Mitchell**¹, Dr Sandra Osorio¹¹Melbourne Polytechnic, Melbourne/Preston, Australia

Context. The COVID-19 pandemic disrupted the Australian Higher Education landscape and has continued to bring challenges to the provision of learning. Impacts of the pandemic on higher education have resulted in declining financial resources, changes in student expectations, and new technological classroom challenges. These factors have created the need for institutions, particularly smaller higher education institutes, to leverage limited resources to remain viable. However, this creates the wicked problem: how do you efficiently, effectively and economically improve delivery in a post-pandemic world. We suggest that higher education providers draw from the principles of Lean Higher Education (LHE) (Balzer et al, 2014) to construct methods of professional development that specifically target those areas requiring the greatest need.

Topic for discussion. Academics come well qualified and highly skilled, and are self-aware in how to deliver their areas of expertise in higher education (Ferman, 2010). However, the purpose of professional development is to ensure that they remain confident in their subject deliveries. Professional development is also important in providing the support to continue to engage in a post pandemic dynamic learning environment. Finally, it is essential in maintaining teacher satisfaction (Emiliani, 2015).

Professional development is often delivered *'en masse'* to the academic cohort, to address broad issues in higher education. However, it often fails to address the nuances of distinct student cohorts and subjects. In higher education the student cohort is characterised by varied educational, age, socio-economic, language, health, and cultural backgrounds. Therefore, when designing professional development, the following topics deserve further exploration: How do academics gain the confidence and knowledge to connect with students efficiently and effective when the characteristic makeup of cohorts vary from semester to semester? How can we provide professional development across different disciplines? How do we support the professional development requirements of a transient casualised workforce? Are the issues facing large universities and smaller higher education providers similar or different? We posit that an exploration of these topics reveals that "one-size-fits-all" professional development programs will not meet the immediate classroom needs of teachers efficiently, effectively or economically. Rather, targeted professional development can be delivered to teachers by using LHE to design an interactive teaching plan that will agilely fill professional development gaps of academics as they occur.

Intended outcome. The intended outcome of this study is that by using a teaching plan, professional development is delivered efficiently, effectively and economically. The efficiency of this form of professional development will be measured by the time taken from identification of the need and provision of the professional development support. Effectiveness will be measured by the percentage change in teacher satisfaction scores, student satisfaction scores and pass rates. The economical outcome will be measured by the use of a cost-benefit analysis and a comparative of costs within the course pre and post lean delivery.

P127**Meeting our instructors where they are: Flexible asynchronous online professional development****Mr Nick Yates**^{1,2}¹Zayed University, Abu Dhabi, United Arab Emirates, ²University of the Sunshine Coast, Sippy Downs, Australia

Background/context. Over the years, our Centre realised that scheduled face-to-face (F2F) Professional Development (PD) events were not meeting the needs of instructors. Finding time to attend modules of weekly F2F sessions for six weeks was becoming less viable for instructors with high workloads.

The initiative/practice. The Blended and Online Teaching Innovation Program (BOTIP) was designed with flexibility at its heart. BOTIP workshops sought to develop skills in instructors for the design, development, and facilitation of blended and online courses through asynchronous online learning activities. The workshop programming is flexible so that instructors can complete a series of online learning activities anytime, anywhere within a week or ten-day period.

Methods of evaluative data collection and analysis. Instructor feedback was sought to understand the effectiveness of the flexible BOTIP programming and its workshops. A ten-question survey was sent to instructors upon finishing a BOTIP workshop. A thematic content analysis was used on the qualitative and quantitative survey data (n=116).

Evidence of outcomes and effectiveness. Overall instructors responded that despite being a new mode of PD for our Centre, instructors reported high engagement in the asynchronous online PD experience. Also, instructors outlined that the BOTIP workshops were seen as models of best practice and the workshops were opportunities to explore asynchronous online learning experiences. The workshop design and clear organisation of the diverse interactive asynchronous online learning activities for instructors seemed to be highly regarded. However, not all instructors thought the length of the workshops was long enough and some felt they might benefit from a synchronous component. As recommendations for other Centres, especially those with multiple campuses across different cities, course design and development of diverse interactive asynchronous online learning activities is as much crucial to the PD experience as it is to model best practice to instructors.

P128**Critical realism as a framework for analysing curriculum change in higher education****Dr Robyn Yucef**¹¹Deakin University, Burwood, Australia

Background/context. Higher education curricula must be responsive to contextual factors shaping higher education to ensure they continue to be fit-for-purpose. However, the phenomenon of curriculum change has received little attention from higher education researchers.

The initiative/practice. Curriculum change is a *social* phenomenon, and as such, it is carried out by social agents who are influenced by their structural and cultural contexts. Margaret Archer's morphogenetic approach (Archer 1995) provides a critical realist framework that facilitates the study of the interplay between structure, culture and agency in the phenomenon of curriculum change in higher education. Archer proposes that complementary or contradictory relations between the 'parts' of structure and the 'parts' of culture give rise to situational logics that condition, but do not determine, the actions of social agents (Archer 1995; Archer 1996).

Methods of evaluative data collection and analysis. This paper draws on interview data from a study exploring Australian science academics' views on the teaching and learning of the 'Nature of Science' (NOS). Archer's morphogenetic approach was used to identify a structural logic of *protection* acting as a brake on curriculum change and a cultural logic of *opportunity* acting as an enabler of curriculum change to include NOS.

Evidence of outcomes and effectiveness. The study demonstrates that the morphogenetic approach can facilitate practical social theorising about curriculum change in higher education that goes beyond empiricist detection of patterns to identify the casual mechanisms contributing to those patterns. For academic developers tasked with facilitating curriculum change with academics, the study findings inform an approach that focuses not simply on convincing academics about the need for change but also on recognising and appreciating the powerful situational logics that condition agency to change curriculum and capitalising on those most likely to lead to desired change.

References.

Archer, M. S. (1995). *Realist social theory: The morphogenetic approach*. Cambridge University Press.

Archer, M. S. (1996). *Culture and agency: The place of culture in social theory* (2nd ed.). Cambridge University Press.

P129**Building peer-supported teaching practice from the ground up****Dr Tim Chambers**¹¹Deakin University, Burwood, Australia

Background/context. Peer review of teaching broadly encompasses strategies and mechanisms that are designed to improve the quality of teaching in higher education (e.g., improved constructive alignment and pedagogic enhancement; Johnston et al. 2020). Whilst this research has proliferated internationally in the last decade, attempts to conduct peer review teaching in Australia has been minimal, small in scale, and or often go unpublished (Johnston et al., 2020). Consequently, the practice of peer review within Australian tertiary institutions is unclear. Moreover, much of the published research focuses on formal, structured peer review programs that fail to consider the influence of organic peer-supported teaching practices.

The initiative/practice. As part of a broader project that designed and developed an institute-wide program for peer-supported teaching practice (PTP), the aim of this qualitative study explored the peer-supported teaching practice experiences of academic teaching staff. Specifically, we explored how PTP enabled staff to organically develop and or evaluate their teaching practice (e.g., peer observation, review, and reflection).

Methods of evaluative data collection and analysis. Online interviews were conducted with 8 academic teaching staff (Levels B to D) across the faculties of health, arts and education, business and law, and science, engineering, and the built environment. Data were transcribed verbatim for inductive and deductive thematic analysis.

Evidence of outcomes and effectiveness. Preliminary findings suggested three prominent themes: (i) participants adopt person-centred values in the PTP relationship, (ii) PTP relationships enable both curriculum development and teaching practice, and (iii) participants go outside traditional peer review frameworks to develop their teaching practice. These findings complement the existing peer review literature by showcasing how peer-to-peer relationships can foster improvements in practice and continue to inform the development of this institution-wide program.

References.

Johnston, A. L., Baik, C. & Chester, A. (2020). Peer review of teaching in Australian higher education: A systematic review, *Higher Education Research & Development*, 41(2), 390-404. DOI: 10.1080/07294360.2020.1845124

P130

Designing peer review of teaching for changing academic practice

Dr Uma Jogulu¹, **Mrs Martina Costello**¹¹Edith Cowan University, Joondalup, Australia

Peer review of teaching is an opportunity to work with a colleague, to improve student experience and for professional and personal development of practice (Harris et. Al. 2008; Walsh et al. 2020). Building on 'making learning possible' not just for students but also for individual academics, our presentation outlines experiences with peer review of teaching using the 4 Cs principles as a systematic tool and a research informed template. With feedback from peer review processes and community of practice we extend the four Cs of learning framework: connect, communicate, collaborate, and consolidate as a process of peer reviewing our colleagues on how they connected, communicated, collaborated, and consolidated when teaching. Using reflexivity (Steier, 1991; Coulson & Homewood, 2016) as the methodological lens, we are able to locate ourselves while implementing a deeply thorough peer review evaluation process to challenge our very presence and our individual academic practice. We will focus specifically on the outcome of this research as it centres around students' equitable access to learning as highlighted by data. The peer review journey as academics, and our willingness to reflect critically utilising evidenced based approaches has helped us build skills to improve practice. While we believe that the four Cs framework in peer review of teaching will help to prepare for the many exciting challenges and joys of content in future, it is not a magical model that will promise success for us as educators, or for our learners. However, the peer review practice using the 4 Cs tool has shown to sharpen our academic skills and the ability to critically reflect on the dynamics of teaching practice and social context in which teaching manifests itself (Pardede, 2020: partnership for 21st century skills (2011 a 2011 b).

References.

- Coulson, D., & Homewood, J. (2016). Developing psychological literacy: Is there a role for reflective practice? *Journal of University Teaching & Learning Practice*, 13(2), 60–78. <https://doi-org.ezproxy.ecu.edu.au/10.53761/1.13.2.5>
- Harris, K. L., Farrell, K., Bell, M., Devlin, M., & James, R. (2008). *Peer Review of Teaching in Australian Higher Education: A handbook to support institutions in developing effective policies and practices*. Melbourne, Victoria: The Centre for the Study of Higher Education.
- Partnership for 21st Century Learning. (2011a). Framework for 21st Century Learning. Retrieved from <http://www.p21.org>
- Partnership for 21st Century Skills. (2011b). Communication and Collaboration. Retrieved from <http://www.p21.org>
- Partnership for 21st Century Skills. (2011b). Communication and Collaboration. Retrieved from <http://www.p21.org>
- Pardede, P. (2020). Integrating the 4cs into efl integrated skills learning. *Journal of English Teaching*, 6(1), 71–85.
- Sutherland, K. A. (2021). The four Cs of effective classroom teaching. In *University Teaching in Focus* (pp. 112-134). Routledge.
- Steier, F. (1991) 'Introduction: Research as selfreflexivity, self-reflexivity as social process'. In F. Steier (ed) *Research and Reflexivity*, Sage, London
- Walsh, P., Owen, P. A., Mustafa, N., & Beech, R. (2020). Learning and teaching approaches promoting resilience in student nurses: an integrated review of the literature. *Nurse Education in Practice*, 45. <https://doi.org/10.1016/j.nepr.2020.102748>

P131**Designing a discipline-specific academic development group to cross multiple third spaces**

Dr. Naima Iftikhar¹, Dr. Kate Tregloan¹

¹Faculty of Architecture, Building and Planning; University of Melbourne, Parkville, Australia

Background/context. Central Academic Developer (AD) groups operate within various third spaces and across university structures (Kensington-Miller et al., 2015; Potter & Devecchi, 2020; Whitchurch, 2008, 2012, 2015), however there has been limited investigation of the work of discipline-specific groups that must also cross multiple spaces (Sharif et al., 2019; Popovic & Baume, 2016).

The initiative/practice. A Learning and Teaching group (LTG) was established within a Faculty in 2018 as a Faculty strategic initiative. The LTG operates in three modes, as a design studio, a consultancy and as a research group to deliver professional learning and initiatives that enhance the teaching practises of ongoing and sessional staff.

The LTG operates in multiple third liminal spaces in which its heterogenous identity (Handal 2008; Mori et al. 2021) evolves to enhance academic practises. These third liminal spaces cross (Mori et al. 2021; Whitchurch 2012): Faculty Student and Staff needs and values; Research and Teaching practices and processes; and Academic and Professional group frameworks and operations.

Methods of evaluative data collection and analysis. Self-reflections by LTG members and academic colleagues in an autoethnographic investigation of initiatives undertaken by LTG in various third spaces reveal relevant challenges and opportunities to operate optimally.

Evidence of outcomes and effectiveness. The nature of roles/identities of the LTG transforms due to the nature of the third liminal space in which the Group collaborates, and the evolution of its relationship to academic colleagues and the space/s of higher education. This in-person showcase presentation will share example outcomes from partnerships in each of the spaces outlined. Emerging findings related to the initiatives impact associated with perceived roles by the LTG will be of particular interest to discipline- and faculty-specific AD Groups nationally and globally.

References.

Reference list can be found in a separate document list in [this google drive link](#) as advised by HERDSA Conference Manager.

P132**An in-depth comparative analysis of the Canadian and Danish education system**

Miss Amna Khaliq¹

¹Northern Lights College, Dawson Creek, Canada

An in-depth analysis of a comparison study between Canada and Denmark to analyze the education system between the countries in entrepreneurship is undertaken in this paper. Denmark, a land of high wages and taxes, and Canada, a land of immigrants and opportunities, have seen a positive relationship in entrepreneurs' growth. They are both considered one of the top ten countries to start a business and to have government support globally. However, education is entirely free to Danish students, including university degrees, compared to Canadians. This can further hurdle Canadian millennials to grow in the business world—the business experience more growth with educated entrepreneurs with international backgrounds in new immigrants.

Along with Ph.D. professors, entrepreneurs should be allowed to teach at learning intuitions. Millennials turn out to be the most entrepreneurial generation in both countries. Entrepreneurship education is only beneficial when students create businesses and learn from real-life experiences. Entrepreneurship is not about reading theory but practical work experience, from starting and closing your business to empowering young entrepreneurs. Managing physical, mental, emotional, and psychological health while dealing with high pressure in entrepreneurship are soft skills learned through practical work. The tests should be around practicality means handling the high-pressure situation, dealing with supply and demand, handling finances, accepting criticism, and learning from feedback in business. It takes a little humility for faculty to know that you need to get feedback from your students to learn and grow to take managerial and technical expertise to the next level. Denmark and Canada have immense potential and a growing population of young male and female entrepreneurs. With the right set of government and learning institutions strategies, entrepreneurship education is a must in all disciplines.

Keywords: Entrepreneurship Education, Millennials, Pandemic, Denmark, Canada

P133

Does team-based, collaborative learning influence students' learning and their confidence in a micro-credential course?

Mr Kin Guan Wee¹¹Singapore Polytechnic, Singapore

Background/context. The higher education institutions have been experimenting with different modes and formats of teaching and learning in response to the changes in international trends, industry needs and student profiles. "Intensive" modes of teaching, otherwise known as "accelerated," or "compressed" courses, are getting traction in such a rapidly changing education landscape (Davies, 2006). Other studies focus on short, bite-sized courses ("micro-credentials") as a mean to upskill workers and to promote lifelong learning (Beverly, 2019). New learning designs and pedagogies are required to implement such courses effectively.

The initiative/practice. This poster reports on the findings of an evidence-based case study that aims to promote student learning using the Team-Based Learning (TBL) pedagogy in relation to micro-credential courses in a revamped institution-wide curriculum. In a 6-week course, we implemented two TBL activities which consist of a three-step cycle: preparation, in-class readiness assurance testing and application-focused exercise (Michaelsen & Sweet, 2008). We aimed to demonstrate the positive impact of TBL on the preparedness, motivation, and confidence of the pre-university students in learning the subject of data fluency.

Methods of evaluative data collection and analysis. A total of 697 students enrolled in the course were surveyed using a pre-and post-TBL survey adapted from several studies (Frame et al., 2016; Goh et al., 2014; Mennenga, 2012) to assess changes in their cognition and metacognition levels. The survey included measures of content knowledge, self-directedness, and TBL effectiveness. Analysis of the paired data was performed using the paired t-test to explore the difference across the responses. The teaching team, which consisted of the course coordinator and 16 lecturers, reflected on the experience of implementing the TBL pedagogy and noted increased student engagement and active participation in group discussions.

Evidence of outcomes and effectiveness. Student surveys show that the confidence level of the students has increased, both in terms of content knowledge and perception of the TBL pedagogy. Eighty-four percent of the respondents commented that they would like to see other courses to be taught using the TBL pedagogy in their study at the institution.

References. Beverly, O. (2019). *Making micro-credentials work for learners, employers and providers*. Deakin University. <https://www.voced.edu.au/content/ngv:83922>

Davies, W. M. (2006). Intensive teaching formats: A review. *Issues in Educational Research*, 16(1), 1–20.

Michaelsen, L. K., & Sweet, M. (2008). The essential elements of team-based learning. *New Directions for Teaching and Learning*, 2008(116), 7–27. <https://doi.org/10.1002/tl.330>

Frame, T. R., Gryka, R., Kiersma, M. E., Todt, A. L., Cailor, S. M., & Chen, A. M. H. (2016). Student perceptions of and confidence in self-care course concepts using team-based learning. *American Journal of Pharmaceutical Education*, 80(3), 46. <https://doi.org/10.5688/ajpe80346>

Goh, A. Y., Ho, S. S., Lim, S. F., Ning, H. T., Ooi, S. J., & Aung, G. M. (2014). A study of student perceptions of team-based learning in electromagnetic induction. *Proceedings of the International Science Education Conference 2014*, 604–621.

<https://repository.nie.edu.sg/handle/10497/19198>

Mennenga, H. A. (2012). Development and psychometric testing of the team-based learning student assessment instrument. *Nurse Educator*, 37(4), 168–172. <https://doi.org/10.1097/NNE.0b013e31825a87cc>

P134

The efficacy of quizzes in online learning

Mr Mark Eggins¹, Dr Scott Doidge¹, Dr Rhonda Siu¹¹Australian Catholic University, Fitzroy, Australia

Background/context. The COVID-19 pandemic has precipitated a shift to online learning in higher education, resulting in major changes in pedagogical approaches and practices (Fabian et al., 2021; O’Dea & Stern, 2022; Pandya et al., 2022; Zhang et al., 2021). Consequently, online learning has become the default (Heo et al., 2021), rather than a complement to face-to-face instruction (O’Dea & Stern, 2022).

Kirkwood (2014, pp. 208, 215) has warned however of “technological determinism”, where digital uplift is viewed as inherently beneficial and its ability to enable deeper learning must be carefully considered. Furthermore, Bower (2017) stresses the central role of context (e.g., ability and motivation) in online learning.

The initiative/practice. A technological tool can develop tasks that correspond with Bloom’s Taxonomy levels (Bower, 2017; Kirkwood, 2014). For example, an H5P quiz can test recall of key concepts or their application to real-life situations. Quizzes furthermore are customisable, provide various formative feedback (Inspire, n.d.) and can improve students’ memory/recall (Schwieren et al., 2017; Sotola & Crede, 2021) especially in maths and science-based disciplines (Wilkinson et al., 2019). Despite these features, quizzes have been somewhat underexamined in higher education literature.

Methods of evaluative data collection and analysis. Drawing on learning analytics from ACU’s Learning Management System (LMS), this poster examines how online quizzes are employed in ACU’s faculties of Arts and Education and Law and Business. Looking at faculty utilisation, student participation and assessment outcomes, we consider best practice in fostering greater critical engagement and interactivity using quizzes as a key online resource tool.

Evidence of outcomes and effectiveness. Our research considers the pedagogical affordances of quizzes for online learning for both generic (academic literacy) and disciplinary applications. We illustrate that the deliberative use of quizzes can promote better student engagement, learning and retention.

References.

- Bower, M. (2017). *Design of technology-enhanced learning: Integrating research and practice*. Emerald Publishing Ltd.
- Fabian, K., Smith, S., Taylor-Smith, E., & Meharg, D. (2022). Identifying factors influencing study skills engagement and participation for online learners in higher education during COVID-19. *British Journal of Educational Technology*, 53(6), 1915-1936. <https://doi.org/10.1111/bjet.13221>
- Heo, H., Bonk, C. J., & Doo, M. Y. (2021). Enhancing learning engagement during COVID-19 pandemic: Self-efficacy in time management, technology use, and online learning environments. *Journal of Computer Assisted Learning*, 37(6), 1640-1652. <https://doi.org/10.1111/jcal.12603>
- Inspire. (n.d.). *Testing and quizzes*. Australian Catholic University. <https://www.inspiretoolkit.com.au/articles/testingquizzes>
- Kirkwood, A. (2014). Teaching and learning with technology in higher education: Blended and distance education needs “joined-up thinking” rather than technological determinism. *Open Learning: The Journal of Open, Distance and e-Learning*, 29(3), 206-221. <https://doi.org/10.1080/02680513.2015.1009884>
- O’Dea, X., & Stern, J. (2022). Virtually the same? Online higher education in the post Covid-19 era. *British Journal of Educational Technology*, 53(3), 437-442. <https://doi.org/10.1111/bjet.13211>
- Pandya, B., Patterson, L., & Cho, B. (2021). Pedagogical transitions experienced by higher education faculty members: “Pre-Covid to Covid”. *Journal of Applied Research in Higher Education*, 14(3), 987-1006. <https://doi.org/10.1108/JARHE-01-2021-0028>
- Schwieren, J., Barenberg, J., & Dutke, S. (2017). The testing effect in the psychology classroom: A meta-analytic perspective. *Psychology Learning & Teaching*, 16(2), 179-196. <https://doi.org/10.1177/1475725717695149>
- Sotola, L. K., & Crede, M. (2021). Regarding class quizzes: A meta-analytic synthesis of studies on the relationship between frequent low-stakes testing and class performance. *Educational Psychology Review*, 33, 407-426. <https://doi.org/10.1007/s10648-020-09563-9>
- Wilkinson, K., Dafoulas, G., Garelick, H., & Huyck, C. (2020). Are quiz-games an effective revision tool in anatomical sciences for higher education and what do students think of them? *British Journal of Educational Technology*, 51(30), 761-777. <https://doi.org/10.1111/bjet.12883>
- Zhang, L., Carter Jr., R. A., Qian, X., Yang, S., Rujimora, J., & Wen, S. (2022). Academia’s responses to crisis: A bibliometric analysis of literature on online learning in higher education during COVID-19. *British Journal of Educational Technology*, 53(3), 620-646. <https://doi.org/10.1111/bjet.13191>

P135

Rolling your AI's: embracing AI image generators in design education

Dr Damian Gascoigne¹, Mr Petr Joura¹

¹JMC Academy, Sydney, Australia

Background/context. AI image generators use in tertiary education for creative practice

The initiative/practice. Practice exploration of affordances and limits of new platforms

Methods of evaluative data collection and analysis. New AI creative outcomes assessed against existing criteria

Evidence of outcomes and effectiveness. Outcomes will be used as examples to open discussion around copyright and creative process in tertiary design education

Abstract. The sudden wave of AI image and text generators has caught tertiary education by surprise, prompting a collective panic around plagiarism. How can visual arts educators engage proactively and ethically with these emerging tools? To address this new paradigm, Dr. Damian Gascoigne and Petr Joura will use the 'Stable Diffusion' AI image generator to create a series of new concept art and character design outcomes and reflect on how these outcomes compare to core educational expectations of student effort, commitment to exploration, originality of outcome, and critical thinking.

The project employs a practice research methodology, conducting practice tests and maintaining a research log to record insights and reflections on outcomes. Visual outcomes will be created in stages, and each output will be accompanied by text, analysing the problems found in the process, insights gained, and further methods suggested.

Starting with the research question- "what do we have to gain and what might we lose when we ask AI to make our design work for us?" - we will conduct 10 creative practice tests, based on problem-solving tasks from Animation and Games teaching practice. We will use AI prompts in a step-by-step design process to generate new visual outcomes which adhere to our teaching methodology- research, ideation, iteration, revision, refinement, outcome.

The creative outcomes will provide our 'practice data,' artefacts for analysis and discussion, rather than conclusive evidence. They will act as a departure point for open debate with our students and the academy about what constitutes authorship, originality, and sustained effort. Here we are asking- how we can work together to construct a new, exploratory language, a robust and challenging practice methodology, and avoid the pitfalls of lazy instantaneity?

References.

- Barnett, S (2023 January 30) *ChatGPT Is Making Universities Rethink Plagiarism*. <https://www.wired.com/story/chatgpt-college-university-plagiarism/>
- Bloom, B.S. (Ed.), Engelhart, M.D., Furst, E.J., Hill, W.H., & Krathwohl, D.R. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook 1: Cognitive domain*. New York: David McKay.
- Borschke, M and ProQuest (2017) *This is not a Remix: Piracy, Authenticity and Popular Music*, Bloomsbury Academic, New York, NY.
- Cassidy, C (2023, January 10) <https://www.theguardian.com/australia-news/2023/jan/10/universities-to-return-to-pen-and-paper-exams-after-students-caught-using-ai-to-write-essays>
- Collins, R. (2014). 'Skills for the 21st Century: teaching higher-order thinking.' *Curriculum & Leadership Journal*, 12(14). http://www.curriculum.edu.au/leader/teaching_higher_order_thinking,37431.html
- Csikszentmihalyi M. (2014). *Flow and the foundations of positive psychology : the collected works of mihaly csikszentmihalyi*. Springer. <https://doi.org/10.1007/978-94-017-9088-8>
- Dorst K. (2015). *Frame innovation: create new thinking by design*. MIT Press. Retrieved February 10 2023 from <https://cornell-library.skillport.com/skillportfe/main.action?assetid=82609>.
- Gray, Caroline (1996) *'Inquiry Through Practice: Developing Appropriate Research Strategies*, in 'No Guru, No Method,' UIAH, Helsinki
- Harris, Miriam, (editor.) & Husbands, Lilly, (editor.) & Taberham, Paul, (editor.) (2019). *Experimental animation: from analogue to digital* (1st). Routledge/Taylor & Francis Group, London; New York
- Kolb D. A. (2015). *Experiential learning: experience as the source of learning and development* (Second). Pearson Education.
- Manovich L (2006) 'Deep Remixability', *Remix Theory* online, accessed August 16 2016, <http://remixtheory.net/?p=61>
- Schön, Donald A (1983). *The reflective practitioner: how professionals think in action*. Basic Books, New York
- Stanford University Libraries (2013) *What is Fair use?* <https://Fairuse.Stanford.Edu/Overview/Fair-Use/What-Is-Fair-Use/>

P136

"I feel at home in this environment": A qualitative study on motivating factors for pursuing a doctoral degree

Dr Africa Hands¹¹University At Buffalo, Buffalo, United States

Background/context. In the interdisciplinary field of library and information science (LIS), doctoral education research has focused on program and student characteristics (Brown-Syed, Baker, & Wick, 2008), mentoring (Sugimoto, 2012), and dissertation research topics (Song, Zhu, & Shu, 2021). Doctoral student motivation is an unexamined topic in LIS.

The initiative/practice. This paper reports on an investigation of doctoral student motivation in LIS, addressing the question: *What initial factors motivate individuals to earn a doctoral degree?*

Methods of evaluative data collection and analysis. Semi-structured interviews were conducted with first-year doctoral students studying at institutions in the United States (n=4) and Canada (n=3). Four students identified as white, two as Asian, and one as Black. The sample included one male student and one student who identified as genderqueer. Participants' ages ranged from 25-54 years, with most students in the 25-34 age category. Most of the participants began doctoral study immediately after completing a master's degree in such subjects as journalism, political science, literature, and art history. Students reported previously working in the nonprofit sector and higher education student affairs, to name a few. Interview transcripts were subjected to rounds of coding (Saldaña, 2016) and constant comparative analysis (Corbin & Strauss, 2015) to identify motivating factors.

Evidence of outcomes and effectiveness. This paper focuses on the motivational factor of the appeal of the scholarly environment. Participants were motivated by being in environments that showcased research and scholarly interests, for example, academic conferences. Participants were drawn to the opportunity to pursue their research ambitions in the structured setting of a doctoral program as opposed to a workplace setting such as a think tank. Pursuing a doctoral degree had the added benefit of availing students of on-campus symposia and guest lectures. This research highlights activities and environments that pique interest in doctoral study. It also notes the importance of involving students in activities that afford an opportunity to interact with scholars. Faculty advisors and mentors are encouraged to involve prospective students in the whole life of research – from idea generation to publication and presentation – so that students have a holistic view of the scholarly environment before beginning doctoral study.

References. Brown-Syed, C., Baker, L., & Wicks, D. (2008). Doctoral recruitment factors: Results of a survey of deans and directors. *Journal of Education for Library and Information Science*, *f49*(2), 107-115.

Corbin, J. M. & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.

Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Thousand Oaks, CA: SAGE Publications Inc.

Song, Y., Zhu, L., & Shu, F. (2021). On the evolution of library and information science doctoral dissertation topics in China. *Journal of Librarianship and Information Science*, *53*(2), 298-306.

Sugimoto, C. (2012). Are you my mentor? Identifying mentors and their roles in LIS doctoral education. *Journal of Education for Library and Information Science*, *53*(1), 2-19.

P137

Making economics teaching more engaging**Dr John Hawkins**¹, Dr Ben Freyens¹¹University of Canberra, Bruce, Australia**Background/context.** Economics has become less popular in universities (and high schools).**The initiative/practice.** We have made our economics classes more engaging, including by filming a video in a real world market.**Methods of evaluative data collection and analysis.** We evaluated our approach using both a formal student evaluation questionnaire and informal discussions in tutorials.**Evidence of outcomes and effectiveness.** Students reacted positively to the initiatives.

The drop in economics student numbers at both universities and high schools has been attributed to a preference for 'business studies' which are perceived as being more relevant, more remunerative and less mathematical (and therefore easier).

In response, we have been making our economics classes more engaging. To bring life to traditionally dry economic content, we filmed a video at a food market near the university. We discussed with shop owners their experiences of economic concepts such as fixed and variable costs, price elasticity, competition and product differentiation. The video illustrated how practitioners apply economic concepts in the real world. To give it a professional quality, two communications students from our arts faculty were engaged to film and record sound and do post-production editing.

Among other innovations, we illustrate game theory by playing games in tutorials. We apply economic analysis to popular culture such as the economics of Star Wars. We provide a playlist of economics-related songs. We also reflect Indigenous experience by using Anita Heiss' book.

References.

Dwyer, J. (2018). What happened to the study of economics? Speech on 26 May. Reserve Bank of Australia

Heiss, A (2016). *Barbed Wire and Cherry Blossoms*. Simon & Schuster.Lovico, G.(2021). The transition from high school to university economics. *Reserve Bank of Australia Bulletin*, 62-70.Wooten, J. & Al-Bahrani, A. (2021). Economics in a crisis: a cautious approach to being relevant, *Journal of Economics Teaching*, 5(4), 143-151.

P138

University student well-being in times of COVID-19 in the Netherlands. Individual and contextual factors within the academic learning environment**Miss Lisa Kiltz**¹, Miss Miranda Trippenzee², Prof Dr Joke Fleer², Dr Marjon Fokkens-Bruinsma¹, Dr Ellen P. W. A. Jansen¹¹University of Groningen, Groningen, Netherlands, ²University Medical Centre Groningen, Groningen, Netherlands**Background/context.** The COVID-19 pandemic has affected student well-being with its accompanying measures. Well-being depends on both individual (e.g., self-compassion; Li et al., 2021) and contextual factors within the academic learning environment, for which the basic psychological needs of autonomy, competence, and relatedness, as stated in the Self-Determination Theory (Deci & Ryan, 1985), have proven essential for higher educational environments.**The initiative/practice.** We implemented a cross-sectional mixed-method design encompassing quantitative and open-ended qualitative questions focused on individual and contextual factors.**Methods of evaluative data collection and analysis.** We distributed a survey including measures of intolerance of uncertainty, self-regulation, -compassion, resilience, and posttraumatic growth as individual factors. For the contextual factors, we assessed need satisfaction and frustration. Open-ended questions addressed students' experiences throughout the COVID-19 pandemic. For the quantitative measures, we ran multiple regressions to determine the factors' predictive strength; for the qualitative data, we used content analysis to identify central topics and themes.**Evidence of outcomes and effectiveness.** Our findings demonstrate that on an individual level, mainly self-regulation ($\beta = .38^{**}$) and -compassion ($\beta = .25^{**}$) determine well-being, followed by resilience ($\beta = .08^*$). Regarding posttraumatic growth, relating to others ($\beta = .16^{**}$) and new possibilities ($\beta = .11^{**}$) significantly predicted student well-being. However, students' qualitative responses describe the whole range of posttraumatic growth as well as a wealth of positive and negative insights from the COVID-19 period. On a contextual level, satisfaction and frustration of all three basic psychological needs relate to well-being, with competence frustration correlating the highest ($\beta = .44^{**}$) and relatedness frustration the weakest ($\beta = 0.03$). Students' qualitative responses, in contrast, particularly highlight the compromised role of relatedness in distance education. Lastly, they gave input and suggestions regarding a potential new educational normal, highlighting hybrid education and the significance of social life during one's studies.**References.** Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Springer Science+Business Media.Li, A., Wang, S., Cai, M., Sun, R., & Liu, X. (2021). Self-compassion and life-satisfaction among Chinese self-quarantined residents during COVID-19 pandemic: A moderated mediation model of positive coping and gender. *Personality and individual differences*, 170, 110457.

P139

Predicting students' mathematics self-efficacy in an enabling program

Ms Pek Foong Ng¹, Dr Kung Keat Teoh²

¹University of South Australia, Adelaide, Australia, ²Flinders University, Adelaide, Australia

Background/context. Previous studies have shown that students' self-efficacy is positively related to mathematics achievement (Liang, 2010; McConney & Perry, 2010; Ugwuanyi et al., 2020). Skaalvik et al. (2014) suggest that affective factors such as emotional support, self-efficacy, help-seeking behaviour, effort and persistence affect students' mathematics success. Despite the increasing recognition of the impact of affective factors on mathematics learning success, there remains a significant gap in our understanding of how mathematics teachers address affective factors in their teaching.

The initiative/practice. This study examined the role of motivation factors and mathematics attitude on students' mathematics self-efficacy. The results will inform teaching practitioners how to improve student success by addressing factors which have been identified to influence mathematics self-efficacy.

Methods of evaluative data collection and analysis. This study employs a correlational research design using a survey with seven scales. The items in these scales were adapted from Tuan et al. (2005) and Lim and Chapman (2013a, 2013b) to suit the mathematics courses in an enabling program. The study participants comprised of 483 enabling program students in mathematics courses. The reliability indices of the scales range from 0.71 to 0.92. Multiple regression analysis was conducted using SPSS to determine the relative contribution of each construct and to determine the statistical significance of the results.

Evidence of outcomes and effectiveness. The results showed that motivation factors and attitude toward mathematics had significant relationships with students' mathematics self-efficacy. There was a strong negative correlation between mathematics anxiety and self-efficacy, with high levels of perceived mathematics anxiety associated with lower levels of self-efficacy. As expected, students who enjoy learning mathematics were more confident in learning mathematics. While students' active learning strategies correlates positively to self-efficacy, perceived usefulness of mathematics did not significantly contribute to predicting the level of students' self-efficacy.

References.

- Liang, X. (2010). Assessment use, self-efficacy and mathematics achievement: comparative analysis of PISA 2003 data of Finland, Canada and the USA. *Evaluation & Research in Education*, 23(3), 213-229. <https://doi.org/10.1080/09500790.2010.490875>
- Lim, S. Y., & Chapman, E. (2013a). Development of a short form of the attitudes toward mathematics inventory. *Educational studies in mathematics*, 82, 145-164. <https://doi.org/10.1007/s10649-012-9414-x>
- Lim, S. Y., & Chapman, E. (2013b). An investigation of the Fennema-Sherman mathematics anxiety subscale. *Measurement and Evaluation in Counseling and Development*, 46(1), 26-37. <https://doi.org/10.1177/0748175612459198>
- McConney, A., & Perry, L. B. (2010). Socioeconomic status, self-efficacy, and mathematics achievement in Australia: A secondary analysis. *Educational Research for Policy and Practice*, 9, 77-91. <https://doi.org/10.1007/s10671-010-9083-4>
- Skaalvik, E. M., Federici, R. A., & Klassen, R. M. (2015). Mathematics achievement and self-efficacy: Relations with motivation for mathematics. *International Journal of Educational Research*, 72, 129-136. <https://doi.org/10.1016/j.ijer.2015.06.008>
- Tuan, H. L., Chin, C. C., & Shieh, S. H. (2005). The development of a questionnaire to measure students' motivation towards science learning. *International journal of science education*, 27(6), 639-654. <https://doi.org/10.1080/0950069042000323737>
- Ugwuanyi, C. S., Okeke, C. I., & Ageda, T. A. (2020). Motivation and self-efficacy as predictors of learners' academic achievement. *Journal of Sociology and Social Anthropology*, 11(3-4), 215-222. <http://dx.doi.org/10.31901/24566764.2020/11.3-4.351>

P140

Investigating students' perspectives of non-graded assessment in medical education

Dr Caroline Parsons¹, Dr Nga (Angie) Nguyen¹, **Dr Carl Parsons¹**

¹Western Sydney University, Penrith, Australia

Background/context. There is a move in medical education away from traditional multi-tiered grading systems to two-tiered systems such as pass/fail. This system of assessment focusses on achievement of competencies. In competency-based medical education the emphasis of learning environments focuses on outcomes, capabilities, and learner-centeredness, where students take an active role in learning (Ross et al., 2022). With a focus on sustained evidence of professional competence, this calls for new methods of teaching and assessment. A clear and positive outcome of a two-tiered grading system is the improved well-being of students (Bloodgood et al. 2009). Moreover, there is evidence to suggest that collaborative learning and cohort cohesion is enhanced following the introduction of a two-tiered grading system (Spring et al, 2011). However, a major argument against implementation of two-tiered grading systems is the perception that students will be less motivated to learn. This stems from the belief that medical students are extrinsically motivated to learn in order to achieve passing and higher grades. There is little evidence to support this belief.

The initiative/practice. This research project aims to present and discuss the associated opportunities and challenges from students' perspectives of a change from a multi-tiered to a two-tiered grading system. The findings provide insights into factors affecting student motivation and engagement in learning.

Methods of evaluative data collection and analysis. This paper presents findings from eight student focus group interviews exploring students' perspectives of the changes from multi-tiered to two-tiered assessments in a medical program at a cosmopolitan Australian university.

Evidence of outcomes and effectiveness. The results of the analysis reflect respondents mixed viewed of non-weighted assessment systems. Our findings support previous evidence that a two-tiered system supports student well-being. However, students raised concerns about their motivation to learn and the importance of a mark to provide feedback on their performance.

References.

Bloodgood, R.A., et al., A change to pass/fail grading in the first two years at one medical school results in improved psychological well-being. *Academic Medicine*, 2009. 84(5): p. 655-62.

Ross, S., Pirraglia, C., Aquilina, A. M., & Zulla, R. (2022). Effective competency-based medical education requires learning environments that promote a mastery goal orientation: A narrative review. *Medical Teacher*, 44(5), 527-534.

Spring, L., Robillard, D., Gehlbach, L., & Moore Simas, T. A. (2011). Impact of pass/fail grading on medical students' well-being and academic outcomes. *Medical education*, 45(9), 867-877.

P141**An Inclusive Virtual Learning Environment (VLE) – how we developed the VLE post the pandemic****Mrs Patricia Perlman-Dee¹**¹*University of Manchester, Manchester, United Kingdom*

Background/context. The pandemic completely changed the way we approach teaching and learning. Overnight changes had to be made, and the reliance on technology was immense. Even though VLE has been part of higher education for an extensive period, the pandemic made us change how we approach the usage of these platforms.

The initiative/practice. This Poster will enhance the audience with learning's of how efficient and thoughtful restructuring of the traditional VLE made the student learning experience a far more inclusive and accessible environment to support learning post covid.

The audience will take away a set of practical implementations of making their VLE a more flexible and inclusive learners' tool. The Poster is focusing on how changes that were initially made as a response to of the pandemic, created an opportunity for more inclusive learning.

Methods of evaluative data collection and analysis. The development and evaluation of the VLE was gradually built up over the pandemic, with the "final" product" being implemented Autumn 2022 and onwards. The initial evaluation has been by collecting feedback from students on the effectiveness of the structure of the VLE. It has also been measured by comparing the number of "logistics" emails sent to the course co-ordinator.

Evidence of outcomes and effectiveness. Through and post the pandemic, additional changes to the VLE were made, building further on these initial smaller tweaks. The result is that the usage of the VLE in the courses today is not just a "place to keep resources", but a place where learning is a truly inclusive experience. Besides using a range of learning resources and content, the usage of VLE is also structured in a manner where all learners are included, but at the same time create a high level of individuality, catering to different learning style as well.

References.

- Diab-Bahman, R. (2021). *VLEs in a Post-COVID World: Kuwait's Universities* [Chapter]. Challenges and Opportunities for the Global Implementation of E-Learning Frameworks; IGI Global. <https://doi.org/10.4018/978-1-7998-7607-6.ch016>
- Nowfeek, M. R. M., & Rupasinghe, Dr. L. (2022). Development of a Virtual Learning Environment (VLE) During the COVID -19 Pandemic: A Study with special reference to Advanced Technological Institute. *International Journal of Latest Technology in Engineering, Management & Applied Science*, 11(01), 32–46. <https://doi.org/10.51583/IJLTEMAS.2021.11103>
- Reflections for the future—Taking forward learning from the global pandemic.* (n.d.). Retrieved 7 February 2023, from <https://www.qaa.ac.uk/news-events/blog/reflections-for-the-future-taking-forward-learning-from-the-global-pandemic#>

P142

Indonesian teachers' learning experience from Australian context

Mrs Yayan Rahayani¹¹University of South Australia, Magill, Australia

Background/context. Transnational education (TNE) refers to education programs in which learners come from a country different from the one where the awarding institution is based. TNE encompasses mobile and diverse student cohorts, a complex array of educational programs and a range of providers that service students across countries in a multicultural setting. Australia is known as one of leading providers of TNE along with UK and USA. Meanwhile, Southeast Asia is one of the main destinations for Australian TNE providers. With the emergence of TNE, it attracts Indonesian teachers to pursue any program for their professional development overseas, including Australia.

The initiative/practice. The increase of interest in the Australian TNE programs including professional development for teachers, reflect both challenges and opportunities for TNE providers. There is a concern that TNE providers in Australia is remain monocultural, which still lack of understanding regarding cultural sensitivity towards international recipients. Hence, this study will investigate one of the Australian TNE practices held for Indonesian teachers through their professional development program. The focus of this paper is to examine how Indonesian teachers learning experiences during the program and to what extent to which they are supported culturally within the programs.

Methods of evaluative data collection and analysis. This is qualitative research that employs an ethnographically informed case study approach using in-depth interviews.

Evidence of outcomes and effectiveness. The preliminary results of the study highlights that the program contributed positively toward participants in term of gaining new experiences although the program only accommodating participants' culture and religious superficially. additionally, the lack of focus given to the local context of participants. Meaning that the pedagogical focus of the content does not address the local contexts of the participants' country or origin.

References.

Ladson-Billings, G. (1995). Toward a Theory of Culturally Relevant Pedagogy. *American Educational Research Journal*, 32(3), 465–491. <https://doi.org/10.3102/00028312032003465>.

Marginson, S. (2002). Education in the global market: Lessons from Australia. *Academe*, 88(3), 22–24. <https://doi.org/10.2307/4025215>.

McBurnie, G., & Ziguras, C. (2006). *Transnational education: Issues and trends in offshore higher education*. Taylor & Francis Group.

P144

Pursuit of increased employability through authentic learnings

Ms Rachel Sinanan¹, Dr Justine Ferrer¹, Ms Layla Clarkson-Eather¹

¹Deakin University, Melbourne, Australia

Background/context. Authentic learning (AL) is fast becoming a priority within the educational sectors to increase student employability (Lombardi, 2007) AL can be viewed as understanding and learning through linking learning, knowledge and everyday life through realism, contextualisation and problematisation (Raymond et al., 2013). With over 40% of Generation Z stating they will move jobs over the next two years, increasing employability needs to be a priority, with AL central to this approach (Deloitte, 2022). AL can enhance the employability of students, particularly using assessments, where we give students the opportunity to connect their theoretical knowledge and skills to real-world experiences (Keenan & Stewart-Wells, 2021).

The initiative/practice. Using an AL approach, this undertaking reviewed the authenticity of a newly developed industry co-designed major in Recruitment and Talent Acquisition (RTA). The purpose was to capture current authentic assessments and activities, identify gaps and subsequent opportunities for improvement.

Methods of evaluative data collection and analysis. Qualitative data was collected for the audit from unit weekly topic learning outcomes and unit assessments across the RTA major, as available within the Universities learning management system. Using the Expanded Authenticity-Proximity (EAP) framework by (Kaider et al., 2017) each unit was individually mapped, providing a substantive cross section of the major in order for recommendations to be drawn.

Evidence of outcomes and effectiveness. AL is not only shown to increase employability outcomes, but has also been shown to increase student engagement and satisfaction (Sokhanvar et al., 2021). The results from the audit have demonstrated that the RTA major delivers somewhat on AL, with each unit varying on the degree of authenticity/proximity needed to improve employability. The audit confirmed that more work is needed in the major – even one which has been codesigned with industry.

References.

- Kaider, F., Hains-Wesson, R., & Young, K. (2017). Practical Typology of Authentic Work-Integrated Learning Activities and Assessments. *Asia-Pacific Journal of Cooperative Education*, 18(2), 153–165. ERIC.
- Keenan, K. M., & Stewart-Wells, A. G. (2021). Moving Beyond Comprehensive Exams: Implementing Authentic Assessments to Enhance Doctoral Student Learning. *Christian Higher Education*, 20(1/2), 69–86. Academic Search Complete.
- Lombardi, M. (2007). *Authentic Learning for the 21st Century: An Overview*.
- Raymond, J. E., Homer, C. S. E., Smith, R., & Gray, J. E. (2013). Learning through authentic assessment: An evaluation of a new development in the undergraduate midwifery curriculum. *Nurse Education in Practice*, 13(5), 471–476.
<https://doi.org/10.1016/j.nepr.2012.10.006>
- Sokhanvar, Z., Salehi, K., & Sokhanvar, F. (2021). Advantages of authentic assessment for improving the learning experience and employability skills of higher education students: A systematic literature review. *Studies in Educational Evaluation*, 70. ScienceDirect.
<https://ezproxy.deakin.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edselp&AN=50191491X21000560&site=eds-live&scope=site>

P145**Promoting emotional intelligence among radiotherapy students through experiential learning experience****Mr Ka Yiu Wong¹, Ms Sum Yin Serene Ho¹**, Dr Wan Shun Vincent Leung¹, Dr Wee Yee Shara Lee¹¹The Hong Kong Polytechnic University, Hong Kong SAR

Background/context. Emotional intelligence (EI) is of paramount importance for radiation therapists who provide daily care to cancer patients. Our institution has successfully implemented an experiential learning module (ELM) to develop the EI of undergraduate radiotherapy (RT) students. This study explored the effect of the ELM and evaluated the impact of ELM and clinical placement in promoting the EI of students.

The initiative/practice. This ELM is a community-engaged project in collaboration with the Children's Cancer Foundation. Senior-year RT students (mentors) work in pairs with a cancer survivor (mentee) for 4 months on a goal that will facilitate their personal development. Students are expected to embrace a caring attitude, develop reflective practice and skills in solving complex problems throughout the process.

Methods of evaluative data collection and analysis. All (n=31) senior-year RT students participated in this ELM. Standardised EI (Situational Test of Emotion Management (STEM), Situational Test of Emotional Understanding (STEU) and Trait Emotional Intelligence Questionnaire-Short Form) questionnaires were distributed to assess their level of EI before and after the module. We also compared the performance of two groups of students with different levels of clinical experience. Paired sample t-test was used to analyse the effect of the ELM on EI, and independent sample t-test was to analyse the effect of different levels of clinical experience. A $p < 0.05$ was considered significant.

Evidence of outcomes and effectiveness. The trait EI performance scores improved significantly from 4.437 to 4.688 ($p = 0.02$) upon completion of the ELM. There was no significant difference in the performance scores across the two groups with different levels of clinical experience. Compared to clinical placement, the ELM may be more effective in developing student's EI. The module provides a precious opportunity to develop the EI of students while supporting cancer survivors through peer mentorship. Similar programmes could be incorporated into the curriculum for promoting EI development among healthcare professional students.

P146**Location of study and the performance of Chinese students in an Australian university's accounting program****Dr Helen Yang¹**, Prof Alan Farley^{1,2}¹La Trobe University, Bundoora, Australia, ²Victoria University, Melbourne, Australia

Background/context. Chinese international students through transnational education programs (TNE) account for a significant percentage of the university accounting students in Australia (and in many other English-speaking countries).

The initiative/practice. This study speaks to the omission in the current literature on the impact of location of study on the academic performance of Chinese students in the TNE context. Specifically, the study addresses the overall research question: Does the academic performance differ between Chinese students who choose to stay in China versus those who choose to come to Australia to undertake the same accounting degree?

Methods of evaluative data collection and analysis. Data were drawn from Chinese students who completed the AU's pathway program (i.e., equivalent to first year) and were admitted and completed in the AU's accounting degree program at a Chinese university. Two sets of data were collected: The first set of data was collected for second-year students of whom 193 studied in China and 248 in Australia; the second set of data was collected for third year students of whom 145 studied in China, and 172 studied in Australia. Comparative analysis was conducted on second-year and third-year degree performance of Chinese students based in China (CCN) and those who transferred to Australia (CAU). Results are analyzed through the perspectives of Hofstede (1997)'s cultural dimensions and cognitive load theory (Sweller, 2010). Academic ability is controlled for by using performance in first year.

Evidence of outcomes and effectiveness. The findings of this study (funded by Australian government) reveal that when matched on academic ability, CCN performed better than CAU in the second-year subjects. However, CAU performed better in the third-year subjects than CCN. Results suggest the influence of intercultural learning on the academic performance of CAU compared to CCN. The study has implications for teaching and learning support in Western English-speaking universities' TNE programs. The findings suggest customized student support is needed to assist the transition of Chinese students from the learning environment in their home country to that of Australia.

References.Hofstede, G. (1997). *Cultures and organizations: software of the mind*. London: Mc Graw Hill.Sweller, J. (2010). Element interactivity and intrinsic, extraneous, and germane cognitive load. *Educational Psychology Review*, 22(2), 123-138. <https://doi.org/10.1007/s10648-010-9128-5>

P147

Unveiling the influence of feedback valency and achievement emotions on students' feedback use

Dr Yang Yann Foo¹, Dr Mark Gan²¹Duke-NUS Medical School, Singapore, ²National University of Singapore, Singapore

The on-going challenge to improve students' variable feedback uptake (Jonsson & Panadero, 2018) has prompted calls to understand how emotions (Goetz et al., 2018) affect the way students process and use feedback (Lipnevich & Smith, 2022).

Our study was underpinned by Pekrun's (2006) control-value theory (CVT) of achievement emotions, and was guided by this question: How do feedback valency and achievement emotions influence graduate medical students' processing and uptake of feedback?

We conducted 6 focus group discussions (FGD) and 12 interviews with 27 graduate medical students in Singapore (age: 18 to 35 with and without working experience; Year 1=9, Year 2=2, Year 3=9, Year 4=7). Voluntary recruitment was made via email, posters and presentations at student meetings. We asked them to describe the emotions they experienced when given positive and negative feedback, and how these emotions influenced their feedback uptake. The FGD and interviews were audio-recorded and transcribed and analyzed using reflexive thematic (Terry et al., 2017). Three researchers wrote familiarization notes, coded the data inductively (at both latent and semantic levels) and deductively (sensitized by CVT constructs of perceived control, perceived value and activating achievement emotions). Candidate themes were then constructed, revised and finalized.

We constructed two themes: 1) feedback uptake depended more on whether it offered opportunities for improvement than valency; and 2) the learning culture in medical education (Watling et al., 2014) may foster self-regulation of emotions, influencing feedback uptake. Analysis showed that feedback deemed to offer opportunities for improvement was specific, timely, actionable, credible, and constructive (STACC). Whether positive or negative, all STACC feedback tended to foster uptake because it aroused activating achievement emotions. Many participants reported that STACC feedback enabled them to experience high perceived control for future performance. In turn, this created high perceived value of the feedback for supporting them in attaining their goals of passing examinations and becoming competent doctors. By contrast, vague and generic feedback, even praises, was typically ignored by the participants. Analysis also indicated that the concept of learning culture helped to explain why the participants in medicine accepted and used negative feedback with STACC features. In the medical education setting, busy clinician-teachers often prioritized patient care over teaching and feedback. As such, students' have little expectations of receiving faculty's attention and were thus appreciative of receiving feedback. Medical students also saw it as their responsibility to learn independently.

Our findings showed that negative feedback could foster uptake if it has STACC features, which is in contrast to prior research that indicated that negative feedback produced negative emotions which led to poor feedback uptake (Sargeant et al., 2005; Goetz et al., 2018). Our findings suggest that clinician-teachers need to consider both STACC feedback features and learners' emotional regulation. For future research, we recommend that scholars outside of medical education examine the impact of negative STACC feedback on learners in different higher education settings.

References.

Goetz, T., Lipnevich, A. A., Maiké, K., & Gogol, K. (2018). Performance Feedback and Emotions. In A. A. Lipnevich & J. K. Smith (Eds.), *The Cambridge Handbook of Instructional Feedback* (pp. 554-574). Cambridge University Press. <https://doi.org/10.1017/9781316832134.026>

Jonsson, A., & Panadero, E. (2018). Facilitating Students' Active Engagement with Feedback. In A. A. Lipnevich & J. K. Smith (Eds.), *The Cambridge Handbook of Instructional Feedback* (pp. 531-553). Cambridge University Press. <https://doi.org/10.1017/9781316832134.026>

Lipnevich, A. A., & Smith, J. K. (2022). Student-Feedback Interaction Model: Revised. *Studies in Educational Evaluation*, 75, 101208. <https://doi.org/10.1016/j.stueduc.2022.101208>

Pekrun, R. (2006). The Control-Value Theory of Achievement Emotions: Assumptions, Corollaries, and Implications for Educational Research and Practice. *Educational Psychology Review*, 18(4), 315-341. <https://doi.org/10.1007/s10648-006-9029-9>

Sargeant, J., Mann, K., & Ferrier, S. (2005). Exploring family physicians' reactions to multisource feedback: perceptions of credibility and usefulness. *Medical education*, 39(5), 497-504.

Watling, C., Driessen, E., van der Vleuten, C. P., & Lingard, L. (2014). Learning culture and feedback: an international study of medical athletes and musicians. *Medical Education*, 48(7), 713-723.

P148**Motivation for major choice and college satisfaction associated with department commitment and learning outcomes****Dr Tzu-ling Hsieh¹**¹*University of Taipei, Institute of Educational Administration and Evaluation, Taipei, Taiwan*

The goal of this study used multiple regression analysis to investigate the relationship between motivation for major choice and student satisfaction with department commitment and learning outcomes. This study provides a comprehensive viewpoint of multi-category motivation for major choice with the key variable of college satisfaction. A survey method was used to collect the data from freshmen students at a four-year research university in Taiwan. The instrumentation used in this study was four scales: Motivation for Major Choice, College Student Satisfaction, Department Commitment, and College Student Learning Outcome. The findings indicate that the two variables of introjected motivation and intrinsic motivation were influential in predicting the department commitment of college students, while the three variables of introjected motivation, satisfaction for teaching, and satisfaction for curriculum were influential in predicting the learning outcomes of college students. In addition, this study also tried to answer the key question that emerged from a review of the literature: is the initial motivation for major choice or the following college learning experience influential to the college learning outcome? The preliminary answer was that both are influential. The findings show in more detail that among different kinds of motivation for major choice, introjected motivation was the key to predicting college learning outcome, while among different kinds of college learning experiences, satisfaction with teaching and curriculum were the most influential for predicting college learning outcome. Two practical implications result from these findings. First, this study suggests that college admission officers may put more effort into reviewing the statements of each applicant to make sure they have appropriate expectations for college and their major choice. Second, this study proposes that college admission officers or other related staff might market the distinguishing features of their college and major departments to parents and teachers.

Key words: motivation, major choice, satisfaction, commitment, learning outcome

P149**Learning analytics in higher education. Can we predict student performance and support student learning using LMS data?****Dr Ari Pinar¹, Assoc Prof Julia Choate¹**¹*Monash University, Melbourne, Australia*

Background/context. With the continued shift and emphasis toward delivering educational content in the online space, this study set out to gain valuable insights on how our students are increasingly engaging with Learning Management Systems (LMSs) for their learning.

The initiative/practice. A data mining approach was used to investigate whether digital data from LMSs could be used to predict academic performance of students.

Methods of evaluative data collection and analysis. Over the course of a semester, LMS activity data was collected for a cohort of undergraduate Biomedical Science students (N=534) enrolled in a core second year subject. This student activity included – total number of page clicks, total number of LMS course and content page clicks (e.g., lecture lessons), total number of discussion forum posts and views, total number of formative quiz attempts and reviews, total views and downloads of lecture recordings, and, average time spent viewing lecture recordings. Measures of student activity from these digital data were used to predict academic performance (students' final unit and exam results), using linear regression and *k*-means cluster analyses.

Evidence of outcomes and effectiveness. We demonstrate the utility of LMS log data in determining the predictors of academic performance (namely average time spent viewing lecture recordings), and in particular, constructing 'profiles' of student engagement. The current findings provide valuable insights on how our students are increasingly engaging with the LMS for their learning. As delivery of tertiary education towards the online space continues to gain momentum, this evidence-based approach will help inform and enhance teaching practices, while supporting the development of teaching resources that better compliment student behaviours, identified to predict academic performance.

References. Conijn, R., Snijders, C., Kleingeld, A., & Matzat, U. (2017). Predicting Student Performance from LMS Data: A Comparison of 17 Blended Courses Using Moodle LMS. *IEEE Transactions on Learning Technologies*, 10(1), 17-29.

P150**First year student experiences in Arts: a longitudinal study through the ever-changing shape of pandemic**

Dr Wajeehah Aayeshah¹, **Dr Nira Rahman**¹

¹Arts Teaching Innovation, University of Melbourne, Parkville, Australia

Background/context. First year university students are full of excitement and nervousness in beginning of their academic journey and require a particular sort of initiation to steer their university life (Ribeiro et al. 2019). Covid19 has disrupted the usual practices and experiences of first year students with most students not being able to experience campus until the end of 2nd year, and in many cases not even that (Anderson et al. 2022). However, students are slowly coming back on campus, and most universities are set to have face-to-face teaching for 2023.

The initiative/practice. This longitudinal research reports on an on-going Action Research project. This project was designed to gauge first year arts students experience with their foundation subject. This presentation is focused on similarities and differences in student expectations from their first-year foundation subjects before, during, and current shape of pandemic.

Methods of evaluative data collection and analysis. The first-year foundation experience was gauged as a part of larger student experience and engagement research. A thematic analysis of the data was conducted to identify themes and patterns that emerged from the responses.

Evidence of outcomes and effectiveness. Our research reports three primary findings. One, meaningful connections between students and academics continues to be unsatisfactory. Two, there is a stronger call for inclusivity, cultural sensitivity, accessibility, and critical engagement with issues around 'future ready graduates' within the curriculum. Three, there has been an emergence in student awareness about the importance of student agency and student voice. This has led to students questioning the existing practices of student engagement and partnership in the curriculum. As an Action Research Project, the on-going data collection and analysis has directly influenced the design and delivery of the first year foundation subject.

References.

Andersen, S., Leon, G., Patel, D., Lee, C., & Simanton, E. (2022). The impact of COVID-19 on academic performance and personal experience among first-year medical students. *Medical Science Educator*, 32(2), 389-397. <https://doi.org/10.1007/s40670-022-01537-6>

Ribeiro, L., Rosário, P., Núñez, J. C., Gaeta, M., & Fuentes, S. (2019). First-year students background and academic achievement: the mediating role of student engagement. *Frontiers in psychology*, 10, 2669. <https://doi.org/10.3389/fpsyg.2019.02669>

P151

Ghost Learners – A new breed of learners, but... are they learning?

Dr Pauline Ross¹, Dr Ayda Succarie²¹Western Sydney University, Parramatta, Australia, ²Western Sydney University, Parramatta, Australia

Background/context. Emergency Remote Teaching (ERT) evoked at the start of the pandemic caused an unplanned pivot for over 84% of the global student population (Kordrostami & Seitz 2021). This move left most students straining to rapidly develop new time management and classroom engagement skills (Adams et al. 2021; Gonzalez, Sørnum, & Raæn 2022; Salmela-Aro et al. 2022), resulting in increased student disengagement. Historically, Mann (2001) defined disengagement as isolation from a group or activity, while Trowler (2016) argued connections to behavioural, emotional, and cognitive elements. This paper argues that the introduction of ERT produced a new form of disengagement, whereby higher than pre-pandemic number of students engaged in disengagement by electronically logging in to the virtual workshop but not logging onto the learning. This action created a cohort of 'ghost learners', or students that appeared as apparition and demonstrated no engagement in subject activity. As a result, and most likely, this form of disengagement displays unrealistic student expectations of the university experience.

The initiative/practice. Due to the absence of a standard for this environment, and the absence of policies to guide academics when assisting students with this transition, pseudo attendance flourished resulting in a generation of learners that have developed a disengaged attitude to the process of higher education.

Methods of evaluative data collection and analysis. This conceptual paper discusses practices highlighted in the literature on pandemic student engagement and a narrative analysis of teaching colleagues in a University Business School.

Evidence of outcomes and effectiveness. The disengaged practices of students were observed to increase the longer the ERT lasted, was noticeable in embedded learning habits. Specifically, the low uptake of subject material, assessment requirements and the level of complaint from the ghost learners highlighted non-engaged students had a higher propensity to complain about the quality of the class content, assessment instruction or feedback provided. The increase in dissatisfaction signals a worrying trend that these ghost learners may have potentially halted their transition to adult learners and, in turn, lack the skills to become life-long learners.

References.

Adams, D., Chuah, K. M., Mohamed, A., Sumintono, B., Moosa, V., & Shareefa, M. (2021). Bricks to clicks: Students' engagement in e-learning during the COVID-19 pandemic. *Asia Pacific Journal of Educators and Education*, 36(2), 99–117.

<https://doi.org/10.21315/apjee2021.36.2.6>

Gonzalez, R., Sørnum, H. and Raaen, K. (2022). Emergency Digital Teaching during the COVID-19 Lockdown: Students' Perspectives. *Education Sciences*, 12(3), p.152.

Kordrostami, M., & Seitz, V. (2022). Faculty Online Competence and Student Affective Engagement in Online Learning, *Marketing Education Review*, vol. 32(3), 240-254. <https://doi.org/10.1080/10528008.2021.1965891>.

Mann, S.J. (2001). Alternative perspectives on the student experience: alienation and engagement. *Studies in Higher Education*, 26(1), pp.7-19. <https://doi.org/10.1080/03075070020030689>.

Salmela-Aro, K., Upadyaya, K., Ronkainen, I. and Hietajärvi, L. (2022). Study burnout and engagement during COVID-19 among university students: The role of demands, resources, and psychological needs. *Journal of Happiness Studies*, pp.1-18.

Trowler, V. (2016). Student engagement literature review. [cited 2016 June 1]. Available from:

https://www.heacademy.ac.uk/system/files/studentengagementliteraturereview_1.pdf.

P152**Beyond the participation mark**

Dr Alison Casey¹, Ms Robyn Martin¹

¹*School of Business, University of Sydney, Darlington, Australia*

Background/context. Student engagement with online course materials and activities predicts academic success, but is difficult to engender.

The initiative/practice. Recognising that students are motivated by assessment, a multifaced engagement assessment was trialled in order to drive engagement by explicitly assessing students on a range of engagement with the LMS that maps to the Kahu and Nelson (2018) student engagement framework.

Methods of evaluative data collection and analysis. Aggregated engagement data from the semester of the intervention will be compared with equivalent data in the same unit from the previous semester. To evaluate the level of engagement, student focus groups will be run after marking is complete, with questions on attitudes to engagement, to the assessment and on reflective development.

Evidence of outcomes and effectiveness. Engagement with the LMS in the previous iteration of the unit was already quite high compared to equivalent units due to a reflective portfolio assessment. Despite clearly driving engagement, various aspects of engagement could not be separated from the aggregated assessment data, and there was no means of determining the depth of engagement. If this assessment drives similar or higher levels of engagement, the researchers will be able to tease out engagement with each aspect of the educational interface (Kahu and Nelson, 2018) in order to better tailor the student experience. Further, the student focus groups will reveal whether the assessment was an exercise in compliance, or really did support authentic engagement with the unit.

References. Kahu, E. R., & Nelson, K. (2018). Student engagement in the educational interface: understanding the mechanisms of student success. *Higher Education Research and Development*, 37(1), 58–71.

<https://doi.org/10.1080/07294360.2017.1344197>

P153**Talking the talk: a framework to introduce verbal learning in lab-based teaching and assessment**

Bethany Goudswaard¹, **Dr Charlotte Clark**¹

¹*The University of Melbourne, Parkville, Australia*

Background/context. We introduced a verbal learning task into an undergraduate developmental biology subject to assess the benefits of this activity and develop a framework for implementation. In this subject, students complete a series of laboratory-based practicals and associated lab reports. Written lab reports are an authentic and suitable assessment task, however we wished to draw on the discursive nature of scientific research and introduce an element of verbal learning to these tasks. We also hoped to help students identify links between tasks and to utilise feedback to improve subsequent work.

The initiative/practice. We introduced a verbal learning task after submission of the first of three lab reports. Students met with a demonstrator to discuss the lab report and were encouraged to explore their learning more deeply.

Methods of evaluative data collection and analysis. We performed a mixed methods analysis, comparing student grades and undertook a thematic analysis of discussions.

Evidence of outcomes and effectiveness. Comparison of student grades in subsequent assessment tasks demonstrated no significant difference for students who did or did not participate in the task suggesting no direct benefit (or detriment) to students. Thematic analysis demonstrated that students were able to critically analyse their work, discuss the significance of their findings, and saw value in the activity. Based on these findings, we have developed a framework to inform curricular development in this subject. We will extend the number of practical classes and lab reports and modify the assessment criteria, better allowing students to action feedback from early reports to improve the quality of subsequent reports. They will also be encouraged to discuss these reports and their feedback with teaching staff in lab classes, increasing the authenticity of both the teaching and assessment. This flexible framework can be applied in other teaching and learning settings.

P154

I can do better, coach: Promoting students' holistic development through coaching in a learning support programme

Ms Bavani Divo¹, Miss Juanita Kong Shu Min¹, Mr Jia Yi Han¹, Mr Chee Ming Ong¹, Mr Ramesh Shahdadpuri¹, Miss Miriam Wun¹, Dr Victor Wang Peng Cheng¹, Dr Eric Chua Chern-Pin¹

¹*Singapore Institute of Technology (SIT), Singapore*

Background/context. Universities are increasingly adopting a holistic approach for student development (Bowden et al., 2021; Howlett et al., 2021). Coaching is one such area that seeks to facilitate solution-focused discussions to better support students' academic learning (Capstick et al., 2019; Dattathreya, 2023; Hall et al., 2021). Literature for coaching students in higher education were focused primarily on academic performance and these studies provided limited qualitative insights (Alzen et al., 2021; Rodríguez Fuentes et al., 2023). This study examined students' experience of coaching provided as part of a learning support programme at the Singapore Institute of Technology. The aim was to explore if coaching enabled students to be more reflective, aware of challenges and able to work towards managing them.

The initiative/practice. Students were allocated a coach to work closely with, over two 1:1 coaching sessions, spaced about a month apart. Using the goals and learning plans submitted by students, coaches facilitated solution-focused coaching conversations. These discussions were targeted to enable students to carry out actionable planned steps in-line with their goals and plans.

Methods of evaluative data collection and analysis. A multi-prong qualitative approach was used. Semi-structured interviews or focus group discussions were conducted with 20 students upon completion of the support programme. Participants were from various degree courses and years of study in the university. In addition, coaches' notes from the 1:1 coaching sessions and participant submissions of reflections, goals and learning plans were also examined. These data were transcribed, coded, and analysed for themes.

Evidence of outcomes and effectiveness. The overall analysis revealed the following primary themes that described students' perceptions and behaviour. (1) Increased motivation to be involved in learning activities and carrying out planned actions for effective learning. (2) Increase in learning behaviour as students were able to demonstrate application of strategies. (3) Increase in reflection and metacognitive awareness as students were able to identify and take steps towards bettering their learning challenges. (4) Sense of support from their coach enabled students to complete the programme. The findings suggest that coaching can be a promising approach, facilitating learning and holistic personal development, thereby contributing to the achievement of student goals.

References.

- Alzen, J. L., Burkhardt, A., Diaz-Bilello, E., Elder, E., Sepulveda, A., Blankenheim, A., & Board, L. (2021). Academic Coaching and its Relationship to Student Performance, Retention, and Credit Completion. *Innovative Higher Education*, 46, 539-563.
- Bowden, J. L. H., Tickle, L., & Naumann, K. (2021). The four pillars of tertiary student engagement and success: a holistic measurement approach. *Studies in Higher Education*, 46(6), 1207-1224.
- Capstick, M. K., Harrell-Williams, L. M., Cockrum, C. D., & West, S. L. (2019). Exploring the effectiveness of academic coaching for academically at-risk college students. *Innovative Higher Education*, 44(3), 219-231.
- Dattathreya, P. (2023). Developing Student Self-Efficacy Through Academic Coaching. In *Using Self-Efficacy for Improving Retention and Success of Diverse Student Populations* (pp. 203-221). IGI Global.
- Hall, M. M., Worsham, R. E., & Reavis, G. (2021). The effects of offering proactive student-success coaching on community college students' academic performance and persistence. *Community College Review*, 49(2), 202-237.
- Howlett, M. A., McWilliams, M. A., Rademacher, K., O'Neill, J. C., Maitland, T. L., Abels, K., ... & Panter, A. T. (2021). Investigating the effects of academic coaching on college students' metacognition. *Innovative Higher Education*, 46(2), 189-204.
- Rodríguez Fuentes, A., Navarro Rincón, A., Carrillo López, M. J., & Isla Navarro, L. (2023). University Coaching Experience and Academic Performance. *Education Sciences*, 13(3), 248.

P155**Integrating commercially available industry-relevant software in the education of genome variant curation at the Masters level**

Dr Hendrika Duivenvoorden¹, Dr Callum Vidor¹, Dr Desiree du Sart¹, Prof Robert Bryson-Richardson¹, Dr Thomas Hiscox¹

¹Monash University, Clayton, Australia

Background/context. Genome analytics is a drastically expanding field, and there is a high demand for individuals with the necessary skillset to analyse the genome data that is being generated. A new Masters by coursework was developed to train individuals in genome analytics. Institutions analysing genomes commonly utilise in-house analysis tools, but increasingly commercial software packages that integrate AI are being considered in the research and diagnostic space (De La Vega et al., 2021).

The initiative/practice. This led us to expose students to the use and limitations of commercial software packages during two core units of the course, and evaluate changes in understanding of genome analytics, confidence in working in related fields and their perspective of the integration of commercial software in graduate education.

Methods of evaluative data collection and analysis. Students were invited to voluntarily complete an online survey including qualitative and quantitative components featuring Likert scale questions, both pre and post exposure to the software. Paired data from 23 individuals (73% response rate), most aged between 18 and 25, were recorded and anonymised prior to analysis. Qualitative data were thematically coded blind by two individuals independently using emergent coding (Charmaz, 2008).

Evidence of outcomes and effectiveness. This project indicates that after the completion of the units that integrated commercially available industry software, we measured increased student confidence (increase in percentage reporting fairly confident or higher) in joining the genetic analysis workforce (significant change from 37% to 70%) and in completing job-specific tasks (significant increase in 7 out of 9 tasks of between 28% to 39%). The aspects of their studies the students valued in relation to these changes and their perception of the usefulness of integration of the commercial software were elucidated from qualitative theming, and can inform others looking to integrate commercially available software within their tertiary degree.

References.

Charmaz, K. (2008). Grounded theory as an emergent method. In S. N. Hesse-Biber & P. Leavy (Eds.), *Handbook of emergent methods*. (pp. 155-170). The Guilford Press.

De La Vega, F.M., Chowdhury, S., Moore, B., Frise, E., McCarthy, J., Hernandez, E.J., Wong, T., James, K., Guidugli, L., Agrawal, P.B., Genetti, C.A., Brownstein, C.A., Beggs, A.H., Löscher, B.S., Franke, A., Boone, B., Levy, S.E., Öunap, K., Pajusalu, S., ... Kingsmore, S.F. (2021). Artificial intelligence enables comprehensive genome interpretation and nomination of candidate diagnoses for rare genetic diseases. *Genome Med*, 13(1), 153. <https://doi.org/10.1186/s13073-021-00965-0>

P156

Attributes of On-campus and Online Case-based Learning (CBL): Enhancing or impeding learning?**Dr Katherine Fernandez**¹, Dr Mel Sweeney², Assoc Prof Nirma Samarawickrema¹¹Monash University, Australia, ²University of Oxford, United Kingdom

Background/context. Case-based learning (CBL) is widely implemented in the education sphere and led to meaningful learning experiences, but little is known about its structural attributes that support student learning (Thistlethwaite et al., 2012).

The initiative/practice. In this study, we identified attributes of Interrupted CBL (Kulak & Newton, 2014) that help students surmount difficulties in learning metabolism through the nine weeks of on-campus and online biochemistry workshops. The Interrupted CBL is an iterative process of showing clues and questions about the case, peers interrogating the questions, and educators facilitating class discussions until a solution is formed. Peer interactions and class discussions on campus occurred in Collaborative learning spaces and online through Zoom's breakout and main room. Educators addressed queries and provided prompts by moving from one group to another on campus or from one breakout room to another online.

Methods of evaluative data collection and analysis. At the end of a semester of on-campus and online learning, students completed a survey with Likert-like questions on learning and developing real-life skills and open-ended questions. Likert items were reported as percentage agreement, and free-form answers were analysed for themes on the impact of CBL.

Evidence of outcomes and effectiveness. Participation rates of 96% and 48% were achieved in on-campus and online learning surveys, respectively. Findings indicate that the combination of Interrupted design (ID) + Real-world contexts for the on-campus cohort (> 44%) and ID + Educator support for the online cohort (> 47%) helped in cognition, including retention and understanding of metabolism. Notably, such benefits and support from educators drew the online cohort (98%) to workshops more than on-campus students (75%). However, a small number in both cohorts (< 20%) viewed peer learning as beneficial. The reason for this can be linked to students' feedback regarding the occasional disengagement of their peers.

Three attributes of Interrupted CBL enhanced student understanding of metabolism. The peer interaction attribute, however, requires restructuring to increase the positive impact of CBL.

References.

Kulak, V., & Newton, G. (2014). A guide to using case-based learning in biochemistry education. *Biochemistry and molecular biology education*, 42(6), 457-473.

Thistlethwaite, J. E., Davies, D., Ekeocha, S., Kidd, J. M., MacDougall, C., Matthews, P. & Clay, D. (2012). The effectiveness of case-based learning in health professional education. A BEME systematic review: BEME Guide No. 23. *Medical teacher*, 34(6), e421-e444. <https://doi.org/10.3109/0142159X.2012.680939>

P157

Making online lecture recordings more engaging for first year biology students**Dr Jennifer Fox**¹, Ms Brianna Steed^{1,2}¹The University of Melbourne, The University of Melbourne, Australia, ²Monash University, Clayton, Australia

Background/context. In response to the COVID19 pandemic and subsequent lockdowns our institution, like others around Australia and the world, switched to online learning. Lectures for a large cohort of first year biology students were switched to pre-recorded online videos to permit flexible learning. To improve student experience, we created a series of online interactive activities to accompany the lectures. Online interactive activities are an increasingly common and effective strategy for learning (Davis et al., 2018).

The initiative/practice. In this showcase we describe iterative improvement in the design of pre-recorded lectures to increase student engagement. We created short activities to encourage students to actively review the concepts in the lecture immediately and or/apply their understanding to new situations. Over multiple years the activities were further developed to create interactive web experiences that provided immediate feedback.

Methods of evaluative data collection and analysis. The effectiveness of the intervention was evaluated using Learning Management System analytics to quantify student engagement with lecture materials and interactive web experiences across the semester and across multiple years (2020-2022).

Evidence of outcomes and effectiveness. Student engagement with these activities was strong at the start of semester with more than 50% of students completing the Week 1 activities in 2022. Engagement trailed off over later during semester. Students' engagement with activities that provided immediate feedback (e.g. multiple choice, true/false questions) was greater than for activities that required a written response. This approach can be used in all disciplines and continues to be relevant post-pandemic as higher education continues to deliver education in a blended format.

References.

Davis, D., Chen, G., Hauff, C., & Houben, G. J. (2018). Activating learning at scale: A review of innovations in online learning strategies. *Computers & Education*, 125, 325-344. <https://doi.org/10.1016/j.compedu.2018.05.019>

P158**Utility of online interactive case-based learning approach in teaching pathophysiology during the pandemic and investigation of student engagement**

Dr Vandana Gulati¹, Prof Natkunam Ketheesan, Prof Phillip Fourie

¹University of New England, Armidale, Australia

Background: Case Based Learning (CBL) is a form of Problem-Based Learning (PBL) that is considered to be a participatory teaching-learning method and is categorized as contextual learning in biomedical education. CBL facilitates reflective learning, helps in the development of problem-solving skills and clinical reasoning which further improves the transition into practice in medical and biomedical subjects.

The initiative: The research aims to evaluate the use of interactive Case-Based Learning (CBL) assessment in pathophysiology (PSIO230) and the level of student engagement and achievement of learning outcomes. In this study we aim to evaluate the feedback we receive with the use of case-based learning assessment in the Pathophysiology (PSIO230).

Methods of evaluative data collection and analysis: Pathophysiology (PSIO230) is a fully online subject at University of New England and has been reported to be a difficult subject for students. A real video case study and a case-based learning assessment was utilized in this subject in Trimester 1 2022 using the interactive software (Lt by ADInstruments) and had been shown to be an effective and interactive approach to teach the pathophysiology. In the previous trimester, students had indicated that they preferred this type of assessment. The formal research study has been designed to get students' feedback since this subject is offered again in Trimester 1 2023. Human Research Ethics application had already been submitted to the UNE HREC. The survey questions will be built on Qualtrics and the link will be provided on the Moodle unit site 'PSIO230 T1 2023'.

Evidence of outcomes and effectiveness: The data will be collected and utilized to statistically analyze and evaluate student engagement and achievement of learning outcomes. The feedback of CBL assessment last year showed effective learning outcome, student engagement and interest in the subject. Use of interactive CBL fosters student engagement, enhanced knowledge, and critical thinking.

P159**A club-like model for empowering creative thinking****Dr Brendan Hall¹, Danelda Theron¹, Phillip Theron¹, Grant Jeffries¹**¹Australian Catholic University, Banyo, Australia

Background/context. When entering university, many students begin a transition from adolescent views of education to an adult understanding. This is a transition from pedagogy, where choices are somewhat limited, to andragogy, where choices are more purposeful (known unknowns), and sometimes then to heutagogy, where choices are more open ended (unknown unknowns) (Blaschke, 2012; Canning, 2010). Students will eventually join the workforce and contribute to (even lead) adult learning environments such as work teams and communities of practice/knowledge/interest. Interacting within these environments requires competence in and confidence utilising a range of skills in teamwork, innovation and self-directed learning.

The initiative/practice. To help introduce students to such environments and skills, a club-like learning entity (CLLE) was created to practice creative thinking skills. Each week, students from diverse courses met together, chose a new technique to learn/explore and then practiced it. This operated as a guided community of practice, supported by resources and mentors to help students scaffold their own learning journeys.

Methods of evaluative data collection and analysis. This poster shows how the CLLE fits within the university student experience, its guiding pedagogical principles, and the associated curriculum, including examples of techniques learned.

Evidence of outcomes and effectiveness. Co-presenting are several students that will give testimonials about the group's impact and their use of the techniques elsewhere in their study (e.g. exams, group work) and extra-curricular activities (e.g. placements, student societies).

References.

Blaschke, L. M. (2012). Heutagogy and lifelong learning: A review of heutagogical practice and self-determined learning. *The International Review of Research in Open and Distributed Learning*, 13(1), 56–71.

<https://doi.org/10.19173/irrodl.v13i1.1076>

Canning, N. (2010). Playing with heutagogy: Exploring strategies to empower mature learners in higher education.

Journal of Further and Higher Education, 34(1), 59–71. <https://doi.org/10.1080/03098770903477102>

P160**Student's understanding and perspectives on academic integrity and academic integrity education****Dr Eva Hatje¹, Dr Nicole Reinke², Dr Ann Parkinson², Dr Mary Kynn³**¹Queensland University of Technology, Brisbane, Australia, ²University of the Sunshine Coast, Sippy Downs, Australia, ³Curtin University, Bentley, Australia

Background/context. Many tertiary institutions worldwide have recognised the need for academic integrity education in response to both increasing incidents of academic dishonesty (Bretag et al 2019), and changes to assessment as the result of COVID 19 restrictions. In response, academic integrity education has been included in the curriculum at many institutions. Yet few studies have investigated students' opinions about how academic integrity education should be taught and supported in the university setting.

The initiative/practice. The purpose of this study was to investigate student's understanding and perceptions of academic integrity and academic integrity education at an urban university in Queensland, Australia.

Methods of evaluative data collection and analysis. Students in two first-year pathophysiology subjects completed a subject-specific academic integrity module (n=374) at the start of semester as part of their regular curriculum, which included six scenario-based questions based on our previous work (Parkinson et al 2022). They were then invited to complete a survey (n=117) to gauge their opinions about academic integrity and academic integrity education.

Evidence of outcomes and effectiveness. While most students correctly identified a clear-cut case of academic dishonesty (96.8%), some struggled to correctly identify dishonesty in scenarios based on plagiarism in online quizzes (68.7% correct), collusion on an assignment (58.7% correct), and one scenario which was not academic dishonesty (76.9% correct). Most survey respondents (89.4%) found the subject-specific academic integrity module improved their understanding and approximately 40% indicated that they would like to receive further academic integrity education. Students also identified contract cheating as the most serious type of academic dishonesty and collusion on assignments as the least serious. These findings highlight that students have difficulty recognising academic integrity breaches in assessment practice, despite being able to define types of academic misconduct. This supports the need for ongoing contextualised academic integrity education.

References. Bretag, T., Harper, R., Burton, M., Ellis, C., Newton, P., Rozenberg, P., Saddiqui, S., & van Haeringen, K. (2019): Contract cheating: a survey of Australian university students. *Studies in Higher Education*, 44 (11):1837-56. doi: 10.1080/03075079.2018.1462788.

Parkinson, A. L., Hatje, E., Kynn, M., Kuballa, A., Donkin, R., & Reinke, N. B. (2022). Collusion is still a tricky topic: student perspectives of academic integrity using assessment-specific examples in a science subject, *Assessment & Evaluation in Higher Education*, 47(8). 1416 – 1428, <https://DOI:10.1080/02602938.2022.2040947>.

P161**Day of tutorial class is associated with overall course performance for on campus but not online students****Dr Stephanie Roughley¹, Dr Kate Hutton-Bedbrook¹**¹*University of New South Wales, Sydney, Australia*

Background/context. A common piece of departmental folk wisdom is that students enrolled in tutorial classes on the same day as lectures tend to perform better than students enrolled on other days. One possible reason for this may be that students prefer to consolidate their time on campus as much as possible, and the more organised students are those that manage to secure those preferred timeslots. Planning, self-regulation, and motivational style are all aspects of meaningful cognitive engagement (Pohl, 2020), which is correlated with academic performance (Walker et al., 2006). Thus, it is possible that there exists a bias in which the most engaged students self-select into the same classes.

The initiative/practice. This exploratory study involves the retrospective analysis of data from students enrolled in a core first-year psychology course and aims to investigate whether performance outcomes differ as a function of “preferred” (lecture day) vs. “non-preferred” (other) tutorial timeslots. Data was compared between cohorts enrolled in 2019, in which lectures and tutorials were on-campus, and 2021, at which point COVID lockdowns had enforced a transition to fully online learning and timetabling preferences may no longer be expected to promote biased enrolment.

Methods of evaluative data collection and analysis. Anonymised records (2019 and 2021) of student assessment, final exam, and overall course grades were analysed using a combination of Chi square, independent t-test and ANOVA.

Evidence of outcomes and effectiveness. Results indicate that when learning occurs on campus, students enrolled in preferred tutorials perform significantly better overall, and that this is driven primarily by higher marks for written assessments. In contrast, when learning occurs online performance does not significantly differ as a function of tutorial timeslot. As we transition back to face-to-face learning, these findings have implications for how we approach and engage student learning in tutorial classes.

References.

- Pohl, A. J. (2020). Strategies and interventions for promoting cognitive enhancement. In A. L. Reschly, A. J. Pohl, & S.L. Christenson (Eds.), *Student Engagement (253-280)*. Springer, Cham. https://doi.org/10.1007/978-3-030-37285-9_14
- Walker, C. O., Greene, B. A., & Mansell R. A. (2006). Identification with academics, intrinsic/extrinsic motivation, and self-efficacy as a predictor of cognitive engagement. *Learning and Individual Differences, 16*, 1-12.
doi:10.1016/j.lindif.2005.06.004

P162**Juxtaposing the application of AI and gaming technology in schools: Vignettes from Australia and China****Ms Alison McGregor¹, Ms Meixia Xu**¹*Victoria University, Clarinda, Australia*

Background/context. Artificial Intelligence (AI) at self-learning, high-speed data processing, back-propagating, accurately predicting and Machine Learning (ML) level is free of disciplinary barriers. It is called Artificial General Intelligence (AGI), and outside Computer Science SILO instruction, cross-disciplinary AGI pedagogy is non-existent. AI is as aligned with computationalism as with culturalism, restating classical ways of teaching and problem-solving with faster computable forms. AI Education (AI) should embody a culture’s way of life, not just preparation for it. AI in everyday devices relies on data and algorithms fed by sources typically unknown to users also unaware of bias, safety and privacy risks. AI can innovate teaching and learning practices and accelerate progress towards UNESCO’s sustainable development goal 4. We juxtapose the application of AI and Educational Gaming Technology in schools and universities in China and Australia. We show vignettes as snapshots in time of AI education pitched from two different angles, (i) how to best teach AI technology at Machine Learning (ML) level and (ii) how to enhance learning using AI educational gaming technology.

Methods of evaluative data collection and analysis. We present core competencies of state-of-the-art AI pedagogy based on qualitative interpretation of Participatory Action Research (PAR) led focus group discussions, student drawings, interviews with teachers and university professors, student-led projects, school and university partnerships, and teacher-researcher diary notes collected from schools in Australia and China over one year in 2022.

Evidence of outcomes and effectiveness. The student-designed and initiated AI MY WAY school excursion program for secondary school girls to attend at the Victoria University Cyber Security Operations Centre (CSOC) is gaining increasing attention from schools and educators. A model comparing key characteristics of student learning and engagement in and with AI organically arose, we named this the ‘Australasian New Educational Technologies Integration Consideration (ANETIC) framework and it moulded what we show and tell as effective AI pedagogy.

P163

Equal but not equitable? Voice from first generation students

Dr Hilary K. Y. Ng¹¹Hong Kong Metropolitan University, Hong Kong

Introduction. Extensive research has shown that first-generation students may not have equal chances for academic success, even with equal opportunities provided. First-generation students refer to those whose parents have not received any post-secondary or university education (Choy, 2001). Compared to other students, first-generation students face unique challenges, such as a mismatch of cultural values between their home and school environments (e.g., Lehmann, 2009). However, existing works on first-generation students have primarily focused on their academic outcomes and development, neglecting their perception of their learning experience regarding education inequality and inequity.

Methods. A mixed-method research design was employed to investigate the differences in perceptions of educational equality and equity between first-generation students and other students. There were 144 university students, with 109 first-generation students, participated in the survey. Additionally, eight participants were selected to attend interviews.

Results and Discussion. The results show that first-generation students have higher mean scores for education inequality and inequity compared to other students, indicating a greater frequency of experiencing these challenges. Independent t-test showed a significant mean difference in education inequity, but not in education inequality. Interview results highlighted experiences of inadequate resources despite equal opportunities and learning under normal or special circumstances. Findings from both quantitative and qualitative data converged to highlight the effectiveness of measures and supports aimed at promoting education equality. However, there is a continuous need to promote education equality and equity, such that we can create a learning environment that celebrates inclusivity and diversity.

References.

Choy, S. (2001). *Students whose parents did not go to college: Postsecondary access, persistence, and attainment*. U.S. Department of Education, National Center for Education Statistics. <https://nces.ed.gov/pubs2001/2001126.pdf>
Lehmann, W. (2009). Becoming middle class: How working-class university students draw and transgress moral class boundaries. *Sociology*, 43(4), 631-647. <https://doi.org/10.1177/0038038509105412>

P164

If we develop it, will they stay?

Dr Linda Ng¹, Dr Jann Foster, Dr Christine Taylor, Dr Sheeja Perumbil Pathrose, Dr Priya Govindaswamy, Prof Ritin Fernandez, Mrs Tiffany Patterson-Norrie¹University of Southern Queensland, Indooroopilly, Australia

Aims and Background: New graduate nurses (NGNs) are being placed in acute and complex neonatal intensive care units (NICUs). The NGNs transition experiences are varied around Australia and inadequate support could lead to high attrition of NGNs in NICUs (Alsalamah & Fawaz, 2023). To effectively support new graduates, it is essential for nurse educators to understand the new graduate experiences and their preparedness for working in NICUs. A qualitative systematic review was undertaken to identify evidence around nurses' perceptions, challenges, facilitators, and barriers they experienced during their first 12 months in NICU.

Methods: Five databases were searched to identify studies about new graduate nurses and transition programs. The review included studies that focused on qualitative data including, but not limited to, designs such as phenomenology, grounded theory, ethnography, and qualitative components of studies using mixed method designs. The review followed principles of meta-aggregation in line with the JBI approach and it followed the methods established in the *a priori protocol*. Methodological quality assessment was based on representation of participants' voices and congruence between research methodology, research question and analysis of data.

Results: Three qualitative studies were included in the review. The narratives of 27 new graduate nurses generated 39 findings that formed 8 categories based on similarity of meaning. Two synthesized findings were generated from these categories: (i) feeling unprepared (ii) Job satisfaction despite challenges. Feeling unprepared included the lack of neonatal specific content in undergraduate training and inconsistent clinical support. Nurses reported job satisfaction despite challenges such as stress caused by their lack of knowledge and attitudes from staff.

Conclusions: To our knowledge this is the first systematic review investigating new graduate experiences in the NICU. The review highlighted the complexities of experiences faced by NGNs in the NICU setting. In particular, the findings highlighted that NGNs were unprepared and lacked confidence due to the specialised knowledge and skills required to work in NICUs. It is timely to consider how we can create supportive work and learning environments for these new graduates. Further research exploring interventions that can effectively transition new graduates to NICU practice is recommended.

Reference:

Alsalamah, Y., & Fawaz, M. (2023). Exploring facilitators and barriers for successful transition among new Saudi graduate nurses: A qualitative study. *Nursing Open*, 10(1), 278-286. Doi: <https://doi.org/10.1002/nop2.1302>

P165

Utilising inclusive student-led research methods transnationally for successful work-integrated-learning: Developing student capacity and identity regarding practice with disaster-affected rural communities.

Mrs Emma Pascoe¹, Mrs Kim Doyle², Mrs Robyn Fitzroy³, Dr Erica Russ⁴, Dr Monica Short⁵

¹Charles Sturt University, Wagga Wagga, Australia, ²Southern Cross University, Lismore, Australia, ³University Centre for Rural Health, Sydney University, Lismore, Australia, ⁴Southern Cross University, Lismore, Australia, ⁵Charles Sturt University, Wagga Wagga, Australia

Background/context. Since 2020, COVID-19 has disrupted student work-integrated learning [WIL](placements) (Crisp et al., 2021). In response, members of the [Anonymised network] supported student-led, rural-focused, research-based placements. [Anonymised network] is a group of people with academic, industry and/or student backgrounds who utilise Cooperative Inquiry [CI] as an emancipatory, action-based practice research approach. This placement initiative has expanded *from* four students from three Australian Universities to six students from three Australian Universities and an Irish University, with idea initiation support and financial incentive from [Anonymised University]. Our presentation outlines the experiences of students and their supporting academics engaged in the third and current CI. This inquiry is exploring how educational institutions' curricula can equip emerging social workers with knowledge and tools needed for working with disaster-affected rural communities.

The initiative/practice. CI, our preferred methodology, shares power, promotes students' voices, supports rural placements and rural practice, democratises learning and facilitates the documenting of students' and supervisors' experiences ([Authors Own]). All participants, including the students, are co-researchers, co-participants, and co-authors.

Methods of evaluative data collection and analysis. CI guided the research process (Heron & Reason, 2006). Qualitative data were collected via a shared, secure, online platform and recorded video-conferencing, and were analysed using thematic analysis - providing a flexible environment for the transnational co-participants.

Evidence of outcomes and effectiveness. This innovative placement developed inspiring international partnerships and transformational learning experiences that enhanced skills, knowledge and professional identity. Research outputs included an international conference presentation, a submitted conference paper, and the preparation of a journal article. Recommendations for social works' curricula development and a framework for future innovation in research placements - specifically educational and training materials and philosophies and pedagogies resulted. This inquiry has the potential to inform positive changes for WIL and student research, with consideration for rural communities facing future disasters.

References.

- Crisp, B., Stanford, S., & Moulding, N. (2021). Educating social workers in the midst of COVID-19: The value of a principles-led approach to designing educational experiences during the pandemic. *The British Journal of Social Work*, 51(5), 1839-1857. <https://doi.org/10.1093/bjsw/bcab108>
- Heron, J., & Reason, P. (2006). The practice of co-operative inquiry: Research 'with' rather than 'on' people. In P. Reason & H. Bradbury (Eds.), *Handbook of action research: Concise paperback edition*, 144-154.

[Authors Own]

[Authors Own]

P166**Developing effective strategies to monitor students' behavioural, cognitive, and emotional engagement in blended learning: A pilot study**

Dr Astrid Schmied¹, Dr Rajamanickam Yuvaraj¹

¹*Nanyang Technological University / National Institute of Education, Singapore*

Background/context. Blended learning—a combination of online learning and the traditional face-to-face format—has greatly facilitated education worldwide. Students' engagement, however, has surfaced as one of the biggest challenges of blended learning.

The initiative/practice. This study aims to design effective strategies to systematically monitor students' engagement in blended synchronous learning experiences to improve teaching practices. Students' engagement is a multifaceted construct; it includes behavioural, cognitive, and emotional (affective) dimensions. Behavioural engagement comprises the idea of participation in academic work, which is important for accomplishing positive outcomes. Cognitive engagement relates to investing efforts that are necessary to master ideas and skills. Lastly, emotional engagement involves positive and negative actions or attitudes towards classmates, instructors, and institutions that play an important role for connectedness and commitment to perform properly.

Methods of evaluative data collection and analysis. Based on prior studies and innovative ideas, a set of items were selected to design short, self-report surveys to monitor the three facets of students' engagement: behavioural (conduct, work involvement, and participation), cognitive (goals and strategy use), and emotional (positive and negative emotions related to coursework and student-student and student-instructor interactions). The surveys were piloted on a subsample of six students attending a blended course with synchronous components four times per week (pre-lecture, post-lecture, pre-lab, and weekly) during four consecutive weeks.

Evidence of outcomes and effectiveness. The results of this pilot study indicate that monitoring students' engagement systematically through short, self-report surveys is viable, effective, and informative. Statistical comparisons and trend analysis of the behavioural, cognitive, and emotional dimensions provide objective measures over time. This not only promotes students' agency, but also enhance their learning experience. Instructors obtain systematic feedback that allows for course tailoring while implementing blended learning with synchronous components. This directly relates to instructional design and good practices for teaching and learning.

P167**Disrupting the silence: Hearing the voices of disabled doctoral students**

Dr Lara Sanderson, Dr Kim Brown, **Prof Rachel Spronken-Smith**

¹*University of Otago, Dunedin, New Zealand*

Background/context. The experiences of doctoral students with a disability, impairment, chronic illness and/or neurodiversity are under-represented in research, and are often unheard on campus (Finesilver et al., 2020). A fear of stigmatisation and a lack of awareness of their situation may mean they are not fully supported in a needs-based (dis)abled framework. We draw on the social model of disability, which uses 'disabled person', rather than a person with a disability, as it recognises that society is the disabling factor.

The initiative/practice. Our research explored the study experiences of disabled doctoral students.

Methods of evaluative data collection and analysis. The research design involved a survey and follow-up unstructured interviews with volunteers. We sent a survey to all doctoral students at our University and obtained 64 responses from those who self-identified as disabled, impaired, chronically ill and/or neurodiverse. The survey explored the nature of their disability, their study experiences, and any challenges they faced during doctoral study, as well as any related support they received. Twelve students were interviewed to gain more in-depth data on their study experiences. Our analysis used a Poetic Inquiry approach to privilege the voices of doctoral students. This analysis allowed re/presentation of participant voices in thematic poems. Poetic approaches to data analysis and re/presentation challenge dominant ableist cultures within the academy and have the potential to stimulate social change.

Evidence of outcomes and effectiveness. The poems centre the complexities faced by the doctoral students in this study, and articulate the challenges, enabling practices and possibilities for the future encountered by disabled students. We invite viewers to participate with this poster by interacting with verbal recordings of the poems via the QR Code, and colouring in the SILENCE. From our findings, we hope to transform broader doctoral practices and institutional policy, thereby improving disabled students' doctoral experiences.

References.

Finesilver, C., Leigh, J., & Brown, N. (2020). Invisible disability, unacknowledged diversity. In *Ableism in academia: Theorising experiences of disabilities and chronic illnesses in higher education*, pp. 164-181. UCL Press, London.
<https://doi.org/10.14324/111.9781787354975>

P168

When the stars align: reclaiming Adorno's constellate criticality to transform the business education curriculum**Dr Andy Wear¹**¹University of Melbourne, Parkville, Australia

Context/background. Business education is at a critical juncture. An expanding body of scholarship details this challenge, overwhelmingly presenting its role in consolidating the neo-liberal hegemony, with its educators "hypocrites" (Gioia & Corley, 2002) and "silent partners in corporate crime" (Swanson & Fredrick, 2003) whose very "theories and ideas have done much to strengthen the management practices that we are all now so loudly condemning" (Ghoshal, 2005: 74). Unsurprisingly, some educators are becoming "disenchanted with traditional (rational, instrumental, economically dominated, realist oriented and 'objectively' analytical) means of development and practice" (Sutherland, 2012: 25), and demanding change. This poster will illustrate a model by which we might revise the business education curriculum.

Intended outcome. To illustrate the value of Adorno's 'constellate criticality' in re-shaping the business education curriculum.

Abstract. In this paper I argue that central to the problems befalling business education is that its curriculum is bereft of critical, transformative character. This is evident in the scholarship, which observes the dilution of critical thinking's purpose in the context of business education, its impact seemingly relative only to 'how a business practitioner makes strategic investment decisions for optimising clients' returns' (Calma & Davies, 2021: 2280) and that 'business scholars are less interested in critical thinking as a concept, as much as what it can do for business practices' (ibid: 2285).

I propose a retrieval of transformative criticality in the business education curriculum built upon the Frankfurt School tradition (McLaughlin, 1988); more specifically, the particular version explicated by Theodor W. Adorno (Bobka & Braunstein, 2018). In this effort the educational context becomes inextricable from 'the social context in which it is embedded...empowering learners to think and act critically with the aim of transforming their life conditions.' (Aliakbari & Faraji, 2011: 78). Extending Cornbleth's (1990) conceptualisation of curriculum as 'praxis' I channel Adorno to reconfigure the curriculum as a 'constellation' of co-created experiences that allow the contestation of structures of power both within and external-to the learning experience.

References.

- Adorno, T. W. (1973) *Negative Dialectics*. (Ashton, E. B., Trans.) Routledge. (Original work published 1966)
- Adorno, T. W. (1993) *Theorie der Halbbildung in Schriften: Soziologische Schriften* (Cook, D., Trans.) (Original work published 1959) pp. 93-121.
- Aliakbari, M., & Faraji, E. (2011). *Basic Principles of Critical Pedagogy*. 2nd International Conference on Humanities, Historical and Social Sciences. 1(17), 78-85.
- Bobka, N., & Braunstein, D. (2018). Theodor W. Adorno and Negative Dialectics. In B. Best, W. Bonefeld & C. O'Kane (Eds). *The SAGE Handbook of Frankfurt School Critical Theory*. SAGE Publications.
- Calma, A. & Davies, M. (2021) *Critical Thinking in Business Education: Current Outlook and Future Prospects*. *Studies in Higher Education*, 46(11), 2279-2295.
- Cornbleth, C. (1990) *Curriculum in Context*. Falmer Press.
- Ghoshal, S. (2005). Bad management theories are destroying good management practices. *Academy of Management Learning & Education*, 4(1), 75-91.
- Gioia, D. A., & Corley, K. G. (2002). Being good versus looking good: Business school rankings and the Circean transformation from substance to image. *Academy of Management Learning & Education*, 1(1), 107-120.
- McLaughlin, N. (1999). Origin myths in the social sciences: Fromm, the Frankfurt School and the emergence of critical theory. *Canadian Journal of Sociology/Cahiers canadiens de sociologie*, 109-139.
- Swanson, D. L., & Frederick, W. C. (2003). Are business schools silent partners in corporate crime? *Journal of Corporate Citizenship*, 9, 24-27.

P169

From all angles: Exploring feedback in practice and theory

Dr Nirmani Wijenayake¹, **Dr Lynn Gribble**¹, Dr Chien Gooi¹, Dr Mona Ziaeyan Bahri¹, Dr Sumiko Iida¹, Dr Vanessa Honson¹, Dr Natalia Ortiz Cebero¹, **Dr George Joukhadar**¹, Dr Yingli Sun¹

¹University of New South Wales, Sydney, Australia

Background/context. Feedback is given to enable students to develop by understanding their strengths and weaknesses and make meaningful progress in their learning journeys (Hattie and Timperley, 2007) and is a critical part of any learning context. However, providing effective feedback can also be challenging, particularly in large-scale educational environments where both the volume of work and allocated time to do so are limited.

The initiative/practice. An Education Focused Initiative, of Fellowship joined nine cross-faculty academics together to examine assessment and feedback practices from the perspectives of students and staff (course convenors & sessional staff), underpinned by the feedback literature (*Mamoon-Al-Bashir, Kabir, and Rahman, 2016; Weaver, 2006*). Beyond knowledge management, these Fellows were to explore current practices to champion better feedback practices across the university.

Methods of evaluative data collection and analysis. End-of-course student survey data (n=7171) was obtained and analysed using a qualitative thematic analysis to investigate the aspects of feedback students value. Primary data was collected through interviews with highly rated course convenors (n=16) who provided effective feedback. For triangulation, sessional staff (n=132) who are responsible for grading were also surveyed. Analysis of data from all three groups provided four main themes: the need for feedback to be detailed, individualised, clearly articulated, and supportive. These themes aligned with *Mamoon-Al-Bashir et al's* (2016) findings. The data formed the basis of the content for the self-paced development modules.

Evidence of outcomes and effectiveness. The Fellowship Program was instigated to create cross faculty collaboration on matters of strategic significance for the university. Artifacts including two comprehensive reports with recommendations formed the basis of a self-paced learning module which is now being piloted across two Faculties with a view to provide a consistent philosophy as well as development to all those who provide feedback across the university. Early showcases within the University have been met with enthusiasm and willingness for implementation. Importantly, this group has continued to work together, influence practice more broadly and champion the change they recommended. Participants will be given a tour of the program which may provide the reflective opportunity to explore their own feedback practices.

References.

- Hattie, J. & Timperley, H. (2007) The power of feedback. *Review of educational research*, 77(1), pp.81-112.
- Henderson, M. (2017) Universities are failing their students through poor feedback practices. *The conversation*, November 28, <https://theconversation.com/universities-are-failing-their-students-through-poor-feedback-practices-86756>
- Mamoon-Al-Bashir, M., Kabir, R.M., Rahman I. (2016) The Value and Effectiveness of Feedback in Improving Students' Learning and Professionalizing Teaching in Higher Education Journal of Education and Practice Vol.7, No.16*
- Weaver, M. R. (2006). Do students value feedback? Student perceptions of tutors written responses. *Assessment & Evaluation in Higher Education*, 31(3), 379-394. <https://dx.doi.org/10.1080/02602930500353061>

P170

What's in a name? The impact of educator names in feedback from student evaluation of teaching surveys**Dr Lauren Woodlands¹, Dr Sam Cunningham¹, Dr Sarah Dart¹, Dr Freya Wright-Brough¹**¹*Queensland University of Technology, Brisbane, Australia*

Background/context. Within higher education, Student Evaluation of Teaching (SET) surveys are regularly used to gather feedback from students (Spooren et al., 2013). However, when these surveys are reported, emphasis is often placed on the scores, with little analysis completed on the free text comments (Cunningham-Nelson et al., 2019) and the implications of socio-cultural influences and the impact of names as a means to foster connection (Foster, 2023).

The initiative/practice. Due to the development of relationships between students and educators in the classroom, we hypothesise that when students use their educators' name in a SET survey response, the quantitative score is more likely to be positive. This leads to the research question: How does students' use of educator first names in qualitative SET comments relate to the quantitative rating of the subject?

Methods of evaluative data collection and analysis. A transformer-based machine learning model was used to detect the presence of names within qualitative feedback in a SET survey performed at a large Australian university (Devlin et al., 2018). Chi-square statistical testing was used to determine if there was a statistically significant relationship between the use of first names in qualitative comments and the associated positive or negative subject rating.

Evidence of outcomes and effectiveness. First names are more likely to appear in comments related to aspects done well as opposed to what could be improved. Use of first names suggests evidence of connectedness in teaching practices. This research includes a statistical comparison of the use of educator names and quantitative subject scores and suggests that humanising educators is an important element of student feedback behaviour.

References. Cunningham-Nelson, S., Baktashmotlagh, M., & Boles, W. (2019). Visualizing student opinion through text analysis.

IEEE Transactions on Education, 62(4), 305-311. <https://doi.org/10.1109/TE.2019.2924385>

Devlin, J., Chang, M. W., Lee, K., & Toutanova, K. (2018). *Bert: Pre-training of deep bidirectional transformers for language understanding*. <https://doi.org/10.48550/arxiv.1810.04805>

Foster, M. M. (2023). Instructor Name Preference and Student Evaluations of Instruction. *PS: Political Science & Politics*, 56(1), 143-149. <https://doi.org/10.1017/S1049096522001068>

Spooren, P., Brockx, B., & Mortelmans, D. (2013). On the validity of student evaluation of teaching: The state of the art. *Review of Educational Research*, 83(4), 598-642. <https://doi.org/10.3102/0034654313496870>

P171

Making knowledge structures visible in chemistry education**Prof Margaret Blackie¹**¹*Rhodes University, Makhanda, South Africa*

Background/context. This paper focuses on chemistry but the underlying principle is more widely applicable across major disciplines. Chemistry is a subject that is required by many undergraduate Bachelor of Science degrees. The knowledge is deemed foundational for other disciplines but the transfer of chemistry knowledge to these disciplines can be poor. One avenue to explore is the way in chemistry assessments are thought about.

The initiative/practice. This study uses the epistemic assessment framework (EAF) developed by Blackie (2022). In this framework makes the distinction between knowing the fact, knowing how, knowing why and powerful knowledge. Assessments, in this case tutorials, tests and exams, are coded in a manner that is visible to the student at the time of writing the assessment. Students are given a 'core knowledge' test which comprises factual information and demonstrating of 'knowing why' on two key components of the course. Lecturers are encouraged to link to the EAF in their teaching.

Methods of evaluative data collection and analysis. Students were interviewed in focus groups using a semi-structured interview after completion of the course to ascertain the extent to which they perceived that the EAF impacted their learning of chemistry and whether it had any influence on their understanding of learning more generally. Questions focused on their understanding of the knowledge structure.

Evidence of outcomes and effectiveness. Most students reported using the EAF pragmatically to guide their progress in exam settings i.e. which questions to focus on and which to skip until the end. A few students noted that it had changed how they approach other subjects. They know that there are underlying principles that need to be grasped and so they now seek them. The consequence is making knowledge structure visible in one discipline can enhance engagement with education more broadly and opens the notion of teaching for knowledge building.

References.

Blackie, M. A. L. (2022). Knowledge building in chemistry education. *Foundations of Chemistry*. <https://doi.org/10.1007/s10698-022-09419-w>

Author index

By surname with abstract reference number

A

Aayeshah, Wajeehah	P150	Armitage, James A	P111, P113
Allen, Ellinor	P106		

B

Bennett, Dawn	P109	Brown, Angela	P122
Bickford, Jane	P105	Brown, Kim	P167
Birbeck, David	P122	Bryson-Richardson, Robert	P155
Blackie, Margaret	P171		

C

Cary, Lisa	P103	Clark, Charlotte	P153
Casey, Alison	P152	Clarkson-Eather, Layla	P144
Chambers, Tim	P129	Coles, Lilienne	P105
Chan, Roy Y.	P110	Costello, Martina	P130
Choate, Julia	P149	Costibile, Maurizio	P122
Chong, Luke	P113	Crockett, Josephine	P122
Chua Chern-Pin, Eric	P154	Cunningham, Sam	P170

D

Dart, Sarah	P170	Doyle, Kim	P165
Desmarchelier, Renee	P103	Duffy, Amanda	P121
Divo, Bavani	P154	Duivenvoorden, Hendrika	P155
Doidge, Scott	P134		

d

du Sart, Desiree	P155		
------------------	------	--	--

E

Eacersall, Douglas	P115	Eggin, Mark	P134
Edgar, Amanda K	P111, P112, P113		

F

Fanning, Nicola	P105	Fokkens-Bruinsma, Marjon	P138
Farley, Alan	P146	Foo, Yang Yann	P147
Fernandez, Katherine	P156	Foster, Jann	P164
Fernandez, Ritin	P164	Fourie, Phillip	P158
Ferrer, Justine	P144	Fox, Jennifer	P157
Fitzroy, Robyn	P165	Freyens, Ben	P137
Fleer, Joke	P138		

G

Gan, Mark	P147	Goudswaard, Bethany	P153
Gascoigne, Damian	P135	Govindaswamy, Priya	P164
Goarin, Antoine	P112	Gribble, Lynn	P169
Gonzalez, Prue	P125	Gulati, Vandana	P158
Gooi, Chien	P169		

H

Hall, Brendan	P159	Hiscox, Thomas	P155
Han, Jia Yi	P154	Ho, Sum Yin Serene	P145
Hands, Africa	P136	Honson, Vanessa	P169

Hansen, Stacey	P104	Hopkins, Susan	P119
Harmon, Joanne	P122	Hsieh, Tzu-ling	P148
Hatje, Eva	P160	Hutton-Bedbrook, Kate	P161
Hawkins, John	P137		
I			
Iftikhar, Naima	P131	Iida, Sumiko	P169
J			
Jach, Elizabeth	P104	Jogulu, Uma	P130
Jansen, Ellen P. W. A.	P138	Jones, Angela	P119
Jeffries, Grant	P159	Joukhadar, George	P169
Jevons, Colin	P106	Joura, Petr	P135
K			
Kelder, Jo-Anne	P125	Kiltz, Lisa	P138
Kennedy-Clark, Shannon	P114	Kimberley, Nell	P106
Ketheesan, Natkunam	P158	Komsta, Peter	P120
Khaliq, Amna	P132	Kong Shu Min, Juanita	P154
Kiddell, Elisa J	P111	Kynn, Mary	P160
L			
Larsen, Ana	P119	Lisciandro, Joanne	P119
Lee, Wee Yee Shara	P145	Loughlin, Colin	P108
Leung, Wan Shun	P145		
Vincent			
M			
Macfarlane, Susie	P111	McPhee, Russell	P109
Martin, Robyn	P152	Mitchell, Elizabeth	P126
Mccluskey, Trish	P112	Morris, Gayle	P103
McGregor, Alison	P162	Murphy, Karen	P121
N			
Narayanan, Anuradha	P113	Ng, Pek Foong	P139
Ng, Hilary K. Y.	P163	Nguyen, Nga (Angie)	P140
Ng, Linda	P164		
O			
O'Brien, Chelsea	P104	Ong, Chee Ming	P154
Olds, Anita	P119	Ortiz Cebero, Natalia	P169
		Osorio, Sandra	P126
P			
Parkinson, Ann	P160	Perlman-Dee, Patricia	P141
Parsons, Carl	P140	Perumbil Pathrose, Sheeja	P164
Parsons, Caroline	P140	Pinar, Ari	P149
Pascoe, Emma	P165	Polly, Patsie	P117
Patterson-Norrie, Tiffany	P164	Pretorius, Lynette	P101
R			
Rahayani, Yayan	P142	Ross, Pauline	P151
Rahman, Nira	P150	Roughley, Stephanie	P161
Rankin, Michaela	P106	Russ, Erica	P165

Reinke, Nicole P160

S

Samarawickrema, Nirma P156

Sanderson, Lara P167

Schmied, Astrid P166

Scrafton, Sharon P121

Shahdadpuri, Ramesh P154

Short, Monica P165

Sinanan, Rachel P144

Siu, Rhonda P134

T

Taylor, Christine P164

Taylor Matison, Jane P105

Teoh, Kung Keat P139

Theron, Danelda P159

V

Vallis, Carmen P125

Vidor, Callum P155

W

Wang Peng Cheng, Victor P154

Wear, Andy P168

Wee, Kin Guan P133

Westacott, Marguerite P119

Wijenayake, Nirmani P169

Wilson, Gail P125

X

Xu, Meixia P162

Y

Yang, Helen P146

Yap, Melvin J. P118

Yates, Nick P127

Z

Ziaeyan Bahri, Mona P169

Spronken-Smith, Rachel P167

Steed, Brianna P157

Sturniolo-Baker, Rebekah P119

Subramaniam, Juliette P119

Succarie, Ayda P151

Sullivan, Lauren P105

Sun, Yingli P169

Sweeney, Mel P156

Theron, Phillip P159

Tregloan, Kate P131

Trippenzee, Miranda P138

Villanueva, J. Aleta P115, P116

Wong, Ka Yiu P145

Wood-Bradley, Ryan P111

Woodlands, Lauren P170

Wright-Brough, Freya P170

Wun, Miriam P154

Yeo, Zi Hui P118

Yucel, Robyn P128

Yuvaraj, Rajamanickam P166