Academic Women Co-designing Education Futures in a Postdigital World

Cheryl Brown[1] · Elaine Huber[2] · Elisa Bone[3] · Lynn Gribble[4] · Isabelle Lys[5] ·
Camille Dickson-Deane[6] · Ping Yu[7] · Lina Markauskaite[2] · Chris Campbell[8]

Abstract

This paper draws on the collective knowledge-building of nine women from diverse disciplines, roles, cultures, and institutions in Australasian women in leadership programme. Brought together during Covid-19 through a shared interest and purpose concerning current and future developments in digital education, we offer knowledge and insight from our perspective as women leaders in academia, on co-designing futures in a postdigital world. Drawing on a duoethnographic research design, we reflected on our experiences as academic leaders and practitioners to systematically explore people, situations, and contexts through co-construction and dialogue. Our joint exploration uncovered themes of visibility, gravitas, and relationships. We provide evidence of the role co-design plays in our own practices, in our classrooms, and how our research design was strengthened through co-design. Finally, we offer an evolving model of co-design for leadership in higher education with communities of practice at its core.

Keywords Co-design · Leadership · Communities of practice · Duoethnography · Women

Introduction

The neoliberal university context has resulted in a competitive and increasingly stressful work environment (Ross and Savage 2021). Work-life conflict is complex and gendered and has amplified during and post Covid-19. The reality for many academics is a constant juggle of demands and priorities, and digital ways of working made it easy for these demands to creep into evenings and weekends. Gendered divisions in academic labour and capital continue to exist (Rosa 2022). In this pressured and performative culture, finding mental and physical space to challenge masculine hegemonies and develop new visions is hard. Reflecting on a leadership programme for women in academia, this paper foregrounds the unanticipated outcomes

---

✉ Cheryl Brown
Cheryl.brown@canterbury.ac.nz

Extended author information available on the last page of the article

and collective gains that can occur when women come together with shared interest and purpose to focus on our collective vision and dreams for postdigital education in a tertiary setting. What emerges is a feminist transformative-constructive perspective with co-design at the centre where the future is empowering and inclusive. This paper aims to develop knowledge and insight for academic women in leadership to co-design futures in a postdigital world. As noted by Goodyear (2022), universities need networks of co-operation if we are to reflect real-time change.

The paper draws on the collective knowledge-building of nine women from diverse disciplines, roles, cultures, and institutions who are part of the Australasian Society for Computers in Learning in Tertiary Education (ASCILITE) Women in Academic Leadership (WiAL) initiative. In 2021, the WiAL initiative was established as an attempt to address the continued gender imbalance in university senior academic roles and the gap in leadership development programmes for women (Redmond et al. 2017). The initiative aimed to bring together women via a community approach to collaborate and support each other to purposefully progress their academic leadership journey (Redmond et al. 2021). We use Follet's (1919) definition of community as a creative process, intermingling to create 'personality, purpose, will, loyalty' (577). Participants were distributed across Australia and New Zealand, and the programme involved virtual interactions through both small group mentoring and webinars over 2 years. The extended time together enabled iterative conversations that facilitate critical self-reflection in a manner akin to action research (McNiff 2013).

As a subset of the WiAL cohort, we were interested in exploring our experiences and outcomes as a structured process in order to purposefully reflect on the realities of our leadership experiences and our collective vision for the future of postdigital education. We are from nine different tertiary institutions ranging from large metropolitan to smaller regional institutions. As academics, we hold a range of roles from the traditional balanced teaching and research to those oriented towards leadership, management and teaching focussed. The mentoring was set up to support Level C academics (Senior Lecturer) with a Level D (Associate Professor) being a mentor. If Level D academics chose to be a mentee, then they were mentored by a Level E academic (Professor). Across disciplines, we span Education, Business, Science, Arts, Information Systems, Engineering and Information Technology, Learning Sciences, Academic Development and Educational and Instructional Design. Some of us fit into these disciplinary boundaries, and others cross over multiple disciplines and fill multiple roles within our institutions. Although we are diverse in roles, background, experience and contexts of work, we are a community drawn together through a shared interest and purpose concerning current and future developments in digital education.

Whilst Communities of Practice (CoPs) (Wenger 1998) are not a new concept, our CoP was formed with a distinct transformative-constructive (aka. feminist) agenda, from participants who recognise that gender equity continues to be an issue in Australia and New Zealand, and one that influences organisational structures, policies and pay (Bönisch-Brednich and White 2021; Brower and James 2020). Multi-institutional CoPs have been noted as being a support for women leveraging learning opportunities, knowledge transfer, sharing practice,

political support and solidarity (Thomson et al. 2022), and networking noted for its value in improving gender equality and career advancement in academic leadership (Burkinshaw and White 2019). However, realising this value requires fitting into existing structures whilst simultaneously challenging and changing them. With an awareness that an initiative such as WiAL can be used as a vehicle to address inequalities, we sought to investigate:

What are our realities as women leaders in higher education?

As we recognised ourselves as being gendered leaders, skilled in educational technologies in higher education, and distinctly positioned as postdigital humans connected individually but and located globally (Savin-Badin 2021), we asked ourselves:

What are our visions for postdigital education?

Both of these questions beguiled us as we worked as leaders in a digitised realm knowing that the concept of digital spaces, and unpacking the core constructs of postdigital co-design, can create a confounding argument for our own positions in higher education (Macgilchrist et al. 2023). Answering these questions will help us reinforce our professional identities whilst projecting a professed vision of who we are and who we want to be.

Drawing on others we view postdigital as rejecting common dichotomies between 'natural' and 'artificial', 'human' and 'non-human', 'pedagogical' and 'technological' and see these modalities as inseparable from each other (Jandrić et al. 2018). The postdigital perspective of learning and teaching presents an increasingly blurred boundary between the physical and the online classroom. As Lamb et al. note, 'although there is a certain convenience, and perhaps an administrative necessity, in distinguishing between degree programmes that are delivered either 'on campus' or 'online', it is a distinction that ignores the postdigital reality of contemporary learning' (2022: 4). In addition, postdigital draws attention to new ways of working together and relating to the planet, our students and one another. A fundamental capability for those who are involved in teaching is 'awareness of how the digital is entwined with human practices within and across different levels of the educational eco-system and fluency to navigate and co-create "postdigital learning ecologies"' (Markauskaite et al. 2023: 14).

This entanglement also extends to leadership; which requires an ability to navigate our complex physical and digital work spaces and their behaviours as we constantly adjust to focal liminality of what we do (Galyen et al. 2021).

Our practice is situated in the fluid space of the postdigital where boundaries are blurred between physical and digital in all aspects of our academic lives. We use the concept of post-pandemic to signal a global context where people and geographies cannot be 'with' or 'without' Covid-19. In our view, there is no 'return to normal', and the pandemic has and continues to alter the fabric of learning and teaching (Rapanta et al. 2021), along with other structural and relational aspects of higher education institutions (HEIs). Through our reflections, we question assumptions about learning and teaching futures and uncritical

discourse around a 'return to normal'. We explore a future of postdigital education that, through co-design, is democratic for all those who participate in the learning spaces — including teachers, designers and learners.

Being Situated in the Australasian Higher Education Landscape

As leaders in higher education, we face multiple challenges in a rapidly evolving landscape. Higher education institutions in Australasia operate under complex regulatory frameworks that include accreditation, quality assurance and government compliance. Structural constraints, inequalities and patriarchal structures hinder efforts towards personalization and democratisation of learning and teaching (Linkova et al. 2021). In parallel, HEIs have been battling a continuing reduction in government support and funding. This has pushed most universities in Australia and New Zealand to not only tighten budgets and restructure departments/faculties, but to also increase competition for local students and an over reliance on international student revenue to stem the loss of funding. The pandemic has exposed HEIs to the vulnerabilities of a neo-liberal paradigm when countries went into lockdown (Pan 2021) and has highlighted an over-reliance on casual teaching staff and insufficiencies in quality approaches to building learning and teaching capacity for a postdigital era (Rapanta et al. 2021).

Whilst the UK HEA accreditation scheme is beginning to gain traction to ensure teaching consistency in HEIs, there is still no compulsion for a formal teaching qualification when academic staff were employed at HEIs. In addition, HEIs in Australia and New Zealand are under mounting pressure to produce work-ready graduates with skills to thrive in a complex, changing landscape. Incorporating more industry-related content and applying knowledge to authentic contexts through co-design with stakeholders is one way of meeting these challenges (Huber and Jacka 2022). Despite many efforts to close the gaps in access to HEIs, similar to that reported from the USA (Hanushek et al. 2019), there are still significant gaps in participation and attainment rates between different socioeconomic and demographic groups in Australasian HEIs.

Mapping the Intellectual/Theoretical Landscape: Postdigital and Co-design

In the field of educational technology, we are continuously grappling with contradictory and complex changes. After the challenge of offering remote learning during the pandemic, HEI's were faced, at the end of 2022, with the sweeping power of generative artificial intelligence (AI) technologies such as Chat GPT, which has created a paradox for educational institutions as academic integrity issues are pitted against new pedagogical opportunities (e.g. Dawson 2021; Cotton et al. 2023).

Like 'post-' and postdigital, 'co-' and 'co-design' have become a catch-all phrase for what some may refer to as participatory design, collaborative or partnership approaches or co-creation. However, the main tenet of this approach

is that a range of actors, each having a stake or interest in the outcome, come together to design an output or product. In the area of educational innovation, co-design can be described as:

> ...a highly-facilitated, team-based process in which teachers, researchers, and developers work together in defined roles to design an educational innovation, realize the design in one or more prototypes, and evaluate each prototype's significance for addressing a concrete educational need (Roschelle et al. 2006: 606).

In higher education, co-design can involve a range of stakeholders such as students, industry partners, educational designers and technology vendors all working with the educators to develop environments to facilitate authentic learning experiences (Huber and Jacka 2022). Co-design is about moving past collaborators simply having a 'voice' through consultation and feedback, to a direct involvement in design processes. Examples include higher education outreach interventions involving equity groups such as regional/remote, low socioeconomic and Indigenous Australian students (Dollinger et al. 2021) and building frameworks for supporting Māori ākonga (learners) that involve working together in mutually productive ways (Rātima 2022).

Through co-design, we also see how the idea of 'entanglements' emerges, whereby connections are made between critical perspectives and design practices — 'the inseparability between knowing and making practices' (Teli et al. 2020: 8). Co-designing for postdigital futures entails an inclusive practice that take ontological entanglements as the foundation of our thinking about teaching and learning in higher education. It challenges the discourse of academics as individuals and institutions as competitors (Macgilchrist et al. 2023). Through co-design, we can explore how the sociotechnical contributes to new futures through forging and fostering new relations and partnerships between women academics as we share ideas, sentiments and strategies

Enabling co-design practices is especially tricky in the 'individualistic and performative 'audit cultures' of neoliberal higher education that do not prioritise collaborative practices and approaches. With many tensions involved in such approaches, an acknowledgement of the different strengths and roles when moving towards a team-based approach to teaching and learning is required (Mantai and Huber 2021; Vallis et al. 2022). These differences must also be acknowledged for leadership approaches where activities and interactions are distributed across multiple people and situations (Timperley 2005) and co-created and co-constructed as part of leadership process (Sims and Weinberg 2022).

Strong leaders can acknowledge these tensions and find ways of working together to learn from them. One approach within academia is networks that enhance learning and support (Mantai and Huber 2021). Academic women's networks have been effective in increasing information exchange and improving gender awareness and solidarity (Sagebiel 2018). However, the potential for innovation and power and influence of women's networks has not been as extensive. Sagebiel (2018), drawing from an empirical study in Germany, has suggested this is due to low numbers of women in academia and lack of 'network awareness' amongst women.

With the above shared understanding and theoretical lens, we purposefully aimed to use our network to co-design learning futures in the postdigital world.

Research Approach

Using a duoethnographic approach, we reflected on our experiences as academic leaders and practitioners where we each felt that there were obstacles to understanding or experiencing our journey. We draw on Sawyer and Norris' (2012) tenets of duoethnography as a collaborative process of inquiry. This research approach has gained momentum in educational contexts, particularly through the pandemic, where researchers and educators spanned global contexts to explore different ways of working together (Dickson-Deane et al. 2022; Markauskaite et al. 2022), seeking to bring together diverse scholars' perspectives foregrounding critical reflection as data (Burleigh and Burm 2022). Like other scholars using this approach to reflect on their practice (Romero-Hall et al. 2018; Burleigh and Burm 2022; Cain et al. 2022), we systematically explored the triad of *people—situations—contexts* through co-construction and dialogue (Roy and Uekusa 2020). As a research approach, duoethnography worked for us as leaders in educational technology creating a foundation for examining our experiences. As a collaborative inquiry, duoethnography is not necessarily restricted to dyads only (Sawyer and Norris 2012). Its key tenets include dialogic and interrogating conversations, a space where researchers' voices are explicit through their lived experiences, views difference as strength and does not seek consensus or truth and can in itself a form of praxis (Burleigh and Burm 2022). Our interactions were supported by our own academic identities, the pandemic experience, digital and general leadership lessons, challenges and the future of digital education.

We, a group of nine women, regularly engaged over 6 months in reflective discourse around our experiences, commonalities and wishes. The duoethnographic approach commenced with digitally facilitated conversations in groups of 2 or 3 and explored the challenges of leading in higher education based on our gender — as women. The series of small group conversations were guided by co-constructed questions that allowed each author to share a story about their own experiences in the defined space. Those discussions enabled facilitated reflections to emerge. Although technology should make collaborative processes easier, in this instance, institutional controls and device compatibility became their own obstacles to seamless interaction. Thus, the strength of intent and collaboration as required by co-design underpinned the group's actions at all stages. Each group met twice for approximately 1 h each. The conversations were recorded and automatically generated transcripts were summarised by the groups. Through fortnightly synchronous discussions over a period of 6 months, we drew on the constructs of 'people, situation and context' (Romero-Hall et al. 2018: 21) to explicitly connect our analysis through the lens of our cultural perspective. In exploring our observations and articulating the patterns we saw in the data, we then drew on inductive reasoning to highlight themes

which were responsive to the main investigative questions. Analysing our narratives through a co-constructed approach lends itself to the probability of intersectional, yet very much subjective, positions (Chiseri-Strater 1996). This perspective illustrates how we, as women leaders, commonly feel we are viewed and how these perceptions of ourselves influence who we are in the field.

Whilst not necessarily overt in our discourse, feminist practices and praxis did underpin our approach. Conversation and critical and reflexive practice were core to the group (Lambert and Parker 2006). We valued grassroots solutions, partnership with all in the learning community (i.e. colleagues, students) and sharing across disciplines and institutions. Through our dialogic sharing in a trusting environment, the resulting narrative becomes answers to the questions about our experiences and visions as higher education leaders. It also led us through discussions about the values underpinning our practice.

Following the genre of duoethnography, our findings draw on personal experiences (duo) as scholarly reflections on practice (Cain et al. 2022; Roy and Uekusa 2020). In seeking to enhance our understanding of cultural perspectives (ethno), what emerged was themes which we systematically explored through collectively writing (graphy) (Romero-Hall et al. 2018) in the context of each of our positions centred around the common problem.

Positionality Statements

Traditionally used to frame ontological or epistemological values in qualitative research, Hayes (2021: 59) has posited an extended lens of postdigital positionality as a 'route towards stronger individual and collective agency and narratives in HE'. These she argues offer a different way to 'examine the web of complexities humans and technologies bring to inclusive policy and practices' (Hayes 2021: 57).

I [Camille] see myself identifying with my Caribbean heritage where my profession draws from its multi-influenced view of differences in valuing spaces, places and beings. My skillset focuses on the socio-technical designs in learning and performance whereby understanding how we understand and do are mediated through [technological] interfaces. My beliefs are that learning is constructed through not always harmonious interactions with others, environments and inanimate objects, thus drawing on our innate characteristics to make meanings. Observing what is learnt is the most important key to measuring (i.e. research) what, how and when information is converted to knowledge — thus presenting a continuous struggle between definitions and reality. These beliefs and skillsets are the roots of how I design, research and teach in the field of learning sciences, human–computer interaction and culture and society.

Originally from South Africa, I [Cheryl] am a recent immigrant to New Zealand where I have an academic position in digital education at a small traditional university. I have worked in the tertiary sector across three countries and been an educational designer, academic developer, researcher and educator. In my teaching, I endeavour to engage learners through processes of co-learning between students and teacher to empower students to achieve success. As a largely qualitative researcher, I

explore issues around identity, agency and empowerment of students' digital learning experiences.

I [Chris] grew up in a beach suburb south of Sydney and became a primary school teacher in Western and then South Western Sydney. As a passionate educator, I went back to further study before becoming an academic in teacher education. After 10 years, I moved into academic development and continued my research in new and emerging technologies and improving teaching practice. Drawing on practicalities and the need to move things forward, I am now in a leadership position at a regional New South Wales university. As the President of ASCILITE and an initiator of the WiAL programme, I feel strongly for women taking the lead to make things better for future generations of women in academia.

Whilst I [Elaine] now identify as a social science researcher, my initial engineering training (in the UK) still influences the way I design, deliver, research and evaluate teaching and learning. I tend to take a pragmatic approach to research placing emphasis on the questions asked, rather than any particular methodology. As a pragmatist, practicality, reflective practice and contextual responsiveness are important to me. I came to this research as one of the founders of the WiAL programme and also in the role of a mentor and educational leader in a Business School at a large research-intensive Australian university and also as a mother juggling the intricacies of work and life, personal and social.

I [Elisa] work as an academic developer and researcher in higher education, with research interests in facilitating curriculum change and innovation. My academic background is in zoology and ecology, and I continue to bring quantitative and systems approaches to my research. I have a deep belief in the power of well-designed curricula for building environmental literacy and advocacy and in facilitating transformative experiential learning experiences in students. I am an advocate for the use of digital tools and technologies to facilitate these learning experiences, including in collaborative contexts, with the challenges of the last few years, further highlighting the ways in which working together across contexts can facilitate positive change.

Originally from Malaysia, I [Isabelle] am an immigrant to Australia, and I have an academic teaching focused position in Biomedical and Health Sciences at an Australian University. I have worked previously in tertiary higher education for more than a decade in Canada, New Zealand and Australia. I started my journey in higher education as a researcher in sciences, with expertise in quantitative research analysis only, and subsequently delved into qualitative research around pedagogy for teaching and learning of sciences for university staff. I am currently building a transdisciplinary CoP focussing on research and collaborative writing for publications in community engagement.

I [Lina] moved from Lithuania to Australia as a Postdoc and now have a senior academic position in one of the comprehensive Australian universities. I mainly research how people develop capabilities necessary to solve complex real-world problems and work across disciplinary, professional and other epistemic boundaries in contemporary, saturated with digital technologies, environments. With a background in applied mathematics, I describe myself as a learning scientist. In my teaching, I teach with and about digital technologies. In my research, I work with qualitative and quantitative data.

I [Lynn] identify as an 'accidental' academic having grown up as a professional athlete and coming into academe late. Having 16-year experience as a sessional academic, I only fully commenced my academic career as the pandemic hit. With a discipline background in Management, I'm also education focused, with a love of looking to how technology enhances learning. Most of my time is spent in the classroom, and my research tends to focus on the scholarship of learning and teaching.

I [Ping] work as an educator and researcher in information technology, with specific research focus on digital transformation of healthcare. With interdisciplinary academic training in biology, population biology and computing, I am proliferating in a pragmatic, mixed-method approach to answer research questions in my specialty. I joined the WiAL programme both as a mentor and a mentee and really found resonance with the fellow academic group members who co-authored this paper.

Insights from Our Collective Narrative

Drawing from the duoethnographic approach, we first build on our positionalities as individuals to present a collective narrative of our lived experiences as real people. We then uncover more about our situation through the circumstances that affected us and explore the opportunities and tensions inherent in our contexts.

People

In our constructed duoethnographic narratives, we identify ourselves as a diverse group of women who came together as a CoP and forged the practice of leadership as co-design. Our gender and positionality was central to how we worked and how we thought about ourselves: 'I wanted to be a role model, use my title for good, do what I value' (LM) to how we interacted with our colleagues/students: 'you know, a kid would come in, … Sorry. I've just got to deal with the four-year-old or whatever, and it would be like, that's, that's absolutely fine' (EB). Many of us were used to juggling responsibilities and time and wanted to create supportive and collaborative environments for students: 'more collaboration across institutions in delivering educational opportunities so that students can communicate with other cohorts who are dealing with similar issues across the world … I want to build learning systems that will allow cohorts to connect with each other' (EB). Collaborative and flexible ('female/feminist') approaches to work were noted by some of us as a normal way of working for women academics already before the pandemic. The paradox of being seen and the toll of flexibility was palpable in our experience: 'I think you need the time and the space to reflect as well on where you're going and not just constantly working because you have to reflect on the work too. Otherwise it's hard to plan' (EB). However despite being busy we often felt isolated: 'I didn't ever feel part of a community of scholars; it was lonely' (EH).

Another salient feature across our positionalities is our non-traditional backgrounds. Rather than following traditional career pathways of completing a series of degrees to PhD and then Early Career Research roles, many of us moved countries

and came from industry or higher education administration. Most of us made this career choice later in life and career and had come to academe for our love of the discipline and the teaching. Commencing in a non-traditional track meant pathways of mentorship had eluded some, but each had carved our own niche. Our combined interest in education and the digital were what had brought us together in this programme. 'I was doing this very central support role around digital technology and e-learning' (CB), in our institutional research and practice.

Whilst many women talk of imposter syndrome, it can be particularly evident in academics from non-traditional backgrounds (Jarldorn and Gatwiri 2022) and those working in non-standard roles or in the so-called third space between academia and administration (Akerman 2020). For our group, our non-traditional backgrounds and expertise provided a different perspective on our recognition. Previously seen as a disadvantage, our lives outside of academe had provided a basis upon which to understand, adapt, share and experiment, leaving us primed and ready to undertake these knowledge positions in the face of sudden and unplanned change. For some of us, what may have previously been considered as a disadvantage become a 'super power' previously unrecognised as we note we 'are respected by people close to us …but not around us/internally to the uni but.. we are respected externally for what we do' (CB).

Situation

Our inductive exploration uncovered two new themes regarding our situation in relation to our roles as educators: (1) visibility and gravitas of who we are and what we do and (2) relationships. Visibility relates to our work and role as being seen or acknowledged. Gravitas, a concept not widely known in leadership literature, is about 'weight, seriousness, or importance'. It has been demonstrated to relate closely to transformational leadership (Jackson 2020). Relationships are about the process we engaged in and the value we held for the collective.

Visibility and Gravitas

Visibility was the direct outcome of the sudden move to remote learning. We felt that the pandemic had made our previously invisible work visible and respected. Whilst some of us had disciplinary *gravitas*, this was not necessarily valued in an educational context: 'I'm enrolled in the second PhD to get the street cred for education, because I come from a science background of pure research' (IL). We all shared interest and expertise in digital learning and teaching, but many had been doing this quietly, either in their own classrooms or as a form of support. 'I'm on the executive, and I get the "what's that … Oh you're going to be away from work"', there's not the 'oh you're a leader in the field of digital education' (EH). However, the pandemic raised the profile of our skill sets, and what we did became 'seen'. In being seen and recognised, our gravitas also increased. These two components are important for women as noted in systems that are individualistic and performative. Comments

such as: 'scaling our work, and at the same time it's difficult, and it's a challenge. It presents a very unique opportunity… because we have many instances of where scalability is an issue, and it just allows us to kind of challenge the research' (CDD).

Visibility and gravitas were not all good news though; with the pivot to online teaching and learning instead of being a benefit, this became both expected and exacerbated as it became normalised due to the visibility of 'all' academics working this way 'it was a nightmare. I was like, oh, my God, why am I doing this job? Because it was terrible. It was literally, you know, late nights and weekends for months and months and months, and then it sort of started to settle down' (EH).

However in the post-pandemic context, what was noted and applauded as being successful is being pushed against as patriarchal structures endeavoured to reinforce the status quo in a desire to go 'back to normal'. As academic leaders we are faced with institutional 'politics behind do we come back to campus, do we not and sometimes the turnaround was like 24 h, you know' (IL). Conversely, some colleagues say 'we're not going to go back… we're not going to go back to what it was before' (IL). We notice this disconnect 'between what the institution is saying and what the teachers are saying, what the students are saying. … People have put so much effort into designing good online experiences and to integrating like, you know, blended learning into the curriculum that the expectations have changed' (EB).

In coming together, we were not one individual battling the 'norm' but a collective working to enhance teaching and learning and overcome the obstacles. In our group conversations, we shared insights and strategies and supported each other in relation to pushing back against institutional practices. Importantly, this visibility and gravitas gave way to co-design, as a central tenet in our discussions, and we reflected that it was critical for postdigital education futures. Communal knowledge and meaning making contributed to our evolving approaches both as individuals and as a collective.

Relationships

Relationships forged in the digital space mirrored advisory work with academics, and trust was built through a shared understanding of the initial challenges inherent in working solely online and a loosening of the traditionally hierarchical approaches to academic work. 'I came to the university when this, you know, massive upheaval – like we'd basically shut down the systems and everyone had to move on to online teaching and learning practices at [university]. So at the same time I was starting a new job, I was sort of jumping into an advisory role with academics who are, like, super-stressed already' (EB).

Relationships developed as the common ground to allow us to counteract isolation and lack of connection characteristic of more 'traditional'/competitive academic pathways. Working online acknowledged the blurring of boundaries between the personal and the professional worlds, 'a teacher can really shape a students professional development' (CDD) and provided the freedom and the space to allow mistakes, vulnerability and compassion 'that's what I'm saying. We make a lot of mistakes, and that we try to correct them. Right?' (CDD).

One academic advisor in the group noted that upholding formal relationships in a turbulent period was at odds with their own experience of navigating a new role in central curriculum innovation reform, as well as personal responsibility in remote learning and childcare: 'I couldn't be like, you know, so hardcore about holding everybody to account when my own … circumstances were chaotic. So I think once everyone relaxed into that, it made the partnerships go a bit more smoothly and it made the advisory relationship better because we were acknowledging each other… each others' humanity' (EB).

Trust was built based on shared experience, including the desire for connection, which was key to our collaboration, both initially in our mentee groups, but also as we started to expand our connections into this research collaboration. 'The women in academic leadership program was a real opportunity for us to just connect and listen to like minded people' (EH) and 'My calendar was full from eight till six pretty much every day and then when our meetings popped up in blue, I called it my "light of the week"' (EH). A desire to connect with and support others was often something we had in common, with several mentioning the emergence of the importance of empathy and kindness in their development and leadership activities in the postdigital space. 'I've taken upon myself to really think about how we can help each other. And so that pedagogy of kindness and applying that to academics has been a really important part of my leadership journey' … 'technologies make people feel uncomfortable, so they're not always comfortable… And my helping them feel comfortable is okay' (CC).

Whilst our adoption of supportive approaches was a common feature of our individual practice 'It feels like it's empathy… creating connections with people and trying to … encourage them to take those risks they wouldn't normally take knowing that they've got our support' (CC) within our respective institutions. Our non-traditional backgrounds underpinned how we worked together as a community that crossed institutional boundaries 'I think of it much more as it's all about the journey and it's all about, you know, enjoying life, the work and making it better for other people' (CC).

Context

Our exploration of context is framed at an organisational level. The universities we work at, ASCILITE as a professional organisation and WiAL as the programme we were part of. This is all situated within our particular political, social, digital and physical context.

The mass move to online teaching and learning at universities worldwide, as a result of the Covid-19 pandemic onset in 2020, further brought the importance of digital collaboration into not just our group space but into our daily working lives as academics. 'I ended up writing a couple of pieces about this sort of pressure that teaching academics were under in this time. And I found that really valuable and I showed that to a few people I was working with and they were saying thank you, you know, we don't have a voice at the moment. We don't have a way to express how difficult it's been for us' (EB). This context was key to our collaboration and building

working relationships that were open and trusting. Collaboration and trust formed within the digital space bridged the boundaries of institution, discipline and hierarchy. As one group reflected 'Women in our group are self-selecting but they are, in general, more interested in connecting. Technology has made it easier – to talk and connect. Are we naturally a more trustful group?' (PY).

'Digital' was an integral part of our everyday lives, learning, professional practice, and network interactions. Many of us have never met in person, yet through digital technologies, we have developed relationships and a community to support and enhance our professional and personal development. Although this was not without challenges as our 'posts' and 'emails' indicated. Despite the promise of institutional digital platforms, they aren't set up for cross institutional engagement very well 'Sorry to have missed these messages. [My university] doesn't allow me to see [another group] unless I log off and on specially' (LG). What is intended to be inclusive, unintentionally becomes a tool for exclusion. Synchronous collaboration was also problematic at times 'My changes just got lost. I used track, but I can't see them at all' (CC). Endeavours to create private groups either opened us up to a wider group or closed us down so sharing documents was difficult 'looking for the channel with the workshops/discussions we had. Are they moved to somewhere else?' (EB). We circumvented institutional platforms in the end and moved to a private cloud solution.

Whilst the 'digital' created new tensions that necessitated a rethinking of concepts of care and well-being, both for us and our students, it also enhanced inclusion through connections, collegiality and identity. Working within a co-design approach can be both a productive and strategic approach to self-care. Throughout this process as a group, we moved in and out of the collaboration depending on personal circumstances 'I'm a tentative for the xx as my mum is having surgery that day and I'll need to pick her up' (EB) or work imperatives 'sorry—we have school PhD presentations today' (LG) and 'I'm still trying to find time to wrangle [our] transcripts' (EB). The reality of flexibility and juggling in academia were entrenched in our practices, not everyone could be 'present' in the same way at the same time.

Consideration of students featured in terms of equity and access too. Concerns for international students, as well as learning preferences were all discussed, again demonstrating the focus of education of the group. 'Then it was like no they're not going to come at all, we're going to have to go online for the [international] students. We had to make a plan, do all this paperwork, run training sessions, and then a week later, it was like okay everybody's going online' (EH). We noted the challenges of scaling our work, knowing that online and face-to-face are different spaces. Further, we talked of the students as central to what we were experiencing and how our designs and work evolved. 'The wicked problems of the world is that every student is a unique instance, context matters. We need to look at the little factors, to tailor, customise, and be a little more hands-on and personalize learning' (CDD).

As a result, innovations, other opportunities arose including this paper and other publications to not only share practice but as a legitimisation of practice. 'Those futures will be designed by people who will live in those futures. All futures are created by people' (LM).

Towards Principles of Co-design

Originating as a leadership/mentoring programme, we evolved into a community (Follett 1919) collaborating through research interests and co-design using equality and equity best practice. As noted during one of our synchronous online meetings, 'working together for research and interest' gave us a 'space to convene away from politics' (IL). We noted how our practices were influenced by power structures in neoliberal scenarios, and shared our struggles of trying to work, to contribute to building the futures we desire. At odds with the structural constraints and inequalities of the 'individualistic and performative neoliberal 'audit cultures' of higher education' (Lambert and Parker 2006), we foregrounded stories of struggle and conflict that worked against us to constrain innovation and flexibility. For example, the politics and decision-making at different institutions about what it means to work on campus was experienced differently in each of our contexts 'it's just the flexibility.. giving everyone more choice,—staff members and students. Sometimes you will be working on campus, and other times you stay at home. It gives you a sort of life work balance' (PY). However in the majority of our institutions, the return to pre Covid-19 work practices of visibility and presence on campus (for both staff and students) has ignored the benefits and balance that flexible work/study offered us during the pandemic. Through co-design, we developed a space to convene away from these institutional politics and 'found our tribe' (LG). We moved beyond our individual career advancement, towards support for each other, to engage in shared thinking and practice to enhance learning and teaching for our students and at our respective institutions. A 'sharing collaboration that will result in change, as we understand more about each other's, institutions, and dilemmas' (IL). This shared thinking enabled us to leverage our learnings towards the development of a number of principles of co-design, each emerging from our combined understanding of how and what we were doing in our day-to-day academic work.

One definition of co-design is a facilitated, collaborative process in which teachers, researchers and developers work together in defined roles to design an educational innovation (Roschelle et al. 2006). Whilst the value of diversity and inclusion is often part of institutional discourse, we were able to demonstrate this in practice through participation in the WiAL programme and our research collaboration. Although for many of us our daily practices may not be labelled specifically as 'co-design', in the true sense of the definition regarding designing innovations in teaching and learning, many of the tenets of co-design practice hold true for us as leaders in higher education. We noted how in our teaching we need to be 'more flexible, students have lives, they need jobs, they are humans. Does it matter if the assignment is handed in Friday night or Monday morning?' (LM).

The tensions reported in the work of Vallis et al. (2022) speak to our combined experiences of navigating the complexities of multidisciplinary skills and knowledges at our respective institutions as well as in our own learning journeys. In our research team one of us noted 'I'm in a completely different field … I think it makes it a bit tricky to kind of prove your worth' (EB) and another felt the need to

enrol in a PhD in education to supplement her scientific expertise and enable better, more scholarly education focussed conversations with colleagues as well as 'to give me street cred' (IL). This aligns with Vallis et al.'s (2022) observations that '… creative collaboration from diverse perspectives necessarily involves an open communication and willingness to persist beyond inevitable misunderstandings and creative tensions and mismatched levels of readiness to participate' (134).

Co-design featured strongly in our research design. Whilst duoethnography was our beginning, our research evolved from our questions, to our narratives and analysis and through to this writing. For most of us, this was an unusual experience and whilst we didn't know the end point at the start, we trusted in the process. 'I was like, Yes, this is the place I'm going to put effort into and try and forge relationships' (CB).

Co-design also features in our own practices, in the classroom, and our leadership. 'I dream that students have flexibility and that we're able to do that, provide that easily, and that if they want to go on campus and go to class, they can, if they want to go on campus and go to a library and join online or they want to stay at home in their bedroom, they can' (CC). Our proposed model for co-design for leadership in higher education whilst originating from women does not need to be gender-specific. Through co-design, it is possible for alternative 'practices, norms, values, and understandings that atypical leaders and leadership candidates hold to inform and co-innovate leader emergence practices' (Özbilgin 2022: 180). However, this needs to be supported within the institution. In a postdigital education future, 'teaching and digital education will be 'nicer' if our educational cultures are more tolerant to risk taking, trying new things and giving agency for teachers' (LM).

Co-design Principles for Leadership in Higher Education

The principles that emerged from our findings and our practice are our contribution to co-designing futures in a postdigital world. They speak to ways of working that are conducive to leading for postdigital futures and form a basis for developing co-design practices in education. As a cohesive set, they overlap but they have learning at their heart.

Collegiate Understanding

As women leaders in academia, we sought to build on our deep-seated knowledge of learning technologies and welcome in the voices of others to build a collegiate understanding of the recent crisis and the ensuing changing landscape. Technology was meant to facilitate this collaboration (Markauskaite et al. 2023), and although it sometimes hindered us in terms of selecting the right communication and collaboration tools that worked across the different institutions or aligned with institutional policies, we worked together to ensure it didn't hold us back. Building communities across institutions and roles breaks away from compartmentalised competitive neoliberal silos of higher education.

Reflexivity

Taking an action research approach (McNiff 2013) that incorporates reflexivity (Jones et al. 2014) to the work that we do enables us to refine our ideas and build our knowledge as a community of scholars. We learned together and shared our failures as well as our wins, often taking two steps forward and one step back. Developing a safe space in which to reflect, learn and share builds confidence and competence in education.

Listening with Attention

Co-design in any form requires a growth mindset and adaptability (Vallis et al. 2022). When we are able to listen to the opinions of others about how they prefer to learn and teach, and adapt our own thinking, we open up to the emergence of innovative thinking and new ideas (Sims and Weinberg 2022). Such ideas and ways of thinking are not threats, and they offer opportunities and benefits to imagine different futures in education.

Empathy

We found that we constantly, almost subconsciously, placed ourselves in our stakeholders' shoes to better understand their perspectives, the challenges we shared and the struggles that frustrated us (Cain et al. 2022). Experiences do not occur in isolation and considering others perspectives within and across contexts builds learning opportunities.

Pluriversity

Defined as 'a world where many worlds fit' (Escobar 2018: XVI), the make-up of our group enabled us to view our work through a multitude of lenses, through dialogues of shared experience across similar but ever changing boundaries (Burkinshaw and White 2019; Bönisch-Brednich and White 2021; Özbilgin 2022). We celebrated this diversity and learned from each other, building a more holistic perspective of the issues and the possible solutions. Difference is beneficial and out of disagreement, new ideas can emerge.

Trust

Regular and open two-way communication helps build trust. This trust can then lead to supporting failure and learning from failure (Vallis et al. 2022). It takes time and effort to build this trust, but it is an essential building block in which to underpin co-design practices if new futures are to be imagined and designed.

A final principle that didn't emerge during our discussions but which, as we reflect back on our collaboration together, is one of *Co-ownership* — sharing responsibility across the co-design team for the outputs of the co-design process and for our students and ourselves enabled us to 'share the load' in a form of distributed

leadership (Timperley 2005; Jones et al. 2014). For example, through modelling co-ownership in the practice of writing this paper, we are speaking up, against the institutional discourse of rankings, authorship, and individual merit, and we advocate for a new, networked model or team approach to learning and teaching (Mantai and Huber 2021) alongside reward and recognition of the skills and attributes required as well as the time it takes to collaborate and work together successfully.

Conclusion

Covid-19 has inadvertently pivoted and expedited higher education into wider and deeper reliance on digital teaching and learning practices than practiced traditionally. One outcome of redesign and resilience from Covid-19 is the formation of this group of women in leadership who have used this digitally enabled opportunity to redevelop a sustainable and equitable way of inclusive collaboration. We foreground these co-designs for leadership principles underpinning our community of practice as our contribution to co-designing futures in a postdigital world.

For us as a group of women leaders, our dream for a postdigital future for teaching and learning is one where co-design is central and where boundaries across institutions/disciplines/levels/status have become porous. It enables the generation of insights into new ways of working together in higher education. Leadership through co-design enables a future which is empowering, inclusive and sustainable, with implications for redesign and sustainability of university practices.

Originally configured in mentor/mentee groups with semi-defined leader/follower roles (Sims and Weinberg 2022), we then came together across these dichotomies to share insights from the programme on how it supported each of us. We figured out strategies, shared ideas particularly around the issues of educational technology. Co-design as a construct related to all aspects of this work as we pooled together our virtual and physical resources in the postdigital context to contribute to other people's journey's in a way that may incite change in academia.

Rather than conforming to the norm, this group of women contributed to and gained collective/shared professional identity through project work, providing an example of equity practice free from confines of status, high education structures and barriers and research or work disciplinary boundaries.

Our future entails leveraging the knowledge and insight from individual cultural and professional identity in a new evolving model of a CoP in diverse scenarios and collaborative authorship across disciplines, extending to women beyond our WiAL initiative. We emphasise the experiences of participants to build collegiality in a specific project or field of research. We, academic women in leadership, are and will continue to work together in true equity and equality to nurture one another and achieve goals higher than any one alone can achieve.

References

Akerman, K. (2020). Invisible imposter: identity in institutions. *Perspectives: Policy and Practice in Higher Education, 24*(4), 126-130. https://doi.org/10.1080/13603108.2020.1734683.

Bönisch-Brednich, B., & White, K. (2021). Whatever happened to gender equality in Australian and New Zealand universities?. In P. O'Connor & K. White (Eds.), *Gender, Power and Higher Education in a Globalised World* (pp. 93–115). Springer International Publishing. https://doi.org/10.1007/978-3-030-69687-0_5.

Brower, A., & James, A. (2020). Research performance and age explain less than half of the gender pay gap in New Zealand universities. *PLoS ONE, 15*(1), e0226392. https://doi.org/10.1371/journal.pone.0226392.

Burkinshaw, P., & White, K. (2019). Networking and gender equality in academic leadership. In A.-S. Antoniou, G. Cooper, & C. Gatrell (Eds.), *Women, Business and Leadership* (pp. 159–173). Cheltenham, UK: Edward Elgar Publishing.

Burleigh, D., & Burm, S. (2022). Doing Duoethnography: Addressing Essential Methodological Questions. *International Journal of Qualitative Methods, 21*. https://doi.org/10.1177/16094069221140876.

Cain, M., Campbell, C., & Coleman, K. (2022). Kindness and empathy beyond all else. Challenges to professional identities of Higher Education teachers during COVID-19 times. *The Australian Educational Researcher.* https://doi.org/10.1007/s13384-022-00552-1.

Chiseri-Strater, E. (1996). Turning in upon ourselves: Positionality, subjectivity, and reflexivity in case study and ethnographic research. In P. Mortensen & G. Kirsch (Eds.)*, Ethics and Representation in Qualitative Studies of Literacy* (pp. 115–133). National Council of Teachers of English.

Cotton, D. R. E., Cotton, P. A., & Shipway, J. R. (2023). Chatting and cheating: Ensuring academic integrity in the era of ChatGPT. *Innovations in Education and Teaching International.* https://doi.org/10.1080/14703297.2023.2190148.

Dawson, P. (2021). *Defending Assessment Security in a Digital World: Preventing E-Cheating and Supporting Academic Integrity in Higher Education.* London: Routledge. https://doi.org/10.4324/9780429324178.

Dickson-Deane, C., Bristol, L., McNeil, D., Esnard, T., & Leacock, L. (2022). Intersectionality and Compromise: Enacting Government Policies in the Caribbean. In V. Dennen, C. Dickson-Deane, X. Ge, D. Ifenthaler, S. Murthy, & J. C. Richardson (Eds.), *Global Perspectives on Educational Innovations for Emergency Situations* (pp. 119–128). Cham: Springer. https://doi.org/10.1007/978-3-030-99634-5_12.

Dollinger, M., D'Angelo, B., Naylor, R., Harvey, A., & Mahat, M. (2021). Participatory design for community-based research: A study on regional student higher education pathways. *The Australian Educational Researcher, 48*(4), 739–755. https://doi.org/10.1007/s13384-020-00417-5.

Escobar, A. (2018). *Designs for the pluriverse: Radical interdependence, autonomy, and the making of worlds.* Durham, NC: Duke University Press.

Follett, M. P. (1919). Community is a Process. *The Philosophical Review*, *28*(6), 576–588. https://doi.org/10.2307/2178307.

Galyen, K., Meekins, D., & Kilgore, W. (2021) Supporting teachers designing in liminality: Embracing a new and flexible way forward. *Educational Technology Research and Development, 69,* 307–311. https://doi.org/10.1007/s11423-020-09923-w.

Goodyear, P. (2022). Realising the Good University: Social Innovation, Care, Design Justice and Educational Infrastructure. *Postdigital Science and Education, 4*(1), 33–56. https://doi.org/10.1007/s42438-021-00253-5.

Hanushek, E. A., Peterson, P. E., Talpey, L. M., & Woessmann, L. (2019). The achievement gap fails to close. *Education Next, 19*(3). https://www.educationnext.org/achievement-gap-fails-close-half-century-testing-shows-persistent-divide/. Accessed 25 July 2023.

Hayes, S. (2021). *Postdigital positionality: Developing Powerful Inclusive Narratives for Learning, Teaching, Research and Policy in Higher Education.* Leiden: Brill. https://doi.org/10.1163/9789004466029.

Huber, E., & Jacka, L. (2022). Co-Design of Higher Education. In C. Campbell, D. B. Porter, D. Logan-Flemming, & H. Jones (Eds.), *Scanning the Ed Tech Horizon: The 2021–2022 Contextualising Horizon Report*. (pp. 30–31). ASCILITE. https://ses.library.usyd.edu.au/handle/2123/29997. Accessed 25 July 2023.

Jackson, C. (2020) Transformational leadership and gravitas: 2000 years of no development? *Personality and Individual Difference, 156*(1), 109760. https://doi.org/10.1016/j.paid.2019.109760.

Jandrić, P., Knox, J., Besley, T., Ryberg, T., Suoranta, J., & Hayes, S. (2018). Postdigital science and education. *Educational Philosophy and Theory*, *50*(10), 893–899. https://doi.org/10.1080/00131857.2018.1454000.

Jarldorn, M., & Gatwiri, K. (2022). Shaking off the Imposter Syndrome: Our Place in the Resistance. In M. Addison, M. Breeze, & Y. Taylor (Eds.), *The Palgrave Handbook of Imposter Syndrome in Higher Education* (pp. 529–543). Springer International Publishing. https://doi.org/10.1007/978-3-030-86570-2_32.

Jones, S., Harvey, M., Lefoe, G., & Ryland, K. (2014). Synthesising theory and practice: Distributed leadership in higher education. *Educational Management Administration & Leadership*, *42*(5), 603–619. https://doi.org/10.1177/1741143213510506.

Lamb, J., Carvalho, L., Gallagher, M., & Knox, J. (2022). The postdigital learning spaces of higher education. *Postdigital Science and Education*, *4*(1), 1–12. https://doi.org/10.1007/s42438-021-00279-9.

Lambert, C., & Parker, A. (2006) Imagination, hope and the positive face of feminism: pro/feminist pedagogy in 'post' feminist times? *Studies in Higher Education*, *31*(4), 469–482. https://doi.org/10.1080/03075070600800616.

Linková, M., Atay Ö., & Zulu C. (2021). Making the right choice: Discourses of individualised responsibility in higher education. In P. O'Connor & K. White (Eds.), *Gender, Power and Higher Education in a Globalised World*. (pp. 71-91). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-69687-0_4.

Macgilchrist, F., Allert, H., Cerratto Pargman, T., & Jarke, J. (2023). Designing Postdigital Futures: Which Designs? Whose Futures? *Postdigital Science and Education.* https://doi.org/10.1007/s42438-022-00389-y.

Mantai, L., & Huber, E. (2021). Networked Teaching: Overcoming the Barriers to Teaching Experiential Learning in Large Classes. *Journal of Management Education*, *45*(5), 715–738. https://doi.org/10.1177/1052562920984506.

Markauskaite, L., Carvalho, L., & Fawns, T. (2023). The role of teachers in a sustainable university: From digital competencies to postdigital capabilities. *Educational Technology Research and Development*. https://doi.org/10.1007/s11423-023-10199-z.

Markauskaite, L., Marrone, R., Poquet, O., Knight, S., Martinez-Maldonado, R., Howard, S., Tondeur, J., De Laat, M., Buckingham Shum, S., Gašević, D., & Siemens, G. (2022). Rethinking the entwinement between artificial intelligence and human learning: What capabilities do learners need for a world with AI? *Computers and Education: Artificial Intelligence*, *3*, 100056. https://doi.org/10.1016/j.caeai.2022.100056.

McNiff, J. (2013). *Action Research: Principles and Practice.* 3rd Ed. London: Routledge. https://doi.org/10.4324/9780203112755.

Özbilgin, M. F. (2022). Keynote Summary: The emergence of atypical leaders and their role in equality, diversity, and inclusion-led changes at work – towards a co-design approach. *International Journal of Gender, Science and Technology*, *14*(2), 176–182.

Pan, S. (2021). COVID-19 and the neo-liberal paradigm in higher education: Changing landscape. *Asian Education and Development Studies*, *10*(2), 322–335. https://doi.org/10.1108/AEDS-06-2020-0129.

Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2021). Balancing technology, pedagogy and the new normal: Post-pandemic challenges for higher education. *Postdigital Science and Education, 3*(3), 715–742. https://doi.org/10.1007/s42438-021-00249-1.

Rātima, M., Smith, J., Macfarlane, A., Riki, N., Jones, K-L., & Davies, L. (Eds.). (2022). *Ngā Hau e Whā o Tāwhirimātea: Culturally responsive teaching and learning for the Tertiary Sector*. Christchurch, NZ: Canterbury University Press.

Redmond, P., Gutke, H., Galligan, L., Howard, A., & Newman, T. (2017) Becoming a female leader in higher education: Investigations from a regional university. *Gender and Education*, *29*(3), 332–351. https://doi.org/10.1080/09540253.2016.1156063.

Redmond, P., Huber, E., Campbell, C., & Gregory, S. (2021). Standing on the shoulders of a giantess: Women in Academic Leadership. ASCILITE TELall Blog, 11 February. https://blog.ascilite.org/standing-on-the-shoulders-of-a-giantess-women-in-academic-leadership/. Accessed 25 July 2023.

Romero-Hall, E., Aldemir, T., Colorado-Resa, J., Dickson-Deane, C., Watson, G. S., & Sadaf, A. (2018). Undisclosed stories of instructional design female scholars in academia. *Women's Studies International Forum*, *71*, 19–28. https://doi.org/10.1016/j.wsif.2018.09.004.

Rosa, R. (2022). The trouble with 'work–life balance' in neoliberal academia: a systematic and critical review. *Journal of Gender Studies, 31*(1), 55–73. https://doi.org/10.1080/09589236.2021.1933926.

Roschelle, J., Penuel, W., & Shechtman, N. (2006). Co-design of innovations with teachers: definition and dynamics. In S. A. Barab, K. E. Hay, & D. T. Hickey (Eds.), *ICLS 2006, Vol. 2* (pp. 606–612). International Society of the Learning Sciences.https://doi.org/10.22318/icls2006.606.

Ross, S., & Savage, L. (2021). Work reorganization in the neoliberal university: A labour process perspective. *The Economic and Labour Relations Review, 32*(4), 495–512. https://doi.org/10.1177/10353046211003635.

Roy, R., & Uekusa, S. (2020). Collaborative autoethnography: "self-reflection" as a timely alternative research approach during the global pandemic. *Qualitative Research Journal, 20*(4), 383–392. https://doi.org/10.1108/QRJ-06-2020-0054.

Sagebiel, F. (2018). Gender and Network Awareness in/for successful leadership in academic Science and Engineering International. *Journal of Gender, Science and Technology, 10*(1), 24–51. https://genderandset.open.ac.uk/index.php/genderandset/article/view/519.

Savin-Baden, M. (2021). What are Postdigital humans? In M. Savin-Baden (Ed.), *Postdigital Humans: Transitions, Transformation and Transcendence* (pp. -15). Cham: Springer. https://doi.org/10.1007/978-3-030-65592-1_1.

Sawyer, R. D., & Norris, J. (2012). *Duoethnography*. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:osobl/9780199757404.001.0001.

Sims, R., & Weinberg, F. J. (2022). More than Follow the Leader: Expectations, Behaviors, Stability, and Change in a Co-Created Leadership Process. *Group & Organization Management*, 10596011221093456. https://doi.org/10.1177/10596011221093456.

Teli, M., Foth, M., Sciannamblo, M., Anastasiu, I., & Lyle, P. (2020). Tales of institutioning and commoning: Participatory design processes with a strategic and tactical perspective. *Proceedings of the 16th Participatory Design Conference 2020 - Participation(s) Otherwise - Volume 1* (pp. 159–171). https://doi.org/10.1145/3385010.3385020.

Thomson, A., Palmén, R., Reidl, S., Barnard, S., Beranek, S., Dainty, A., & Hassan, T. (2022). Fostering collaborative approaches to gender equality interventions in higher education and research: the case of transnational and multi-institutional communities of practice. *Journal of Gender Studies*, *31*(1), 36–54. https://doi.org/10.1080/09589236.2021.1935804.

Timperley, H. S. (2005). Distributed leadership: Developing theory from practice. *Journal of Curriculum Studies*, *37*(4), 395–420. https://doi.org/10.1080/00220270500038545.

Vallis, C., Wilson, S., Tyrrell, J., & Narayan, V. (2022). Co-design as Professional Learning: Pulling Each Other in Different Directions, Pulling Together. In D. Forbes & R. Walker (Eds.), *Developing Online Teaching in Higher Education: Global Perspectives on Continuing Professional Learning and Development* (pp. 133–146). Springer Nature. https://doi.org/10.1007/978-981-19-5587-7_10.

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.

Authors and Affiliations

Cheryl Brown[1] [ID] **· Elaine Huber[2] · Elisa Bone[3] · Lynn Gribble[4] · Isabelle Lys[5] · Camille Dickson-Deane[6] · Ping Yu[7] · Lina Markauskaite[2] · Chris Campbell[8]**

Elaine Huber
elaine.huber@sydney.edu.au

Elisa Bone
elisa.bone@unimelb.edu.au

Lynn Gribble
l.gribble@unsw.edu.au

Isabelle Lys
Isabelle.Lys@acu.edu.au

Camille Dickson-Deane
Camille.dickson-deane@uts.edu.au

Ping Yu
ping@uow.edu.au

Lina Markauskaite
lina.markauskaite@sydney.edu.au

Chris Campbell
chriscampbell@csu.edu.au

[1]   University of Canterbury, Christchurch, New Zealand

[2]   University of Sydney, Sydney, Australia

[3]   University of Melbourne, Melbourne, Australia

[4]   University of New South Wales, Sydney, Australia

[5]   Australian Catholic University, Brisbane, Australia

[6]   University of Technology Sydney, Sydney, Australia

[7]   University of Wollongong, Wollongong, Australia

[8]   Charles Sturt University, Bathurst, Australia