The paradigm wars rage: the need for an integrated approach for the future of higher education

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Abstract

Are higher education researchers at war – *with each other*? In this invited article, I introduce a keynote manuscript, which I presented at the Higher Education Research and Development Society of Australasia's (HERDSA) 2023 conference. Through it, I argue that despite over 30 years of a wealth of qualitative and mixed methods data arising in the field of higher education, quantitative data continues to play an outsized role in university decision-making. This speaks to a hierarchy of epistemologies in our sector, which, ultimately, may limit the sector's ability to prepare for change or navigate in troubled times. Alternatively, I present an 'integrated approach' which would encourage researchers and university decision-makers to equally respect and value the various epistemologies that exist in the study of higher education. Critically, this includes those epistemologies and methodologies that harness the nuanced, complicated data that draws on students' voices and their lived experiences. I conclude by reflecting on Associate Professor Barbara's Grant's concept of "a thousand tiny universities" to consider how each of us, researchers, practitioners, senior leaders, has a role to play in addressing, and correcting, the existing epistemic biases that continue to thwart progress in higher education.

Editors' Note

We are delighted to make this keynote, presented at the HERDSA 2023 Conference, available to our readership. Dollinger's discussion of research approaches and her call for consideration of epistemic biases and deeper understanding of research methods align well with ASRHE's philosophy. To continue the conversation started at the conference, we have added questions and invited Mollie to respond – please click on the question icons to read our questions and on the audio links for Mollie's responses.

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Introduction

I am not a 'methods person' so to speak. In that, I mean that my research primarily to date has not overtly dwelled on epistemologies, ontologies, and the corresponding methodological approaches of research design. Yet the longer I work in academia, and namely, as a higher education researcher, I feel I have no choice but to highlight the need for the community to better reflect on and interrogate the approaches we take and the philosophies of knowledge which underpin them. Therefore, when I was asked to present a keynote for HERDSA in 2023, I chose not to present on the topic I am predominantly most known for (that is, students as partners or student voice), but rather, on the more significant topic of why years of rigorous, thoughtful research on the benefits of student partnership have yet to drive real change in our sector.

The manuscript presented below is based on my reasonings and reflections on the ways in which higher education continues to be affected by epistemic divides, often referred to as 'the paradigm wars'. In a rare opportunity, this manuscript is being published in text-form to help translate the keynote experience, often a one-off moment, captured in a single place and time, into a broader discussion which can facilitate greater dialogue on the topic. In this process, I have received questions from the editorial board of this journal, Advancing Scholarship and Research in Higher Education. My audio answers are inserted at appropriate points throughout this article. Prompted by these questions, I have also included a reflection to the keynote manuscript, summarising the feedback I have received to date, as well as my thoughts on potential future directions of research.

I note first that I am by no means the first to comment on epistemic divides (Connell, 2020), injustices (Fricker, 2007), or fragilities (Skopec et al., 2021) in research practices. In fact, my attempt at doing so is quite a superficial take compared to others, for example, Savo Heleta's research (2016) on epistemic violence in South Africa, or Thomas Teo's research (2011) on epistemic disparities in psychology. Further, while my discussion below mainly rests on the divides across positivism and interpretivism – there are also more complex nuances in this space – such as the over-reliance on Western epistemologies (refer to Ndhlovu & Kelly, 2020), and the devaluation of Indigenous knowledges (refer to Latulippe & Klenk, 2020). However, in my plain-language attempt, I hope that this historically 'highbrow' debate of what is knowledge, and how do 'know what we know', can appeal to a greater audience and encourage more voices to enter this important discourse.

Keynote Manuscript

In 1989, if you were an educational researcher, there was no larger topic of discussion or debate, than what was known as the 'paradigm wars'. For those of you unfamiliar with this debate, which raged for arguably two decades, or up to a hundred years beforehand, the paradigm wars were a division between educational researchers and teachers about whether the field of education, including higher education, could truly be a science, like biology or engineering.

As summarised by Nathaniel Gage (1989), on one side we had the social behaviouralists, often from psychology or learning sciences, what a layperson might call ‘quantitative researchers’, who designed research studies with methods like randomised controlled trials. And they told us, teaching and learning is like any other natural phenomena, we must take a measured, rational approach to understand it. In other words, there is an objective, universal truth out there, and we can discover it. While on the other side you had what many would refer to as the ‘qualitative researchers’, who actually were quite a diverse group, and who in fact didn’t all agree with each other, but included the critical theorists, the interpretivists, the anti-naturalists, and so on. They said, “No, no, you can’t treat teaching and learning like a science. That’s ridiculous! People and their multiple identities are dynamic and multifaceted, in play with sociocultural and interpersonal forces and contexts, and they can only tell us what they think they are feeling or what they think happened, and goodness knows they might act one way one day and a completely different way another day.” In other words, the world is subjective and pluralist... and it’s complicated.

To keep things brief for the purposes of this talk, what emerged from these wars is a term we’re all very comfortable with today, called ‘mixed methods.’ Because essentially what happened is that scholars said - this war - it isn’t *practical*. We’re not getting anything done, we’re not learning anything because we’re just at each other’s throats. We should be more pragmatic. That’s why you might read quite a few articles in education today taking a pragmatic approach with mixed methods. It’s the ideological middle child.

Mollie’s Response

But I have something to tell you. This war - it isn’t over - it’s still going on.

It’s in this room.

“The past is never dead. It’s not even past”, said William Faulkner (1951).

As I will outline today, this war continues to impact all of us, in subtle and not so subtle ways. I am going to argue that the ceasefire to settle practically, and often superficially, on mixed methods, has at least to date failed to reconcile the differences that lie between us. And that in order for the higher education sector to move past this war, there needs to be a culture change about what data are important, and in particular how we respect and interpret students’ voices.

And I’m going to argue that ending the war starts with you.

Part I. The War Rages

The paradigm wars are a battle of epistemologies, or how we understand knowledge or evidence in our world. And in a world where all of us increasingly rely on data, where we are asked to use evidence-informed approaches in the work that we do, the importance of what data we use has never been more critical. Because our epistemologies, how we understand and see value in data and evidence, drives our decision-making. More often than not the manifestation of the paradigm wars is that evidence emerging from a qualitative paradigm is understood as inferior or overlooked and misunderstood compared to data collected through a quantitative paradigm.

Professor Lisa Given, now at RMIT, in a paper entitled, "It's a New Year, so Let's Stop the Paradigm Wars" (2017), sheds light on this very topic through her decades of experience as a university research leader. She writes that the war is discernible even in the daily actions that occur within the university. From staff preferring data sets with *large* sample sizes, to ethics committees asking researchers to consider how they will maintain *objectivity* in a research project. These are terms, or requirements, which adhere to quantitative data, but they are not relevant for research that adopts a qualitative paradigm. And it makes for an uneven playing field for qualitative researchers who want to have the same impact or influence as their quantitative peers. In fact, when all of our data is assessed through the lens of a quantitative paradigm, it means that student quotes, their stories, and their individual narratives can often be interpreted as anecdotal, nice to have, but not as rigorous as a validated survey tool with wide dissemination and participation.

Recently, Dr Wendy Bastalich, from the University of South Australia has also weighed into this debate, in a paper published this year in HERD (2023). In this work she highlights that the disparity between what is 'good' research often plays out in our research policy and political discourse. For example, she writes that the Australian Research Council (ARC), which has a mandate to support research that engages with local communities, has a noticeable preference to fund research projects that adopt methodologies aimed to describe things like:

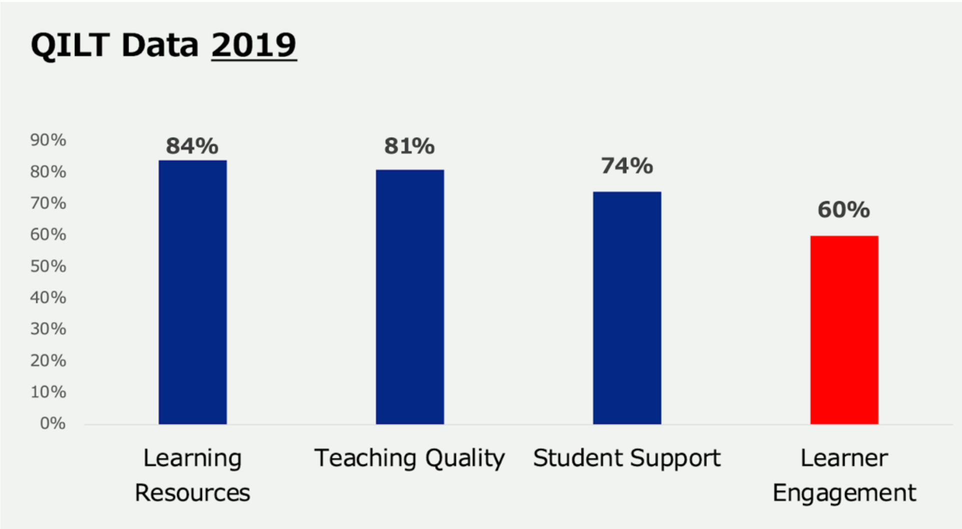
- Causal mechanisms
- Determinants
- Processes
- Theory building or testing

Often, this includes big data, computational modelling, or large national or multinational quantitative surveys. Indicating that the logic of the ARC and its committees too readily endorses "...that 'objective' social research methodologies can represent the 'real' condition of the social world," (Bastalich, p.8).

This divide, however, impacts not only what research is approved or funded, it can impact how we design for the student experience. Take, for example, the increasingly pertinent question of, how do we engage our students? Many universities in the post COVID landscape are asking themselves this very question – and are struggling to find the answer. But it was before COVID that student experience data collected here in Australia by Quality Indicators for Learning and Teaching (QILT) indicated poor results and stagnation in the dimension of learner engagement. As depicted in Figure 1, before 2020, the learner engagement metric on the QILT data for undergraduate students was the lowest item on the 'student experience', with 60% of students giving a positive rating in 2019 (QILT, 2021).

Figure 1

Australian Student Experience Data, 2019

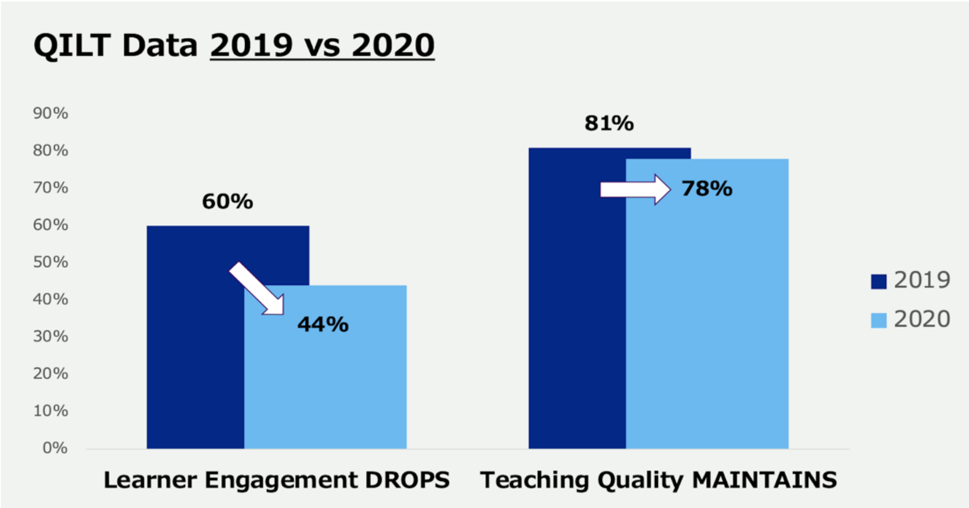


Source: *Qilt (2021)*

In 2020, learner engagement dropped to 44%. This compares to 81% in 2019 for teaching quality, which is consistently higher rated, only dropping to 78% in 2020 (QILT, 2021).

Figure 2

Australian Student Learner Engagement and Teaching Quality Data, 2019 vs 2020



Source: Qilt (2021)

However, we actually do know how to improve learner engagement – and we've known for years. It's just been 'hiding' in a different paradigm, in a different discourse. But the scholars in this sphere, they don't use the term, 'learner engagement', but rather refer to the term, 'student belongingness' (e.g., Gravett & Ajjawi, 2022; O'Shea, 2021). And unlike learner engagement, this concept of belongingness is rarely measured through a survey. That's because researchers have found it hard to define, to measure – difficult to objectify. It's something around how students feel connected – if they feel respected, heard, seen, listened to. Conceptualisations also describe belongingness as feeling at home, feeling safe, and feeling an emotional attachment (Yuval-Davis, 2006).

Going back all the way to 1988, Kuh and Whitt likened this unnameable feeling as the 'invisible tapestry' of the college culture. Elusive, complex, and yet incredibly important to why some students succeed, and others don't. And even though we don't know exactly what belongingness is, or how to phrase it as an item on a survey scale, we actually do know quite a lot about how to *foster* it. For example, it's been well evidenced that the teacher-student relationships are absolutely vital to belongingness, especially for underserved student cohorts (Muller, 2001; Payne et al., 2022). Scholars such as Peter Felten (2020), who presented the keynote at HERDSA last year, and Kelly Matthews (e.g., 2018), who has led the students as partners movement here in Australia, have published extensively on this very topic. Yet, despite the decades-long evidence on the importance of teacher-student relationships to foster belongingness – we still don't consistently practice it.

In fact, at many universities, staff struggle to find the time and emotional workload to deeply engage and talk to their students, as reported recently by higher education reporter, Caitlin Cassidy, in a Guardian article (2023). I, myself, have also run two university-wide students as partners programs and can tell you, from the library to the disciplines, to human resources, and even the infrastructure department, our staff want to partner with students. They simply can't find the time. It's not how our work is organised, acknowledged, or rewarded. So, I think I have a hunch about why the learner engagement metric on the QILT data continues to stagnate – and I don't think I'm the only one. But the answer to it was on the other side of 'the abyss' (Andreotti et al. 2011). It was across what Michael Crotty (1998) has called 'the great divide'.

Mollie's Response

This example illustrates the valuable clues and learnings we can gain when we look across the aisle – when we sync up our narratives. The problem isn't always that we don't have enough data, the problem lies with how we equally respect this data and how we connect it. Because from learner engagement to generative AI to academic integrity – our industry is facing some complex issues. It is no longer feasible for us to be using only half of the tools available to us. Yes, there is value in big data, in surveys, in market logic thinking – but without understanding context and nuancing, we can end up with pretty bad decision-making. This was apparent as many of us recently reflected, with regard to the failed Job-ready Graduates Package here in Australia (DET, 2020). This aimed to use price differentiation in the Australian higher education sector to drive student enrolments in specific courses. It has widely been considered a failure (Hare, 2023; Norton, 2022), with modifications already underway (Norton, 2023), and a lesson learned that passions, not prices, largely determine students' choices.

To prepare for the challenges that lie ahead, we need to build on each other's strengths, to integrate our unique perspectives to help us create a more engaging, a more inclusive, a more innovative student experience. This takeaway is not about changing your epistemologies. Which I couldn't convince you to do anyway. Research from polarizing issues such as climate change to American gun control has shown that a person's bias on how they understand evidence is not reduced by intelligence, access to information, or sadly, education (Steiner-Dillon, 2023). But what we can do is respect and understand the limits of our epistemic beliefs. We can acknowledge what role we can play and the importance of the roles of others – and we can engage in *boundary crossing*.

Part II. A Tale of Boundary Crossing

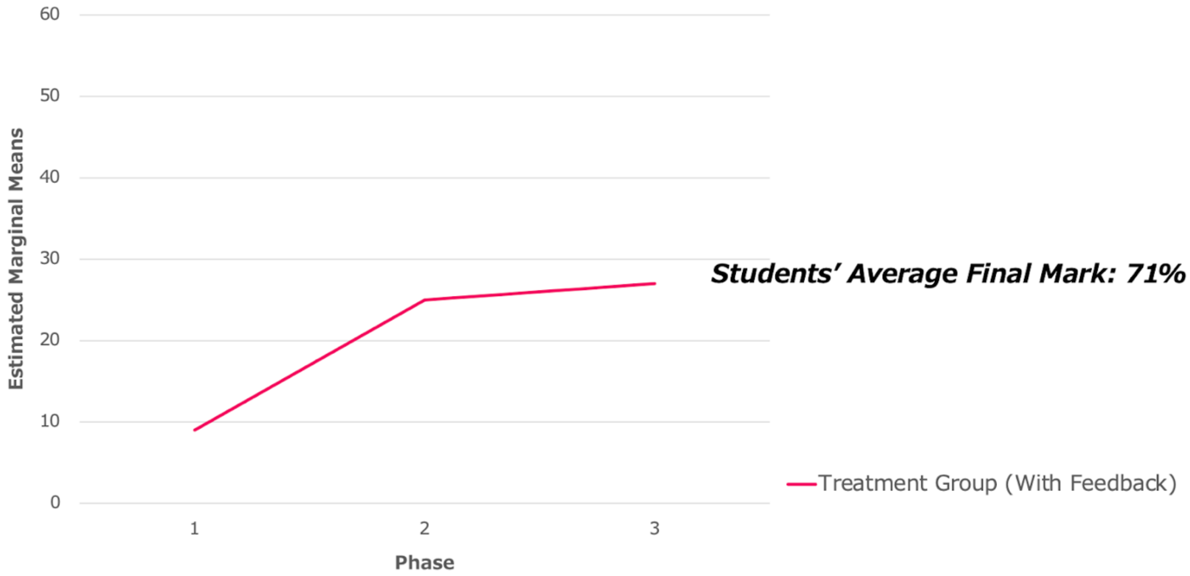
To begin this story, I need to first provide a little bit of background. So let me paint the scene. While the quantifiable, "measurement, collection, and analysis of learners' data for the purposes of understanding and optimising learning and the environments in which it occurs" (SoLAR, 2023, para. 1) has a *long* history, it was only in 2011 that the term, 'Learning Analytics', truly caught on. Quite popular, if not hyped, from the onset, learning analytics was *full* of potential. It was rooted in this idea that with the rise of digitised data, educators could leverage computational analysis to understand our students (Avella et al., 2016; Ifenthaler, 2017). That in the not-so-distant future, we would have just-in-time stats about our students, and visualisations and dashboards to track engagement or help students self-regulate their learning (Aguilar et al., 2021).

Learning analytics in many ways seemed to be the best of both worlds. With big data we could aggregate and highlight trends and pain points across the student journey, but at the same time, harness the individualised data to better personalise learning, and help us support our increasingly diverse student cohorts. However, all the excitement about learning analytics has been plagued by a lack of evidence of its impact on student learning outcomes. As summarised recently by Leah Macfadyen in the UK (2022), for over 10 years, EDUCAUSE Horizon Report, an annual publication that discusses key ed tech trends, has listed learning analytics as an *emerging* technology. And leading scholars in the field, from Rebecca Ferguson and Doug Clow (2017) to Olga Viberg (2018), have discussed the lack of institution-wide programs, or even peer-reviewed evidence demonstrating learning or success at scale.

Yet more recently, work led by another early career researcher, Dr Lisa-Angelique Lim, has helped fill the gap and reinvigorate the field. In her 2021 paper, she and colleagues found that with the use of personalised student emails, sent through a platform known as OnTask, at key assessment time points, students had more stable engagement across the teaching period, as measured through their e-book engagement, and ultimately, performed better in the class (Lim et al., 2021a). As shown in Figure 3, the treatment group or pilot group had increasing, stable engagement, as measured through the e-book, and the students ultimately received a final mark of 71%, on average. Pretty good, right?

Figure 3

Student Marginal Means of Engagement with E-book in Treatment Group with OnTask Feedback



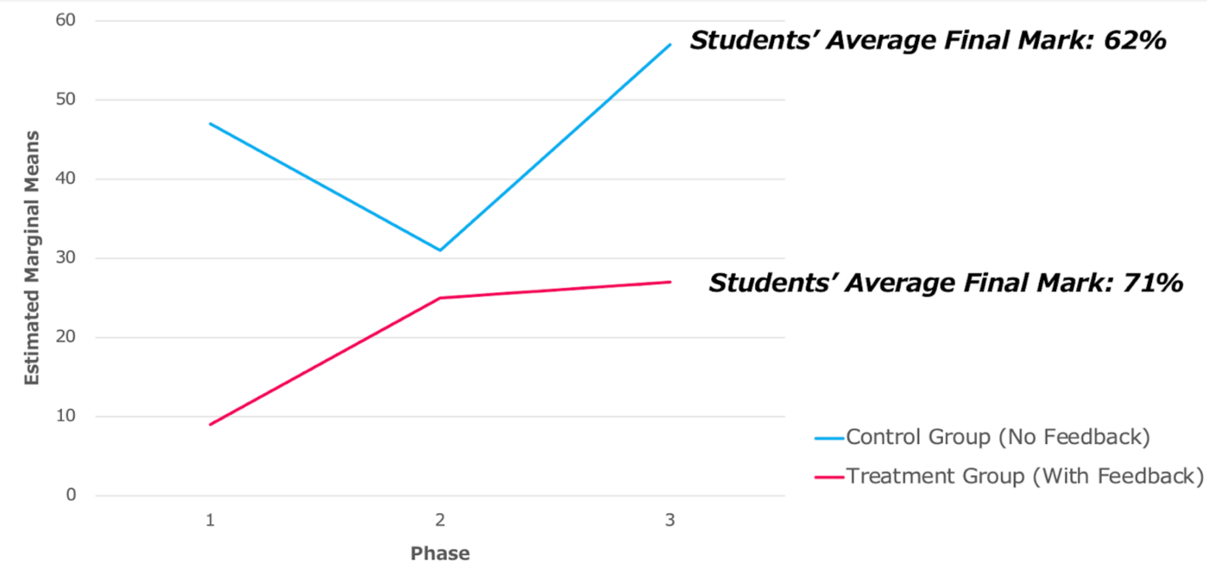
Source: Lim et al. (2021a)

Well hold on, because in discussing these great findings with Lisa in the lead up to today, she told me that this research didn't tell the full story. That her side of the abyss, where she used student log data and performance to inform t-tests, and linear regressions, and growth mixture modelling didn't explain, for example, as shown in Figure 4, why the control group had much higher engagement with the e-book activity overall than the treatment group, with a dip midway through and then a sharp increase at the end. What to make of these results?

How was it that the student treatment group scored so much higher overall, despite their much lower, albeit more stable, e-book activity? Maybe the students were engaged in resources that were unrelated to the study? Maybe there was more out of class peer learning? Maybe they were just really good test takers? It's hard to say. So, Lisa took a leap, she crossed the typical boundary of her and her colleagues' epistemic beliefs.

Figure 4

Comparing Estimated Student Marginal Means of Engagement with E-book and Marks in Treatment and non-Treatment Groups



Source: Source: Lim et al. (2021a)

In the next study, Lisa decided to use both student trace data from their online engagement and in-depth focus groups with students (Lim et al., 2021b). And by comparing, and equally valuing each set of data – she and colleagues were able to use the qualitative data to explore "conflicting or unexpected results from the analysis of the trace data" (p.372). In particular, they learned that while the trace data appeared to document lower student engagement overall with the e-book, this was because students were actually using the personalised messages as the resources. In other words, it was the messages themselves, from the teachers, that were meaningful to students. The intervention, the personalised emails, they were working, just not in the way they expected.

Lisa's tale of boundary crossing here, in fact links to many in the field who have questioned the lack of nuanced research to unpack complex findings from learning analytics. Recently, there have also been several well-known scholars who have openly criticised the lack of equity-focussed research in the space (e.g., Baek & Aguilar, 2022; Slade & Prinsloo, 2013; Williamson & Kizilcec, 2022). After all, who is learning analytics for, if not the students who need it the most? They have argued, somewhat ironically, that despite hopes that big data would help educators personalise learning, big data has, at least to date, reinforced one-size-fits-all.

There are other gaps in learning analytics too. In a paper I wrote with Jason Lodge (Dollinger & Lodge, 2018), we particularly highlight the risk of invalid inferences. This is commonly discussed in the field as ‘garbage in, garbage out’ and has been shown, quite humorously, when scholars can link outcomes to totally random, disconnected, variables, if given enough data. In my previous work with colleagues (Dollinger et al., 2019a; 2019b), we have also advocated for the importance of co-design in learning analytics to better address the mismatch in capacity from what designers *think* will work, and what teachers and students *actually* need. But as Lisa’s work, as well as others in the space such as Danny Liu’s shows, is that learning analytics, while quantitative in nature – is actually best positioned as a tool to enhance relationships. To drive not only ‘learner engagement’, but to help students feel understood and connected. To help students feel like they *belong*. “Divorcing teachers from the process through an overly centralised approach has the potential to lead to the usage of easily-obtainable but generic data,” (Liu et al., 2017, p.5).

Part III. The Devil’s in the Details

The lesson of how qualitative data can open our minds to insights and surprises in our work is likely familiar to many of you in your own research areas. For example, this story also repeats itself in Australia’s higher education equity discourse, where the participation of regional and remote students has flatlined for years (Department of Education, 2021). This, despite numerous studies from scholars such as Professor Sarah O’Shea (2016), Jenny Gore (2017), and Nadine Zacharias (2023), advocating for the importance of context-specific, bottom-up solutions to help create change – in other words, a little bit more complicated than a one-off moving stipend.

Actually, while I’m belabouring the value of qualitative, context-specific research, I am confident that many in the audience today already agree with me. But we also know that qualitative research too often carries less sway with those leading policy reforms or institutional change. Likely, that’s because qualitative research is messier, it’s more complicated. It acknowledges the subjectivities in our world. But our wicked problems won’t be solved by a Likert scale question on a survey.

As I alluded to earlier, part of the issue also lies with the palatable, though often misleading, use of practical mixed methods – a methodology I, myself, have used. That’s because mixed methods is typically just a positivist, or a post-positivist study with a tacked on open ended question at the end. Or as well summarised by Lynne Giddings (2006) from Auckland University of Technology, “Is mixed methods research just positivism dressed in drag?”

Further worrying is the trend to see mixed methods as a third paradigm. For example, in recent work by Felix Knappertsbusch (2023), a postdoctoral research fellow from Germany, the author reflected that rather than confront difficult conversations across paradigms, researchers seemed preoccupied with finding almost clinical, textbook-like ways to just ignore our differences and get along. To follow simple predetermined steps like:

Survey + discursive interview
Ethnography + grid analysis + scaling
Think-out-loud narrative + card sort + factor analysis

As Felix reflects, this arguably does more harm than good. Research shouldn't be an algorithm. It should support researchers' meta-reflexivity to interrogate what data will be collected, the quality of that data, and ultimately, how the findings represent the voices and experiences of those who shared it.

Mollie's Response

This is something I have come to understand through my own research in student partnership. Where I've experienced firsthand the weight of responsibility when students choose to share their voices and experiences with us. Because as many have written, students as partners repositions students from being the objects in the classroom or the objects of our research, to being our colleagues and peers, whose expertise in their lived experiences can help us create socially-just learning experiences and more accurate inferences from the data we collect (Broughan & Prinsloo, 2020; Mercer-Mapstone et al., 2019).

Student partnership, to me, therefore, needs to play an absolutely critical role in how we understand and tackle complex issues in our sector, moving forward. Because through partnership we can challenge our assumptions about the student experience, and we can design not for, but *with* our students. And we can truly respect their data, their experiences, and avoid what Fricker has coined, 'testimonial injustice' (Fricker, 2007), which is what we risk when seeing them only as mere data points on a survey or a scale.

However, I'd be remiss if I didn't also acknowledge the limitations or challenges. As scholars in this space have reflected, there remain valid concerns about how student partnership maintains authenticity (e.g., Matthews et al., 2018), how it does not water itself down to 'voice of customer' or box-ticking exercises (Miles & Power, 2017). There are also well warranted questions over how student partnership can be scaled, or how we can support more students in the process, and importantly, how we can ensure all voices can be included (Mercer-Mapstone et al., 2021). Perhaps the most critical are the concerns from students themselves who point to the overly optimistic nature of student partnership, often uncriticised, and even condescending. To illustrate, in an autoethnographic paper, self-described MAD disabled scholar and now a postdoctoral research fellow at McMaster University, Alise de Bie (2022), reflected on how sometimes the language of partnership made her wince. She wrote that she was once corrected for using identity-first language like 'crazy' or 'disabled' by a staff member engaged in partnership who told her, "Oh Alise, you have to think more positively about yourself! You're not just a student/crazy/disabled, you're a partner/person with mental health concerns/you just have a disability" (p.721).

Alas, methodologies on both sides of the divide have limitations – and can be applied incorrectly, or simply miss the point. But both sides can also draw insights and important learnings that we will no doubt need for the years ahead. And while student partnership will likely never draw the large sample sizes of learning analytics, nor will it ever pretend to maintain objectivity, or 'count' anything, it too seeks to understand the student experience. As Paulo Freire wrote in his famous book, *Pedagogy of the Oppressed*, "to deny the importance of subjectivity in the process of transforming the world and history is naïve and simplistic. It is to admit the impossible: a world without people" (1970, p. 24).

Part IV. An Integrated Approach

Through this keynote today, I wanted to draw attention to both the abyss that continues to divide us and the potential if we were to engage in boundary crossing. To reflect on the respective epistemologies that drive, or even dominate our sector, and also to consider each of our roles in breaking down these binaries or contributing to them. And now, to end, I'd like to share my thoughts on an integrated approach to what we can do to better ensure that the future of higher education and the important decisions that we will continue to make are informed by both sides of the aisle.

1. (Bold) Appreciation for Other Knowledges

An integrated approach begins with the appreciation for diverse knowledges that exist in our world. Deleuze and Guatarri, who published in the 1980s, just alongside the raging paradigm wars, discussed these as 'rhizomatic knowledge structures', as shown in Figure 4, visualised through the metaphor of a bulbous ginger root. And they argued that rather than see knowledges as binaries, we could position them as interconnected, growing out from one another, rather than hierarchical.

Mollie's Response

Figure 4

Rhizomatic Knowledge Structures

Source: Deleuze and Guatarri (1988)

More recently, Cally Guerin (2013) has mapped the metaphor of the rhizome to academic identities, highlighting that siloed academics might be described as having research with ‘clear opinions’ and ‘predictable content’ and be ‘confident and telling’. And if that sounds like you, perhaps it’s time to practice more epistemic modesty. This modesty is described by Canadian psychologist Thomas Teo as “being aware of one’s own horizon, the strengths and limitations of one’s own approach, while being knowledgeable about the history, sociality, and culturality of knowledge” (2019, p. 40). Which, if you ask me, is not modest, it’s bold.

2. Critical Boundary Crossing

But it’s not enough to boldly appreciate each other's knowledge, we also need to engage with it. This is varied, and this list is not exhaustive but includes intentionally citing other epistemologies in your research, and avoiding confirmation bias by citing scholars who use similar approaches or have found similar results to you.

It means taking the time to discuss differences and commonalities across research methods or epistemic binaries, and to this end, using your worldview in areas of research where it is rare. For those that are qualitative researchers, this also means really, intentionally linking your findings to surveys and policies, and even institutional strategies or collective bodies agendas. This is absolutely critical both before and after whatever comes out of the Universities Accord here in Australia, where we need make sure that student voices – not just their data points – are incorporated into the decision-making. Finally, it means all of us, whatever our epistemologies may be, getting more comfortable, more honest, with the messy and inconclusive results of our data. We do and will continue to stand on the shoulders of giants, it's what I love about being a researcher, but leaps are built incrementally, and over time.

3. Refute Dominant Timescapes

And then, there is time, or lack thereof. In a paper I wrote for Teaching in Higher Education, I discussed the encroaching 'projectification' of our sector (Dollinger, 2020). Projectification is a timescape or a perspective of time that, as the name implies, takes a project-based approach to workloads. And through its lens, time is seen as bound, linear, measurable (also refer to Midler, 1995). It's the idea that we can easily, without complexities, conceptualise our time by tasks and milestones.

While there might be merits in this approach for project management, it's yet another way that the one side of the abyss holds weight over another in our sector. Because it assumes that there is in fact objective time, and that time is universally experienced by everyone. It prioritises actions and completions and quick decision-making that is 'future focussed'. And what it ultimately means is that our sector sometimes values output over outcomes.

Refuting this dominant timescape would mean taking a longer, more context-specific view on how we inform our decision-making, both in research, and in supporting the student experience. It would mean positioning our work in the historical context in which it arises, going down rabbit holes, and not only thinking about the low hanging fruit – but how we are going to create sustainable workplace cultures and processes. To be more like scholars such Agnes Bosanquet, who quite bravely calls herself, "the slow academic", in her blog series. Recently, she and Catherine Manathunga (2021) have written about how they have become inspired by slow tiny acts of resistance (STARS), first defined by Harre and colleagues in 2017. These moments prioritise collegiality, friendship, and playing the 'long game' and can include intentionally taking the time to cite diverse scholars, or those from non-Western countries; emphasising care, refuting ableism in our work, accepting learning in progress, and reflecting on measures of productivity.

Conclusion

Mollie's Response

I attended my first HERDSA conference in 2018, as a PhD student. At that conference I heard what was, and still is, the best keynote I've ever witnessed. Some of you may in fact remember it, as Associate Professor Barbara Grant from the University of Auckland spoke on her concept of a thousand tiny universities (Grant, 2018). Those thousand tiny universities being us, that we are all the university. And every day, whether we realise it or not, we embody the university, we represent it, we transform it.

In the integrated approach I outlined today, we can continue Barbara's idea of being our own universities. We can consciously, for example, reflect on how we gather our evidence, how we decide what is truth. We can be critical of our own practices and decision-making. We can read widely or network with people who are different from ourselves. When we review others' work, in journals, conferences, or maybe in grant or human ethics applications, we can choose to be more mindful of our epistemic preferences – and not devalue the approach of others who may see the world differently.

Mollie's Response

We can even choose to take the time, the hard work, to try and build on what is known across the divide, even if it's known by a different keyword, to build stronger narratives. And we can reflect on what kind of university we are – and whether this is the university we want to be. We can, in essence, through our daily actions, and how we approach evidence, choose to continue this war, or choose to end it.

Speaker Reflections

In the time that has passed since the keynote, it has been a joy to have so many colleagues and scholars reach out with their reflections and thoughts on this important topic. Many have shared with me that they, too, have felt subjected to the raging paradigm wars, and also feel that more attention is needed to unpack the complex question of, 'What is evidence?' It has also been encouraging to have colleagues interested in how to support student agency in research, to choose how they share their voice, as well as to play a greater role in the analysis or summarising of data. I think this speaks to the growing recognition to 'humanise' educational practices, which for far too long, disregarded the importance of relationships in the context of learning.

I also applaud the editors of ARSHE for taking on the task of publishing a keynote, and posing to me their questions, to enable our community to keep discussing. This to me goes to the heart of what a good journal does, to connect us, to challenge us, and to build off one another's work. Academic publishing does not need to be stuffy; we can write texts that are engaging or provocative or use platforms such as audio or video to communicate differently. By doing so, we also may be able to reach new audiences or members of our community, who had previously felt excluded.

As with any piece of work, however, there remain many questions in this space which I hope readers will continue to unpack and explore. In particular new directions or themes for research into epistemic divides in higher education include:

1) How do epistemic divides continue to impact higher education research and researcher development? What are the consequences of disregard and disengagement?
2) What is the role of researcher development (e.g., doctoral training, conferences, internal university academic development) in bridging epistemic divides? What are examples of good practice?
3) How do journal practices orientate and shape academic culture and appreciation for diverse knowledges? What innovative practices or policies could help support more inclusive communities while maintaining standards of rigorous research?

References

Aguilar, S. J., Karabenick, S. A., Teasley, S. D., & Baek, C. (2021). Associations between learning analytics dashboard exposure and motivation and self-regulated learning. *Computers & Education*, *162*, 104085. https://doi.org/10.1016/j.compedu.2020.104085

Andreotti, V., Ahenakew, C., & Cooper, G. (2011). Epistemological pluralism: Ethical and pedagogical challenges in higher education. *AlterNative: An International Journal of Indigenous Peoples*, *7*(1), 40-50.

Avella, J. T., Kebritchi, M., Nunn, S. G., & Kanai, T. (2016). Learning analytics methods, benefits, and challenges in higher education: A systematic literature review. *Online Learning*, *20*(2), 13-29.

Baek, C., & Aguilar, S. J. (2022). Past, present, and future directions of learning analytics research for students with disabilities. *Journal of Research on Technology in Education*, Online First Publication. https://doi.org/10.1080/15391523.2022.2067796

Bastalich, W. (2023). The devaluation of philosophical reflexivity in social research. *Higher Education Research & Development*, Online First Publication. https://doi.org/10.1080/07294360.2023.2192464

Bosanquet, A. (2023). The slow academic blog series. https://theslowacademic.com/

Broughan, C., & Prinsloo, P. (2020). (Re) centring students in learning analytics: In conversation with Paulo Freire. *Assessment & Evaluation in Higher Education*, *45*(4), 617-628. https://doi.org/10.1080/02602938.2019.1679716

Cassidy, C. (2023). 'Appallingly unethical': why Australian universities are at breaking point. *The Guardian*. https://www.theguardian.com/australia-news/2023/apr/10/appallingly-unethical-why-australian-universities-are-at-breaking-point

Connell, R. (2020). *Southern theory: The global dynamics of knowledge in social science*. Routledge.

Cook-Sather, A., Bovill, C., & Felten, P. (2014). *Engaging students as partners in learning and teaching: A guide for faculty*. Jossey-Bass.

Crotty, M. J. (1998). The foundations of social research: Meaning and perspective in the research process. *The Foundations of Social Research*, 1-256. SAGE Publishing.

de Bie, A. (2022). Respectfully distrusting 'Students as Partners' practice in higher education: Applying a Mad politics of partnership. *Teaching in Higher Education*, *27*(6), 717-737. https://doi.org/10.1080/13562517.2020.1736023

Deleuze, G., & Guattari, F. (1988). *A thousand plateaus: Capitalism and schizophrenia*. Bloomsbury Publishing (Originally Published in 1980).

Department of Education and Training (DET). (2020). *Job-ready Graduates package*. https://www.education.gov.au/job-ready

Department of Education, (2021). Higher Education Statistics – Student Data. https://www.education.gov.au/higher-education-statistics/student-data

Dollinger, M. (2020). The projectification of the university: consequences and alternatives. *Teaching in Higher Education*, *25*(6), 669-682.

Dollinger, M., & Lodge, J. M. (2018). Co-creation strategies for learning analytics. In *Proceedings of the 8th International Conference on Learning Analytics and Knowledge* (pp. 97-101).

Dollinger, M., & Lodge, J. (2019a). What learning analytics can learn from students as partners. *Educational Media International*, *56*(3), 218-232.

Dollinger, M., Liu, D., Arthars, N., & Lodge, J. M. (2019b). Working together in learning analytics towards the co-creation of value. *Journal of Learning Analytics*, *6*(2), 10-26.

Faulker, W. (1951). *Requiem for a nun*. Random House.

Felten, P., & Lambert, L. M. (2020). *Relationship-rich education: How human connections drive success in college*. John Hopkins University Press.

Ferguson, R., & Clow, D. (2017, March). Where is the evidence? A call to action for learning analytics. In *Proceedings of the Seventh International Learning Analytics & Knowledge Conference* (pp. 56-65). https://doi.org/10.1145/3027385.3027396

Freire, P. (1970). Pedagogy of the oppressed. *New York: Continuum*.

Fricker, M. (2007). *Epistemic injustice: Power and the ethics of knowing*. Oxford University Press.

Gage, N. L. (1989). The paradigm wars and their aftermath a "historical" sketch of research on teaching since 1989. *Educational Researcher*, *18*(7), 4-10.

Giddings, L. S. (2006). Mixed-methods research: Positivism dressed in drag? *Journal of Research in Nursing*, *11*(3), 195-203. https://doi.org/10.1177/1744987106064635

Given, L. M. (2017). It's a new year… so let's stop the paradigm wars. *International Journal of Qualitative Methods*, *16*(1). https://doi.org/10.1177/1609406917692647

Gore, J., Patfield, S., Holmes, K., Smith, M., Lloyd, A., Gruppetta, M., ... & Fray, L. (2017). When higher education is possible but not desirable: Widening participation and the aspirations of Australian Indigenous school students. *Australian Journal of Education*, *61*(2), 164-183. https://doi.org/10.1177/0004944117710841

Grant, B. (2019, July 2-5). *The Future is Now: A thousand tiny universities*. [Keynote address]. Higher Education Research and Development Society of Australasia (HERDSA) Sydney, Australia.

Gravett, K., & Ajjawi, R. (2022). Belonging as situated practice. *Studies in Higher Education*, *47*(7), 1386-1396. https://doi.org/10.1080/03075079.2021.1894118

Guerin, C. (2013). Rhizomatic research cultures, writing groups and academic researcher identities. *International Journal of Doctoral Studies*, *8*, 137.

Hare, J. (2022). "University funding model falls flat on all objectives: expert". *Australian Financial Review.* https://www.afr.com/policy/health-and-education/university-funding-model-falls-on-all-objectives-expert-20230102-p5c9ye

Harré, N., Grant, B. M., Locke, K., & Sturm, S. (2017). The university as an infinite game. *The Australian Universities' Review*, *59*(2), 5-13.

Heleta, S. (2016). Decolonisation of higher education: Dismantling epistemic violence and Eurocentrism in South Africa. *Transformation in Higher Education*, *1*(1), 1-8. https://hdl.handle.net/10520/EJC-57acdfafc

Ifenthaler, D. (2017). Are higher education institutions prepared for learning analytics? *TechTrends*, *61*(4), 366-371. https://doi.org/10.1007/s11528-016-0154-0

Knappertsbusch, F. (2023). From paradigm wars to peaceful coexistence? A sociological perspective on the qualitative-quantitative-divide and future directions for Mixed Methods Methodology. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, *24*(1). https://doi.org/10.17169/fqs-24.1.3966

Kuh, G. D., & Whitt, E. J. (1988). *The invisible tapestry. Culture in American colleges and universities. ASHE-ERIC Higher Education, Report No. 1, 1988*. Association for the Study of Higher Education.

Latulippe, N., & Klenk, N. (2020). Making room and moving over: Knowledge co-production, Indigenous knowledge sovereignty and the politics of global environmental change decision-making. *Current Opinion in Environmental Sustainability*, *42*, 7-14. https://doi.org/10.1016/j.cosust.2019.10.010

Lim, L. A., Gasevic, D., Matcha, W., Ahmad Uzir, N. A., & Dawson, S. (2021b). Impact of learning analytics feedback on self-regulated learning: Triangulating behavioural logs with students' recall. In *LAK21: 11th International Learning Analytics and Knowledge Conference* (pp. 364-374). https://doi.org/10.1016/j.learninstruc.2019.04.003

Lim, L. A., Gentili, S., Pardo, A., Kovanović, V., Whitelock-Wainwright, A., Gašević, D., & Dawson, S. (2021a). What changes, and for whom? A study of the impact of learning analytics-based process feedback in a large course. *Learning and Instruction*, *72*, 101202. https://doi.org/10.1145/3448139.3448174

Liu, D. Y. T., Bartimote-Aufflick, K., Pardo, A., & Bridgeman, A. J. (2017). Data-driven personalization of student learning support in higher education. In A. Peña-Ayala (Ed.), *Learning analytics: Fundaments, applications, and trends, studies in systems, decision and control, Vol. 94*, (pp. 143-169). Springer International Publishing.

Macfadyen, L. (2022). Institutional implementation of learning analytics: Current state, challenges, and guiding frameworks. *The handbook of learning analytics.* (2nd ed.). Society for Learning Analytics Research.

Manathunga, C., & Bosanquet, A. (2021). Remaking academic garments. In A. L. Black, & R. Dwyer (Eds.), *Reimagining the academy*: ShiFting towards kindness, connection, and an ethics of care (305-325). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-75859-2_17

Matthews, K. E. (2017). Five propositions for genuine students as partners practice. *International Journal for Students as Partners*, *1*(2). https://doi.org/10.15173/ijsap.v1i2.3315

Matthews, K. E., Dwyer, A., Hine, L., & Turner, J. (2018). Conceptions of students as partners. *Higher Education*, *76*, 957-971. https://doi.org/10.1007/s10734-018-0257-y

Mercer-Mapstone, L., Guitman, R., & Acai, A. (2019). Reflecting gendered experiences of student-staff partnership: A student standpoint using poetic transcription. *Teaching in Higher Education*, *24*(6), 809-818. https://doi.org/10.1080/13562517.2019.1602761

Mercer-Mapstone, L., Islam, M., & Reid, T. (2021). Are we just engaging 'the usual suspects'? Challenges in and practical strategies for supporting equity and diversity in student–staff partnership initiatives. *Teaching in Higher Education*, *26*(2), 227-245. https://doi.org/10.1080/13562517.2019.1655396

Miles, B. B., & Power, R. K. (2017). Learners without borders: Tales from the trails of navigating transitions from student partners to staff partners – while retaining students as partners. *Teaching and Learning Together in Higher Education*, *1*(21), 9. http://repository.brynmawr.edu/tlthe/vol1/iss21/9/

Muller, C. (2001). The role of caring in the teacher-student relationship for at-risk students. *Sociological Inquiry*, *71*(2), 241-255.

Ndhlovu, F. J., & Kelly, S. J. (2020). Why ecology of knowledges and multilingual habitus matter in higher degree research student training. *Transmodernity: Journal of Peripheral Cultural Production of the Luso-Hispanic World*, *9*(5).

Norton, A. (2022). "The inequity of Job-ready Graduates for students must be brought to a quick end. Here's how". *The Conversation*. https://theconversation.com/the-inequity-of-job-ready-graduates-for-students-must-be-brought-to-a-quick-end-heres-how-183808

Norton, A. (2023). “The Universities Accord should scrap Job-ready Graduates and create a new multi-rate system for student fees.” https://theconversation.com/the-universities-accord-should-scrap-job-ready-graduates-and-create-a-new-multi-rate-system-for-student-fees-203910

O’Shea, S. (2016). Avoiding the manufacture of ‘sameness’: First-in-family students, cultural capital and the higher education environment. *Higher Education*, *72*, 59-78. https://doi.org/10.1007/s10734-015-9938-y

O’Shea, S. (2021). “Kids from here don't go to uni”: Considering first in family students' belonging and entitlement within the field of higher education in Australia. *European Journal of Education*, *56*(1), 65-77. https://doi.org/10.1111/ejed.12434

Payne, A. L., Stone, C., & Bennett, R. (2022). Conceptualising and building trust to enhance the engagement and achievement of under-served students. *The Journal of Continuing Higher Education*, 1-18. https://doi.org/10.1080/07377363.2021.2005759

Quality Indicators for Learning and Teaching (QILT). (2021). Student experience survey. https://www.qilt.edu.au/surveys/student-experience-survey-(ses)

Skopec, M., Fyfe, M., Issa, H., Ippolito, K., Anderson, M., & Harris, M. (2021). Decolonization in a higher education STEMM institution–is ‘epistemic fragility’ a barrier? *London Review of Education*, *19*(1), 1-21.

Slade, S., & Prinsloo, P. (2013). Learning analytics: Ethical issues and dilemmas. *American Behavioral Scientist*, *57*(10), 1510-1529. https://doi.org/10.1177/0002764213479366

Society for Learning Analytics Research (SoLAR). (2023). *What is learning analytics?* https://www.solaresearch.org/about/what-is-learning-analytics/

Steiner-Dillion (2023). “Why can’t Americans agree on, well, nearly anything? Philosophy has some answers. *The Conversation*. https://theconversation.com/why-cant-americans-agree-on-well-nearly-anything-philosophy-has-some-answers-193055

Teo, T. (2011). Empirical race psychology and the hermeneutics of epistemological violence. *Human Studies*, *34*, 237-255. https://doi.org/10.1007/s10746-011-9179-8

Teo, T. (2019). Academic subjectivity, idols, and the vicissitudes of virtues in science: epistemic modesty versus epistemic grandiosity. In K. C. O’Doherty, L. M. Osbeck, E. Schraube, & J. Yen (Eds.), *Psychological studies of science and technology.* Palgrave Studies in the Theory and History of Psychology. (pp. 31-48). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-25308-0_2

Viberg, O., Hatakka, M., Bälter, O., & Mavroudi, A. (2018). The current landscape of learning analytics in higher education. *Computers in Human Behavior*, *89*, 98-110. https://doi.org/10.1016/j.chb.2018.07.027

Williamson, K., & Kizilcec, R. (2022, March). A review of learning analytics dashboard research in higher education: implications for justice, equity, diversity, and inclusion. In *LAK22: 12th International Learning Analytics and Knowledge Conference* (pp. 260-270). https://doi.org/10.1145/3506860.3506900

Yuval-Davis, N. (2006). Belonging and the politics of belonging. *Patterns of prejudice*, *40*(3), 197-214. https://doi.org/10.1080/00313220600769331

Zacharias, N. (2023). Student equity forum keynote. The University of Technology Sydney. https://www.youtube.com/watch?v=QHd6K0UwJAM

References for Audio

Bretag, T., Harper, R., Burton, M., Ellis, C., Newton, P., Rozenberg, P., ... & van Haeringen, K. (2019). Contract cheating: A survey of Australian university students. Studies in Higher Education, 44(11), 1837-1856. https://doi.org/10.1080/03075079.2018.1462788

Dollinger, M., & Hanna, L. (forthcoming in 2023). Students with disabilities mentoring staff: Supporting scalable academic development for inclusive education. International Journal of Academic Development.

Harper, R., Bretag, T., Ellis, C., Newton, P., Rozenberg, P., Saddiqui, S., & van Haeringen, K. (2019). Contract cheating: A survey of Australian university staff. Studies in Higher Education, 44(11), 1857-1873. https://doi.org/10.1080/03075079.2018.1462789

Lingard, L. (2015). Joining a conversation: the problem/gap/hook heuristic. Perspectives on Medical education, 4, 252-253. https://doi.org/10.1007/s40037-015-0211-y

McDonald, A., McGowan, H., Dollinger, M., Naylor, R., & Khosravi, H. (2021). Repositioning students as co-creators of curriculum for online learning resources. Australasian Journal of Educational Technology, 37(6), 102-118. https://doi.org/10.14742/ajet.6735