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Improving Wellbeing in Universities

A Transdisciplinary Systems Change Approach

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In order for universities to flourish, we need to ensure that their staff and students are well mentally, physically and socially. Improving wellbeing is an open, systemic and complex challenge, because it contains many interrelated and dynamic problems and concerns. Such challenges cannot be ‘solved’ by using traditional and reductionist problem-solving strategies. In this paper we demonstrate how we worked towards an integrated systemic design and transdisciplinary innovation approach to improve the wellbeing of staff and students at the University of Technology Sydney. We developed a systemic vision of university wellbeing which considers wellbeing a characteristic of the community as a whole, and an integral part of education and research, rather than an issue that needs to be addressed by a separate ‘service’. The transdisciplinary and systemic design approach is further characterised by an ongoing evolutionary action-approach; an integration of diverse ways of knowing including various academic disciplines, Indigenous ways of knowing and community knowledge; and a structured learning strategy to support system change based on mutual learning and reflexivity. We discuss how this case illustrates how transdisciplinary learning approaches can strengthen systemic design practices.

Introduction

Wellbeing is “a complex, multi-faceted construct” that tends to “elude researchers’ attempts to define and measure” it (Pollard & Lee, 2003). On the basis of our experiences as systems change practitioners, we provisionally adopt the definition of wellbeing as “a multidimensional construct incorporating mental/psychological, physical and social dimensions” (Columbo, 1986, p1).

Up to 33% of Australians aged 20-64 years hold a university degree (Australian Bureau of Statistics, 2019), spending a number of formative years embedded in the university education system. While it has been shown internationally that higher levels of education can lead to long-term health and socioeconomic benefits across populations (Feinstein et al, 2006), the wellbeing of staff and students while at university has only recently gained more focused attention. It is broadly accepted that students need to feel well to be able to learn, while staff need to be well to engage in all aspects of academic work. Yet with the massification of higher education and the increased focus on academic performance, the wellbeing of learners, teachers and researchers is at risk (Fernandez et al., 2016; Kinman & Johnson, 2019).

Undesirable effects of metrics-driven high-pressure university environments are well-documented (Barcan, 2016; Shore & Wright, 2000). The extent of the impact of the university environment on

academic staff is shown by research indicating that staff have higher rates of mental-ill health than other professions (Kinman & Johnson, 2019). In university students, multiple studies have shown that they experience higher levels of psychological distress than that of the general population when controlled for age (Eisenberg, Gollust, Golberstein, & Hefner, 2007; Larcombe et al., 2016; Stallman, 2010)(Eisenberg et. al. 2007; Larcombe et al., 2016; Said, Krypri & Bowman 2013; Stallman, 2008; Stallman, 2010). In recent years the awareness of the current state of university staff and student mental health has become increasingly more widespread. However, interventions that successfully address the complexity of this challenge are limited.

Wellbeing in universities is a complex problem situation – it is not a single challenge that can be resolved using traditional problem-solving strategies. While we may wish to improve wellbeing more generally, it is difficult to define or frame it as a problem, because it is not clear what a positive outcome might be. Multiple stakeholders in universities have different conceptions of wellbeing, including different understandings of personal and institutional responsibilities for improvement. For example, improving wellbeing can be approached by mainly tackling the challenge of long waitlists for student counselling, whereas others might be more interested in improving ‘wellbeing literacy’, ensuring that staff and students understand what wellbeing is and what they can do when they are feeling unwell. These types of challenges are sometimes referred to as wicked (Rittel & Webber, 1973) or open (Dorst, 2015). They are also *systemic*, meaning that they consist of many interrelated problems that cannot be independently solved. Addressing one aspect of the challenge may have flow-on effects in other parts of the context in which the challenge occurs. For example, one of the successful programmes in our university, the University of Technology Sydney, facilitated by the non-governmental organisation Batyr (Hudson & Ingram, 2017) invites volunteers to share their stories of mental illness in the classroom, aiming to raise students’ awareness of mental health and mental illness. As a result, more students seek counselling applying pressure to an already stretched student counselling service.

The complex nature of the wellbeing in universities challenge means that it arises from a dynamic context without any apparent relationships between cause and effect. The university itself constantly changes as an institution through new cohorts of students, newly developed courses, new teaching methodologies and technologies, and new policies. Further, the academic and societal contexts in which the university is embedded are subject to change, including new funding mechanisms, changes in university rankings and so on. It is impossible to predict the true effects of different actions and behaviours in such complex contexts – the cause-effect relationships can only be revealed in hindsight (Snowden & Boone, 2007). Therefore, when facing these types of complex challenges, analysis or research alone are insufficient to determine the best way forward. An action-oriented approach, referred to by Snowden as ‘safe to fail experiments’ (ibid) is necessary, so we can gain a better understanding of the problem situation and the dynamic context in which it resides.

One way to enact this type of experimentation in complex contexts are the methods and practices developed within the emerging field of systemic design, which sits between the fields of systems thinking and design (Sevaldson & Jones, 2019). Systems thinking is based on a method of reasoning called ‘synthesis’. This involves considering concepts and entities in relation to a larger system – or indivisible whole – of which they are part. Systems thinking was developed in response to the observed inadequacy of deterministic and reductionist approaches to complex problem solving, and has developed into a rich field of knowledge over the past century, stemming from and branching into several schools of thought. However, systems thinking has also been criticized for focusing primarily on analysing and modelling systems and lacking practical approaches to innovate on problems within those systems (Ackoff, 2004). Systemic *design* practices have been proposed to close this gap by integrating systems thinking with design practices.

In this paper, we bring systemic design and transdisciplinary approaches into dialogue. Transdisciplinary approaches to academic research emerged in the early 1970s, driven by a desire to create more positive impact on complex societal challenges (Jantsch, 1972). Transdisciplinarity highlights the importance of not only disciplinary perspectives (as in interdisciplinary and multi-disciplinary approaches) but also other knowledge types, including Indigenous knowledges, and local and practical knowledges as essential to responding to complex problem situations (Scholz & Steiner, 2015). Through transdisciplinary interactions, these different ways of knowing come together in an integrated system with a social purpose (Jantsch, 1972).

There are many definitions of transdisciplinary research and innovation. In our work, we define transdisciplinarity as having the following characteristics: it is action-oriented and future-focused, participatory, holistic, systemic and purposive, and it transcends individual disciplines or professional practices (McPhee, Bliemel, & van der Bijl - Brouwer, 2018). A core feature of transdisciplinary practice is that the specific approaches or strategies employed in a given situation evolve and adapt to the specific context or application. Thus, each problem situation stimulates the development of a dedicated and unique approach, co-evolved through interactions by multiple stakeholders (figure 1). As a result, learning is at the heart of all transdisciplinary approaches, with mutual learning and reflexivity being core components of the process (Baumber, Kligyte, van der Bijl - Brouwer, & Pratt, 2019; Polk, 2015). While there are overlaps between systemic design and transdisciplinary research and innovation, it is particularly the integration of different ways of knowing, and the focus on mutual learning and reflexivity, that could contribute to the effectiveness of existing systemic design approaches.

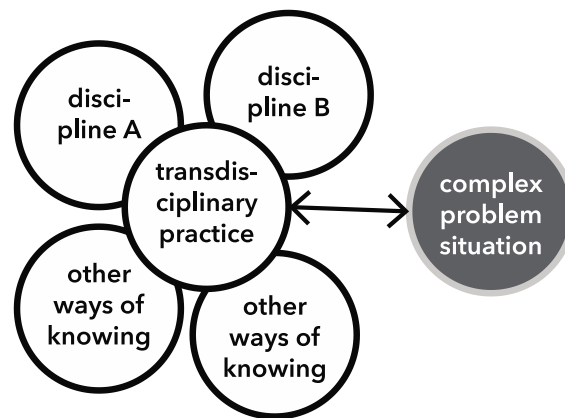


Figure 1: Transdisciplinary practices integrate different disciplines and ways of knowing in an approach that adapts to and evolves with a particular complex problem situation

In this paper we demonstrate the value of a dialogue between a transdisciplinary and systemic design approach, by examining our evolving systemic approach to wellbeing initiatives. The cases discussed represent an iterative development of a systemic perspective on wellbeing, an evolutionary innovation approach, a focus on partnerships in stakeholder networks, and a learning - rather than solution - orientation. The following section provides more detail on our research methodology, followed by a discussion of insights generated through this approach.

Research method: systemic design and transdisciplinary innovation

The research and innovation methodology that we developed combines systemic design with transdisciplinary research and innovation approaches. The methodology was developed through ongoing action research and engagement with the problem situation. In this paper we describe four specific projects that were executed within our university over the course of three years in an attempt to improve the wellbeing of students and staff. The research method described below gradually came into being over the course of these projects, rather than being adopted as a prescribed methodology from the outset.

The iterative methodology included the following components:

- Designerly action research. While all transdisciplinary approaches include an action-orientation, we applied a designerly action research approach. Design practices that we applied in this context include problem framing (Dorst, 2015), human-centred design (van der Bijl - Brouwer & Dorst, 2017) and iterative design through prototyping.
- Systems thinking. Systems thinking is a way of looking at the world. Rather than a reductionist view, where parts of a system are analysed to understand the whole, systems thinking adopts a holistic view and looks at interrelationships between parts and between parts and the whole (Ackoff, 1999, p15). We applied this holistic perspective to understand wellbeing in a university context.
- Systems change: we adopted an evolutionary approach to systems change. This includes running a portfolio of multiple innovation experiments, and selecting and amplifying those that were successful. This approach is further explained in the results section of this paper. We did not only execute multiple projects ourselves, but also worked with other initiatives and stakeholders within the university to achieve such an evolutionary approach.
- Working with purpose and vision: a key element of the evolutionary portfolio approach is to develop a long-term vision and directionality of the envisioned systems change. The vision that we developed evolved over time and was inspired by what we learned in the projects.
- Integrating multiple ways of knowing: we did not only integrate knowledge from the different disciplines from our academic backgrounds, we also integrated other ways of knowing. In particular we integrated knowledge from the university community (students and staff) and learned from Indigenous ways of knowing about social and emotional wellbeing (Gee, Dudgeon, Schultz, Hart, & Kelly, 2014; Yunkaporta, 2019).
- Collaborative approaches: we experimented with different ways to engage the university community to integrate their knowledge in the approach. We started out with participatory design, and eventually worked towards a 'partnership' approach which provides more agency for partnering students and staff (Baumber et al., 2019).
- Mutual learning & reflexivity: to ensure ongoing learning we implemented various practices to promote mutual learning between a range of participants through deliberate processes of reflexivity (Polk, 2015).

The above approach evolved over the course of the following four projects:

- Wellbeing framework: In the first project we collaborated with an Australian state government organisation to develop a framework that organisations could use to improve the wellbeing of their employees and target (user) groups, including businesses, schools and universities, and local governments. The organisation asked us to apply a designerly approach which included a participatory design session with multiple stakeholders and developing and testing a prototype of the framework with multiple stakeholders.

- The student wellbeing challenge: an example of multiple initiatives we organised with students. In this project 80 students from our transdisciplinary undergraduate degree developed ideas to improve wellbeing in universities as part of a two-week intensive course on leadership and innovation.
- Wellbeing research & innovation hub: in this project we tried to develop and implement our idea for a ‘wellbeing research & innovation hub’, a place where researchers and teachers share knowledge and innovative initiatives to improve wellbeing. We organised multiple participatory design sessions and applied a systemic design process to engage the university community. In this project, we also aimed to integrate a citizen science approach. The hub proposal was not implemented by the university.
- Student services hub: in the last project we worked in partnership with a group of students to develop a space within a new university building where students could get access to multiple university services. It included a physical design of the space and an operational model. Parts of the operational model were implemented.

Table 1: Emerging systemic design and transdisciplinary approach

Approach		Wellbeing framework	Student Wellbeing Challenge	Wellbeing Research & Innovation Hub	Student Services Hub
General	Vision			X	X
	Academic background of team members	Design	All UTS disciplines	Design and psychology/health	Health, design, architecture, communication
Systemic design	Designerly action research	X	X	X	X
	Systems thinking		X	X	
	Evolutionary approach to systems change			X	X
Transdisciplinary innovation	Indigenous ways of knowing	X			X
	Collaborative approach	Participatory design	Participatory design	Participatory design/ citizen science	Partnership
	Mutual learning and reflexivity				X

Results

In line with the reflexive approach, we present our findings by examining our learning journey through stories generated from our experiences within the four projects.

Vision: A systemic view on wellbeing

Our vision on university wellbeing evolved over the different projects and was influenced by both engagement with scholarly literature and learning through the various initiatives. In Text boxes 1, 2 and 3 we share stories of our experiences that influenced our vision on a 'happy and healthy university'.

Text box 1: An Indigenous perspective on social and emotional wellbeing

Experience (author, design team member wellbeing framework): As part of the design approach to develop a wellbeing framework, we developed a 'prototype' for such a framework and evaluated it qualitatively in group interviews with different stakeholder groups. This included a group of representatives from different Aboriginal wellbeing organisations in the state NSW. I met with three people at the university and brought our paper prototype to discuss. I felt a bit nervous about the meeting, because I felt we could have done better in considering an Indigenous perspective when developing the prototype. The three people who were providing feedback on the framework indeed soon mentioned that there were many issues with the framework, the main one being that it did not align with the perspective of Aboriginal and Torres Strait Islander people on 'social and emotional wellbeing' (Gee et al., 2014). They took the time to explain what this means. They explained that community is an important part of this perspective, where wellbeing is not just about the individual person, but about the community as a whole. If an individual is unwell, the community or family is unwell. And as a consequence, this is also dealt with within the community. I could easily connect this to my own experiences of ill mental health. When I was feeling unwell I went to a psychologist who was of great help. However, I went on my own, while my family and friends, in particular my husband, were also impacted by my mental challenges and after each separate session with a psychologist I had to go home and explain to them what I had learned. Would it not have been better to also include them in my healing process?

Learning: Wellbeing is not just about individuals, but about the community as a whole.

Text box 2: Relationships between university staff and students

Experience (author, lecturer): When we introduced the 'wellbeing challenge' to students I chose to start the introduction with sharing my personal story of dealing with ill mental health. I felt vulnerable telling a very personal story in front of a room with 80 students, but it went well. The students were very engaged, and after I had shared my story and explained more about wellbeing and mental health they went into their separate project groups and some of them also opened up about their own mental health in their groups and with their coaches. The next day one of the students approached me and thanked me for sharing my story. She said she was very inspired by my story, and it had made her realise "that our teachers are also human beings." It made me realise that we often step into a 'teacher role' in the university, or at least that is how it is perceived by students. What if we had more 'human' or 'personal' opportunities with students in which we show more of our vulnerabilities and insecurities?

Learning: Positive and human relationships between all people in a university impact wellbeing.

Text box 3: Feeling of wellbeing in the classroom

Experience (multiple authors, lecturers): To finish off the wellbeing challenge we asked students to present their ideas to an audience of students, staff and experts. One of the experts was the director of student services. After watching the presentations, we asked him to provide some plenary feedback to the students. He mentioned that there were many interesting ideas presented, but that what he found most interesting was not those ideas, but the ‘feeling of wellbeing’ in the classroom that he said was not common. The students were visibly excited to present their results and they were clearly supporting each other, not just within the teams, but within the cohort as a whole. Why can’t all university contexts and learning experiences have a similar quality of connection, care and wellbeing?

Learning: Wellbeing is directly influenced by the way we shape our education (and research) activities and the ‘culture’ within cohorts and classrooms. Rather than seeing it as a separate ‘service’ – a responsibility of a counsellor for mental health issues – wellbeing should be at the heart of how we shape our university, including research and education.

Inspired by the types of experiences presented in Text boxes 1, 2 and 3, in the next project we conducted a review of literature on wellbeing to develop a systemic vision on wellbeing in universities. Our evolving definition of wellbeing includes both individual and collective aspects. The individual perspective on wellbeing encompasses a definition of health that is considered “a state of complete physical, mental and social well-being”(Constitution of the world health organisation, 1948). Recommendations informed by this understanding of wellbeing are included in the Okanagan Charter for Health Promoting Universities (Okanagan Charter, 2015). This holistic and integrated perspective on wellbeing has been encouraged since the 1980s (International Conference on Health Promotion, 1987), however has yet to be fully implemented in the majority of institutions. The positive psychology of self (Seligman & Csikszentmihalyi, 2000) and the Wheel of Well-being framework (Wheel of Well-Being, 2013) are other well-known wellbeing concepts highlighting the holistic and integrated nature of wellbeing which informed our conception.

Inspired by Indigenous ways of knowing (see Text box 1), we began seeing wellbeing as not only about individuals, but also about community. “Aboriginal health does not mean the physical wellbeing of an individual, but refers to the social, emotional, and cultural wellbeing of the whole community. For Aboriginal people this is seen in terms of the whole-life-view. Health care services should strive to achieve the state where every individual is able to achieve their full potential as human beings, and must bring about the total wellbeing of their communities.” (Gee et al., 2014, p56). Therefore, we framed our wellbeing vision as ‘healthy and happy university’, not just ‘healthy and happy staff and students’. This conception highlights the importance of relationships between members of the university community, for example between staff and students (Text boxes 2 and 3).

Vision: an evolutionary and strength-based approach

While the above-mentioned part of the vision relates to how we envision a university with a high level of wellbeing, we also developed a vision of how we might work towards such a healthy and happy university, including positive influence on university systems change. Text box 4 presents a learning experience that contributed to that vision.

Text box 4: What is already happening in the university

Experience (multiple authors, wellbeing research & innovation hub): In the wellbeing framework project we took the university as a case and interviewed people who had an interest in student and staff wellbeing. For example, we spoke with a professor who had started to integrate meditation in her research training classes for PhD students after having experienced burnout herself. We also found a young employee who had designed a small booklet with tips on how to cope with anxiety, based on her own experiences of anxiety. It turned out there were many initiatives by staff and students who were already trying to do something to improve wellbeing in universities. But these initiatives did not seem to be connected and we did not know a lot about their impact. How can we connect these initiatives to collectively learn from them?



Figure 2: The little book for big worries by Kate Elton



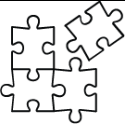

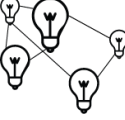
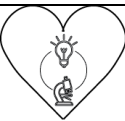
Learning: We have many staff and students who are already implementing wellbeing initiatives. The effectiveness of these initiatives is unclear.

Through our work we learned that we could benefit from a ‘strength-based’ approach: work with the knowledge and innovation that is available in the university and add connections where needed. Our ideas were further influenced by evolutionary theory, which includes a focus on experimentation. Snowden and Boone (2007) argue that in complex contexts, we can only understand why certain things happen in retrospect. Action must therefore be aimed at conducting experiments that are safe to fail and at learning about what works to create change. If the impact of an experiment is positive, we can safely amplify it. If not, we will need to remove or adjust the experiment. The evolutionary approach consists of multiple such experiments. This perspective is inspired by observations of natural living systems that adapt in a process of co-evolution with their environment through a process of differentiation, selection, and amplification. This evolutionary ‘algorithm’ can also be applied to organisational systems change. For example, innovation can be stimulated through a portfolio of experiments that are selected and amplified based on their impact on the system (Beinhocker, 2006; van der Bijl - Brouwer, 2019). Within a university context it means that we can consider existing wellbeing initiatives by students and staff to be ‘wellbeing experiments’. Successful initiatives can be selected and amplified, while further wellbeing experiments can be added where necessary. To achieve this, we proposed that researchers could evaluate and measure the impact of initiatives, with university management scaling up those that are shown to be successful. This formed the basis for our idea of a ‘wellbeing research & innovation hub’. However, we did not have enough institutional buy-in to

implement this concept (an unsuccessful safe-to-fail experiment in itself). Instead we continued running experiments wherever there were opportunities to do so.

The complete vision was established over the course of the first three presented projects and is presented in Table 2.

Table 2: A vision to work towards a healthy and happy university

	<p>A holistic and integrated view on wellbeing: we adopt a holistic view on wellbeing from the positive psychology of self, which acknowledges the interrelatedness of our physical and mental health, as well as how our health is related to our social connections. Rather than seeing wellbeing as separate from work and learning (e.g. as in separate services to prevent or cure health issues), we adopt a view that the way we organise our work and learning in itself is the key to wellbeing and flourishing.</p>
	<p>Connecting innovation and research: to improve wellbeing we need to know more about what our state of wellbeing is. Wellbeing is a fuzzy concept and thick (qualitative) and big (quantitative) data will help us identify how well the university is doing as a community and where we might need improvement. This needs to be connected to innovative practice that can help us generate new, dedicated initiatives to improve wellbeing.</p>
	<p>We already have (most of) what it takes: the university already has many resources required to work towards a healthy and happy university. There are already many people at the university who are passionate to improve student and staff wellbeing. We have researchers with expertise in collecting and analysing data. And we have people with expertise in design and innovation. All we need to do is find ways to connect them and support these efforts towards collaborative action.</p>
	<p>A connected community of students and staff: social connections are the most influential factor in defining our health and wellbeing. We therefore propose to strive towards being a university that is a connected and inclusive community which includes all types of students, professional staff, casual staff, and academic staff and where we work towards increasing our 'social capital'.</p>
	<p>Continuous internal social innovation: there are some great existing and generally applicable wellbeing initiatives available, but we propose that we need to complement these with an approach that designs and measures initiatives that are designed for and adjusted to specific contexts within the university. Because we see the university as a 'complex system' (see motivation) we recommend working with a 'portfolio' of initiatives that are continuously developed, tested, and then either removed or amplified, as well as a recognition of 'emergent' initiatives.</p>
	<p>A healthy research and innovation approach: we propose a 'well' designed inclusive and participatory approach to ensure that we practice what we preach. This participatory approach moves away from 'designing for' to 'designing with'. We take responsibility for our own health and the people we work with, and aspire to research and innovation work that challenges us but also keeps us healthy and sane.</p>

Collaborative approaches: integrating diverse ways of knowing

Throughout the projects, we experimented with and learned about different ways to work together and integrate knowledges. As our first project was based on a design approach, we initially worked with a participatory design methodology. This approach originated in Scandinavia in the early 1980s in the context of designing new technologies and systems for the workplace. It was based on a democratic ideal that those destined to use systems or artefacts should have a say in their design, and on the principle that participation of skilled users in the design process can contribute importantly to successful design and high quality products and systems (Ehn & Sjogren, 1991; Muller & Druin, 2002). In the

wellbeing research and innovation project we hoped to implement a participatory research approach called ‘citizen science’, an approach used by scientists to involve citizens in research projects (Mitchell et al., 2017), for example bird counting by citizens in ornithological research. Our work in a transdisciplinary undergraduate degree led us to explore what *participation* meant in different disciplinary contexts (Baumber et al., 2019). We concluded that there were many values and principles that underlie different types of participation and that depend on the context in which the approach is applied. Based on these insights we adopted a ‘partnership’ approach in the Student services hub project. The language of partnership implies that various stakeholders can contribute different strengths and play a range of roles in the process, with all parties deriving benefits from a mutual learning experience (Kligyte, Baumber, van der Bijl-Brouwer et al., 2019). To strengthen reciprocity and equity in the relationship, students were hired as paid team members on the Student Services Hub team (Figure 3) rather than being engaged as stakeholders as is the case in many participatory design initiatives.



Figure 3: The student services hub team, consisting of staff and student members

Mutual learning and reflexivity

These four projects can be viewed as an iterative learning journey. New projects embedded insights emerging from the experiences in previous projects. For example, the wellbeing research & innovation hub was initiated by two of the authors after working on the wellbeing framework project. Through the wellbeing research & innovation hub project we formed new relationships within the university, which then led to new projects such as the Student Services Hub. However, at the early stages of our collaboration, learning experiences by each individual participant were not shared explicitly.

Adopting the reflexivity approach promoted in transdisciplinary research, we decided to embed structured conversations about these learning experiences in the Student Services Hub project. Reflexivity plays a central role in transcending knowledge ‘silos’ to achieve new collective learning –

“on-going scrutiny of the choices that are made when identifying and integrating diverse values, priorities, worldviews, expertise and knowledge” (Polk, 2015).

We employed specific reflexive strategies for encouraging mutual learning. The tools we used were reflexive reading and writing, as well as creating space and time for mutual learning through dialogue. Throughout the project we scheduled opportunities for the team to come together to share our experiences. As input to these sessions we would read selected readings as provocations and each write a reflexive piece about our experiences in the project. We would then read each other’s reflexive writings and discuss them together. After the project, we also interviewed stakeholders who were outside of the core team to investigate their perceptions and experiences. Text boxes 5 and 6 describe the perspectives of different participants in this project and show how they each grappled with the challenges they encountered, differently framing new types of relationships emerging through this process.

Text box 5: Mutual learning about the partnership approach

Experience (students): one of the student team members reflected on their perception of the relationships within the team in the initial phases as follows:

“The expectations I had... working intensely alongside one another, students and academic staff in an equal partnership.” The initial experience working on the project did not feel this way... it felt like the tutors were supervisors over a student led project”

After we discussed these experiences in our reflexive dialogue session, we adjusted the way we were working together, creating more fluid and informal interactions. The experiences of partnership changed over time:

“The relationships experienced within the workshop between us as students leading them, and the staff invited to be involved, shifted as more workshops were held and our work progressed. During the first workshop it felt that even though as students we were running the workshop, this was in a kind of novel way. Whereas in the following workshops bias against us as students began to disappear and the fact we were ‘student partners’ became impartial to the work that was being done.”

“The fluidity of the relationships that were formed was exciting and encouraged greater responsibility and allowed for greater respect, both ways.”

What if university experience would allow time for student-staff and student-student relationships to grow and evolve, with opportunities for both students and staff to be exposed to a range of thinking and experiences that stimulate mutual learning about wellbeing?

Learning: Partnership is an evolving relationship, it is not simply working with students. It takes time for new types of relationships to emerge and reflexive dialogue can stimulate this process.

Text box 6: The partnership approach from the perspective of other stakeholders

Experience (multiple stakeholders): At the conclusion of the project we also conducted several interviews to capture experiences of stakeholders who were outside the core team and were not involved in the reflexive dialogue sessions. We learnt that the institutional stakeholders appreciated the value of this type of engagement with students, evidenced by their desire to incorporate similar approaches in their other projects. The Director of Student Services, in particular, expressed a sophisticated systemic view of the university, highlighting further opportunities for ongoing safe-to-fail experimentation and innovation to enhance wellbeing in the university. However, the project team felt that both parties missed out by not learning about each other's perspectives earlier on, resulting in some hiccups in the process and only a partial adoption of the proposal, since some key project constraints were not communicated to the student team. Could this type of partnership, focused on reflexivity and mutual learning about wellbeing, involve a wide range of institutional stakeholders, across status and position categories?

Learning: All stakeholders should be involved in co-creating the new framings of relationships within the university, different from the existing institutional roles.

Discussion and conclusion

Improving wellbeing in universities

The paper presents our journey of gradually developing a systemic view of wellbeing in the university. In the 'wellbeing research & innovation hub' project we created a vision and a concept for a 'hub' to improve wellbeing in the university community. However, we discovered that improving wellbeing is an ongoing process – it is not something that can be 'fixed' once and for all. In response, we reconfigured our efforts from a 'solutioning' to a 'learning' approach to support this evolutionary process. Indeed, the last project described in this paper is not an endpoint, but another step in our ongoing innovation process. One of the things that is required to support such an evolutionary process is a better understanding of the 'selection mechanism' of successful experiments. Therefore, as our next step we are looking at ways to evaluate and monitor the impact of new wellbeing initiatives.

Another important element of improving wellbeing in universities is attention to how we work together, and the relationships we shape. This includes the relationships between students and staff, but also between change agents and decision makers. Such relationships can have different characteristics, for example, they can be participatory, partnering, or consultative. In the Student Services Hub project we experienced how reflexivity and mutual learning can help to shape and evolve those relationships to become more authentic and productive. However, this reflexive approach can also be challenging as it invites people to reflect on their own personal values, assumptions and beliefs. Even though relationships are at the core of what it means to be human, in contemporary university climates we often forget to bring our 'whole selves' to work (Laloux, 2014). Our learning journey suggests that reflecting on our own wellbeing and the 'health' of our relationships within the university is crucially important. Thought about in a systemic way, improving student and staff wellbeing cannot be considered as a challenge sitting outside of us. It cannot be simply tackled by using a 'service' or 'prototype'.

Systemic design and transdisciplinarity

Our approach combined design, systems thinking and transdisciplinarity. Our design approach is reflected in the way we framed wellbeing of staff and students as a 'healthy and happy university' in our vision. The framing process followed a typical design approach in which the framing co-evolved with the different proposed designs (Dorst & Cross, 2001). This approach is different from a linear problem-solving approach, where a challenge is extensively analysed and researched before a solution is developed. Instead, our approach uses design action as 'safe to fail experiments' to better understand the problem context. The iterative nature of our approach means that our framing of wellbeing in universities can continue to evolve based on what we will learn in the future.

Systems thinking shaped the holistic way we see wellbeing, focusing on university community and evolving relationships. Systems thinking also shaped the way we looked at the university as a system that was changing and learning in an evolutionary way. As such, systemic design is a promising methodology to improve wellbeing in universities. We propose that by highlighting the importance of different types of knowledges, mutual learning and reflexivity, transdisciplinary approaches can enrich systemic design approaches.

We were particularly inspired by Indigenous Australian ways of knowing through reading literature and seeking experiences with community representatives throughout these projects. Not only do Indigenous Australians understand the interconnectedness of the individual within the community, upholding strong values of respect and reciprocity in these relationships, but they acknowledge the complex and networked nature of broader social and ecological systems (Harrison & McConchie, 2009; Yunkaporta, 2019). This includes the understanding that social change cannot be controlled by a single manager or external authority but must emerge from innovations in the daily practices of the people within the system (Yunkaporta, 2019). These perspectives provide a deeper understanding on the nature of sustainable social change to further inform the way we design interventions for such a challenging issue as university wellbeing.

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References

- Ackoff, R. L. (1999). *Ackoff's best*. New York: John Wiley & Sons.
- Ackoff, R. L. (2004). Transforming the systems movement. Retrieved from http://ackoffcenter.blogs.com/ackoff_center_weblog/2004/05/transforming_th.html
- Australian Bureau of Statistics. (2019). Education and Work, Australia, May 2019. Retrieved from <https://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/6227.0Main%20Features40May%202019?opendocument&tabname=Summary&prodno=6227.0&issue=May%202019&num=&view=>
- Barcan, R. (2016). *Academic life and labour in the new university: hope and other choices*. London and New York: Routledge.
- Baumber, A., Kligyte, G., van der Bijl - Brouwer, M., & Pratt, S. (2019). Learning together: A transdisciplinary approach to student-staff partnerships in higher education. *Higher Education Research & Development, Forthcoming*.

- Beinhocker, E. (2006). *The Origin of Wealth: Evolution, Complexity, and the Radical Remaking of Economics*. Boston, Massachusetts: Harvard Business School Press.
- Columbo, S. A. (1986). *General well-being in adolescents: its nature and measurement*. (PhD). Saint Louise University,
- Constitution of the world health organisation*. (1948). Geneva: World health Organization.
- Dorst, K. (2015). *Frame Innovation; create new thinking by design*. Cambridge, Massachusetts: The MIT Press.
- Dorst, K., & Cross, N. (2001). Creativity in the design process: co-evolution of problem-solution. *Design Studies*, 22(5), 425-437.
- Ehn, P., & Sjogren, D. (1991). From system descriptions to scripts for action. In J. Greenbaum & M. Kyng (Eds.), *Design at work: cooperative design of computer design* (pp. 241-268). Hillsdale, New Jersey: Lawrence Erlbaum associates.
- Eisenberg, D., Gollust, S. E., Golberstein, E., & Hefner, J. L. (2007). Prevalence and correlates of depression, anxiety, and suicidality among university students. *American journal of orthopsychiatry*, 77(4), 534-542.
- Fernandez, A., Howse, E., Rubio-Valera, M., Throncraft, K., Noone, J., Luu, X., . . . Salvador-Carulla, L. (2016). Setting-based interventions to promote mental health at the university: a systematic review. *International Journal of Public Health*, 61(7), 797-807.
- Gee, G., Dudgeon, P., Schultz, C., Hart, A., & Kelly, K. (2014). Aboriginal and Torres Strait Islander Social and Emotional Wellbeing. In P. Dudgeon, H. Milroy, & R. Walker (Eds.), *Working Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice* (pp. 55-68). ACT: Commonwealth of Australia.
- Harrison, M. D., & McConchie, P. (2009). *My People's Dreaming: An Aboriginal Elder Speaks on Life, Land, Spirit and Forgiveness*. Warriewood, NSW, Australia: Finch Publishing.
- Hudson, J., & Ingram, V. (2017). *Stigma-reduction & help-seeking in Australia classrooms - a research report on the batyr@school program*. Retrieved from <https://www.mq.edu.au/research/research-centres-groups-and-facilities/healthy-people/centres/centre-for-emotional-health-ceh/resources/batyr-Research-Doc.pdf>
- International Conference on Health Promotion. (1987). Ottawa Charter for Health Promotion. *Health Promotion International*, 1(4), 405.
- Jantsch, E. (1972). Towards interdisciplinarity and transdisciplinarity in education and innovation. In L. Apostel, G. Berger, A. Briggs, & G. Michaud (Eds.), *Interdisciplinarity, problems of teaching and research in universities* (pp. 97-121). Paris: OECD Publications.
- Kinman, G., & Johnson, S. (2019). Special Section on Wellbeing in Academic Employees. *International Journal of Stress Management*, 26(2), 159-161.
- Laloux, F. (2014). *Reinventing organizations*. Brussels, Belgium: Nelson Parker.
- Larcombe, W., Finch, S., Sore, R., Murray, C. M., Kentish, S., Mulder, R. A., . . . Williams, D. A. (2016). Prevalence and socio-demographic correlates of psychological distress among students at an Australian university. *Studies in Higher Education*, 41(6), 1074-1091.
- McPhee, C., Bliemel, M., & van der Bijl - Brouwer, M. (2018). Editorial: Transdisciplinary Innovation. *Technology Innovation Management Review*, 8(8), 3-6.
- Mitchell, N., Triska, M., Liberatore, A., Ashcroft, L., Weatherill, R., & Longnecker, N. (2017). Benefits and challenges of incorporating citizen science into university education. *PLoS ONE*, 12(11), 1-15.
- Muller, M., & Druin, A. (2002). Participatory Design: The Third Space in HCI. In J. A. Jacko (Ed.), *The Human-Computer Interaction Handbook* (pp. 1125-1154). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Okanagan Charter. (2015). *Okanagan Charter: An International Charter for Health Promoting Universities and Colleges*. Retrieved from

- Polk, M. (2015). Transdisciplinary co-production: Designing and testing a transdisciplinary research framework for societal problem solving. *Futures*, 65, 110-122.
doi:<https://doi.org/10.1016/j.futures.2014.11.001>
- Pollard, E. L., & Lee, P. D. (2003). Child well-being: a systematic review of the literature. . *Social Indicators Research*, 61(1), 59-78.
- Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4(1973), 155-169.
- Scholz, R., & Steiner, G. (2015, 10//). Transdisciplinarity at the crossroads, Editorial. *Sustainability Science*, pp. 521-526. Retrieved from
<https://www.lib.uts.edu.au/goto?url=http://search.ebscohost.com/login.aspx?direct=true&db=eih&AN=109991902&site=ehost-live>
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive Psychology - An Introduction. *American Psychologist*, 55(1), 5-14.
- Sevaldson, B., & Jones, P. (2019). An Interdiscipline Emerges: Pathways to Systemic Design. *She ji: The Journal of Design, Economics and Innovation*, 5(2), 75-84.
- Shore, C., & Wright, S. (2000). Coercive accountability: the rise of audit culture in higher education. In M. Strathern (Ed.), *Audit cultures: anthropological studies in accountability, ethics and the academy* (pp. 57-89). London and New York: Routledge.
- Snowden, D. J., & Boone, M. E. (2007). A leader's framework for decision making. *Harvard Business Review*, 85(11), 68-76.
- Stallman, H. M. (2010). Psychological distress in university students: A comparison with general population data. *Australian Psychologist*, 45(4), 249-257.
- van der Bijl - Brouwer, M. (2019). Problem framing expertise in public and social innovation. *She ji: The Journal of Design, Economics and Innovation*, 5(1), 29-43.
- van der Bijl - Brouwer, M., & Dorst, K. (2017). Advancing the Strategic Impact of Human-Centred Design. *Design Studies*, 53(2017), 1-23.
- Wheel of Well-Being. (2013). About Wheel of Well-being. Retrieved from
<https://www.wheelofwellbeing.org/about>
- Yunkaporta, T. (2019). *Sand Talk: How Indigenous Thinking Can Save the World*. UK: The Text Publishing Company.