A black and white photograph of a group of people in a workshop. In the foreground, a man and a woman are kneeling on a stone floor, facing each other and talking. The man is wearing a patterned t-shirt and dark pants, while the woman is wearing a light-colored striped shirt and dark pants. In the background, several other people are lying on their backs on the floor, some with their arms raised, suggesting a relaxed or collaborative activity. The setting appears to be a large, open space with a curved wall in the background.

Embodied learning for a complex world: Exploring creative education approaches through a transdisciplinary workshop

Lucy Allen, Giedre Kligyte & Jacqueline Melvold
TD (Transdisciplinary) School, UTS



Welcome

Acknowledgement of country

Introductions

Session overview

Acknowledgment of Country

We gather in this space to continue our journey of learning and in doing so, wish to pay respect to the traditional custodians of the land on which we all live and learn.

We pay our respect to Elders past, present and emerging, extending that respect to the various lands from which we are connecting.

We recognise and respect the cultural heritage, beliefs and relationship with land, sea and community that enable us to come together and learn today.



TD School

University of Technology Sydney (UTS)

What kind of university does a new generation need for a changing world, when potentially 50% of the jobs that will exist in 2030, do not presently exist?

- Future focused, university-wide degrees designed with industry and community partners
- Bringing together students, practitioners and partners from across disciplines and sectors
- Building the skills and ways of being needed to operate effectively in a world of work where change is the only constant
- Enabled by a young university who supports new ways of working and learning



Figure 1. UTS Campus in Sydney, Australia

Who are we?

Dr Jacqueline Melvold
Lecturer & Course Director, TD School
Infectious disease, education & professional learning



Lucy Allen
Associate Lecturer, TD School
Visual design, creative practice & innovation

Professor Bem Le Hunte
Director of T&L, TD School
Creative writing, education



TD School
researchers,
educators &
practitioners



Dr Giedre Kligyte
Senior Lecturer, TD School
Design, education & TD collaboration

Katie Ross
Subject Development Coordinator, TD School
Sustainability & transformative learning



Dr Barbara Doran
Lecturer, TD School
Arts, public health & TD practice



Dr Susanne Pratt
Senior Lecturer, TD School
Arts, futures & creative practice

Today we will:

01

Examine the role of embodied learning within a TD context and our diffractive inquiry process.

02

Present a framework and explore case studies for engaging embodied learning for a complex world within TD education.

03

Explore the framework in relation to our individual and collective practices through storytelling, questioning and sharing.

Grounding

What are 5 things you can see?

What are 4 things you can feel?

What are 3 things you can hear?

What are 2 things you can smell?

What is 1 thing you can taste?

A large, detailed image of an orange leaf with a white circle containing the number 01. The leaf is positioned on the left side of the slide, and the white circle is partially overlapping its right edge. The background is a solid blue color.

01

Embodied learning within transdisciplinary education

Why is it important?

How have we explored our practices?

What do we mean by embodied learning?

Tapping into our complex, embodied selves

Hide Video Panel



Deepa here!!



Giedre



Hello! Lucy from Australia here!



Hi everyone Maria



Jacqueline

early morning Kris : hello :-)



Big, still tired HELLO from Vienna - Katharina :)

Hi! Jillian



early morning version of Josefa

A new learning terrain

- Learning across and beyond disciplinary compartments
- Embracing different ways of knowing
- Learning for transformation
- Building capacities and dispositions
- Learning with and in the world
- Engaging the whole learner
- Embracing uncertainty, not knowing and unlearning



Figure 2. Illustration of learning for a complex world by Norman Jackson (2010), retrieved from <http://normanjackson.pbworks.com/w/page/11231851/Learning%20for%20a%20complex%20world>

Embodied learning for complexity

- How we were using embodied learning to engage learners in complexity stories within TD higher education?
- What can we learn from embodied forms of collaborative learning to deepen students' capacity to engage with complex societal challenges? And;
- How do we support practitioners in reflexively developing understanding and expanding practice to include embodied learning for complexity?



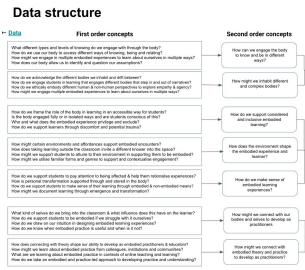
Figure 3. A diffractive reading, discussion and mapping session

An emergent inquiry

	The body as a medium of knowing the world	Environment and affordance	
Engaging the body in knowing and learning	Knowing through the body	Conditions to support learning	Knowing and knowing through the complex other
Connecting with theory and practice	The complex and embodied practitioner	Learning in and with complexity	
	Facilitating embodied encounters with complexity	Knowing the complex self	

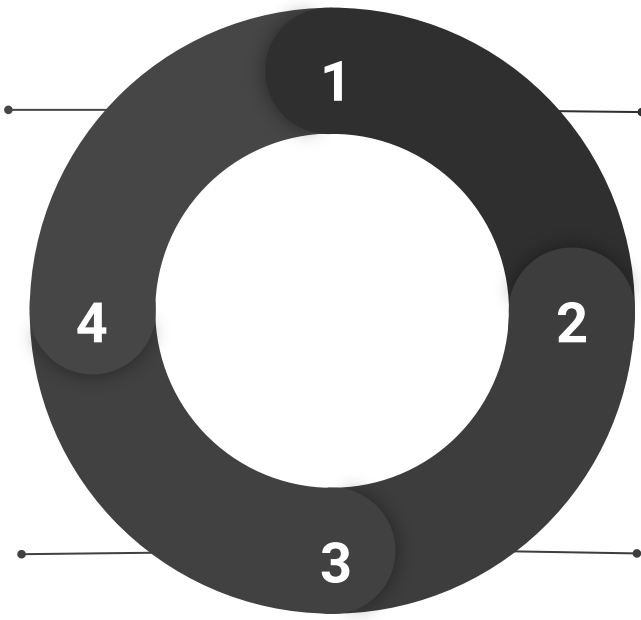
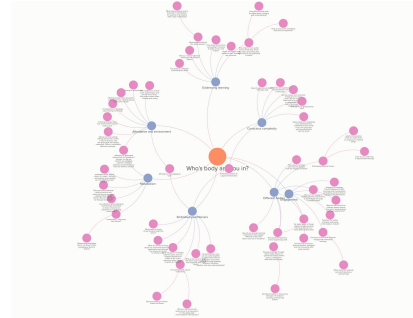
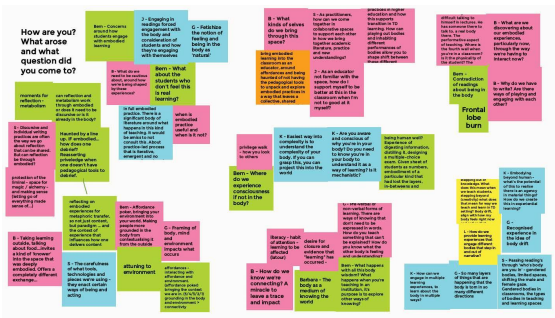
Developing a framework

Undertook qualitative analysis of our data and findings to develop a framework for practitioners



Connecting with theory

Collaborative reading and discussion of theory through the lens of our diffractive questions

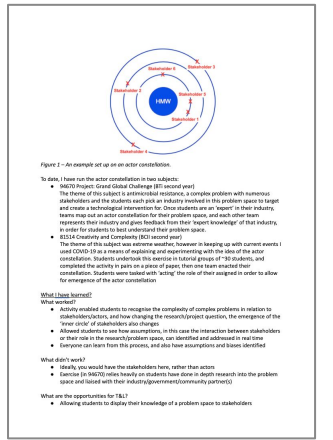
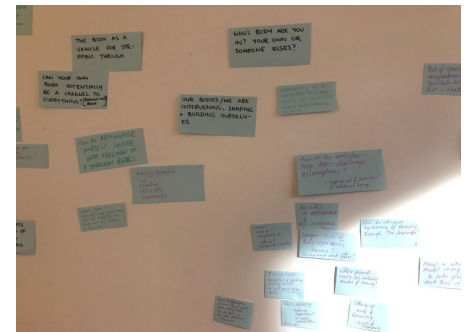
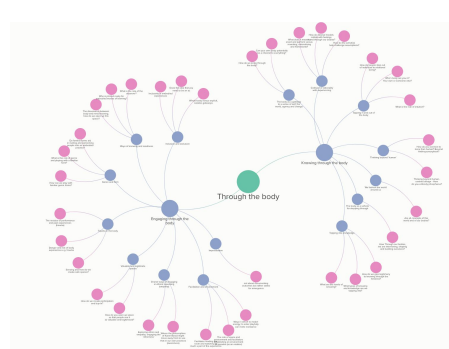


Surfacing practice

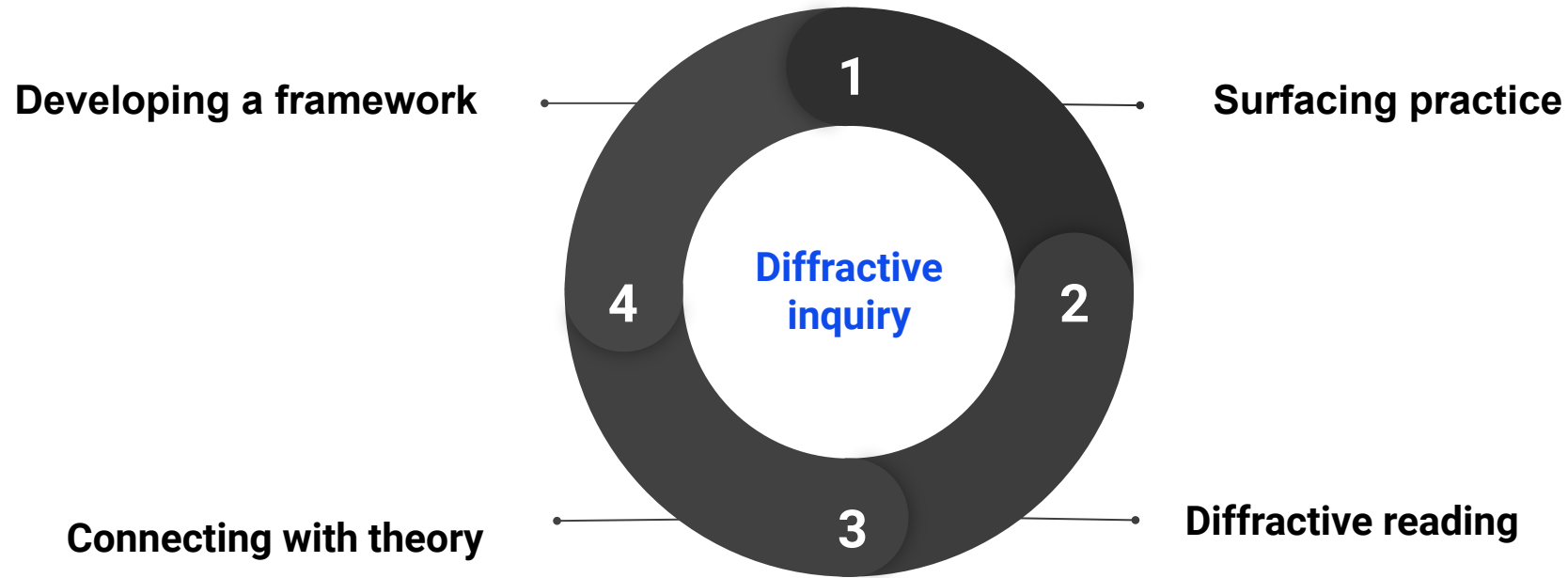
Individual written reflections on a learning activity that drew on embodied learning for complexity

Diffractive reading

Coming together to 'read through one another in ways that help illuminate differences as they emerge' (Barad 2007, 30).



A diffractive inquiry



From a diffractive perspective, subjects and objects such as nature and culture are not fixed referents for understanding the other but should be read through one another as entanglements (Bozalek and Zembylas, 2017, p. 116).

Embodied learning

Learning which joins the body and mind in physical and mental acts of knowledge construction (Nguyen & Larson, 2015, p. 332).


Embodiment as a compelling way to rethink the nature of teaching and learning asks participants to see fundamentally what is at stake within teaching/learning situations, encountering ourselves and our relations to others/otherness (Macintyre Latta & Buck, 2006, p. 315).



Figure 4. An embodied learning activity exploring 'a safe and just operating space for humanity' developed and run by Katie Ross

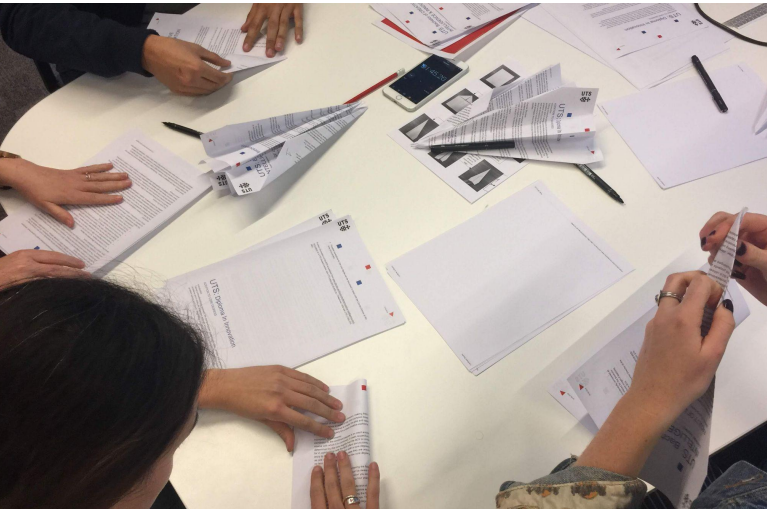
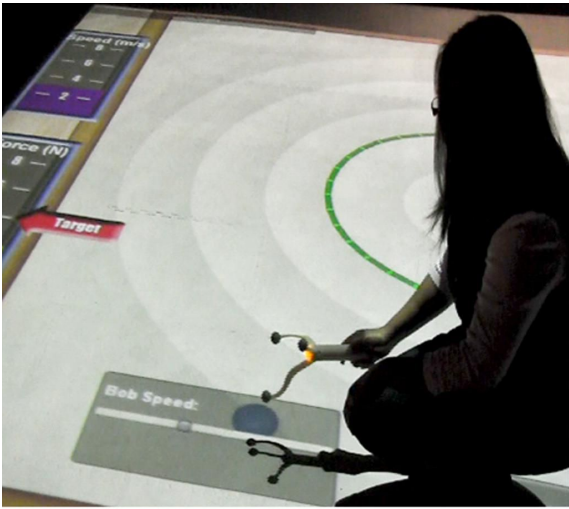
Embodied learning practices

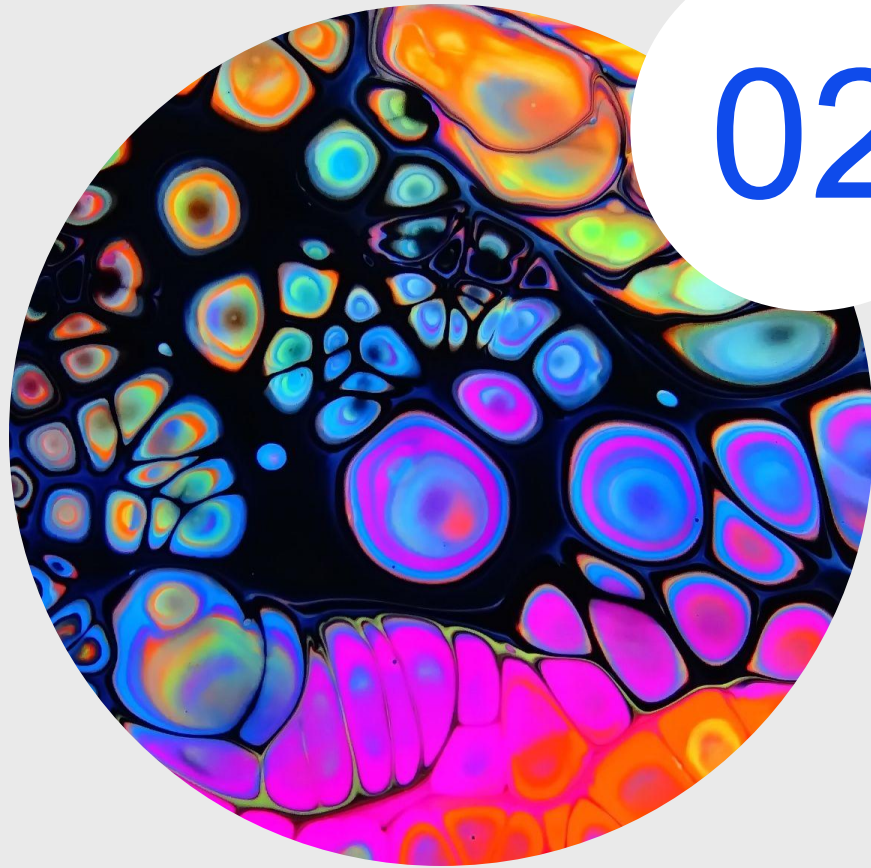


 **Scott Chadwick** @scottchadwick87 · Aug 11, 2020 ...
Today's [#zoomclass](#) comes straight from the handbook. [#Beetlejuice](#). FYI some students didn't recognise terminator last week, i doubt many will recognise Beetlejuice - I feel it's important to educate the students on important pop culture as well as forensic science.



How are you engaging embodied learning?





02

A framework for practitioners

Introducing the framework

Exploring dimensions through embodied case studies

Mapping and sharing stories from practice

Framework

Engaging the body as a medium of knowing, with the complex self and world: considerations and questions for education practitioners



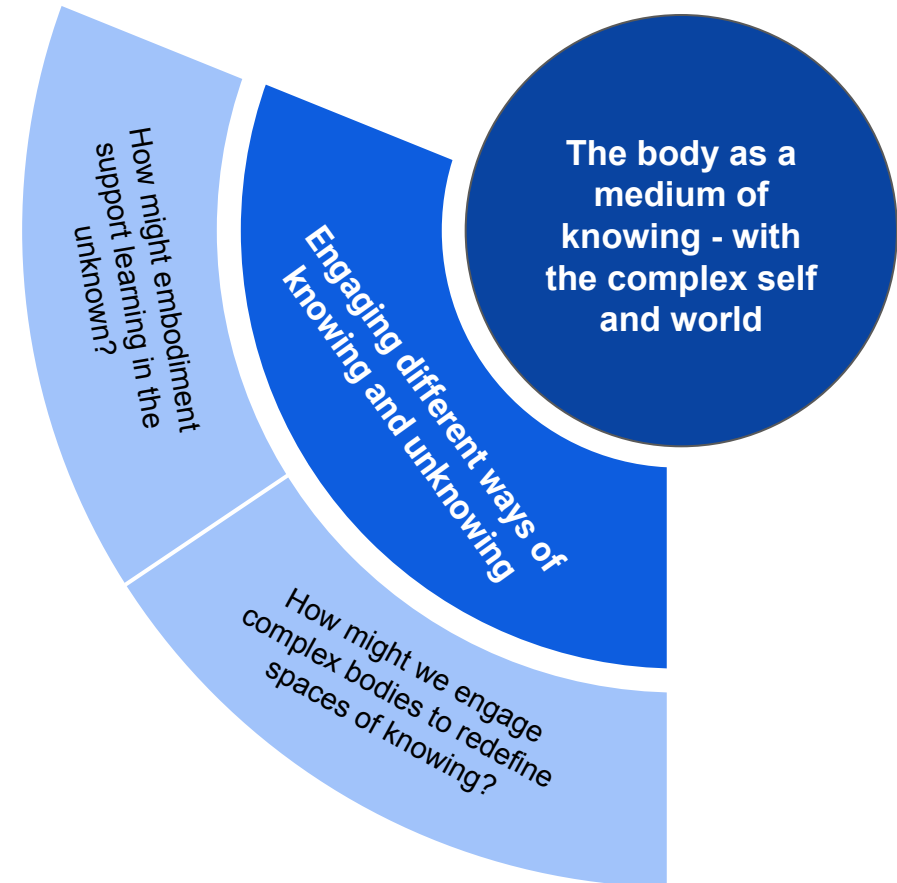
Figure 5. A framework for engaging the body as a medium of knowing - with the complex self and world

Dimension 1: Engaging different ways of knowing and unknowing

“Whose body are you in? Can your body be a channel to everything?”

Engaging the body as a medium of knowing with the complex self and world enables us to engage in new spaces of knowing and not knowing. In embracing the concept of body drift and multiplicity (Kroker, 2012) embodiment allows us to move between and define spaces of ambiguity, uncertainty and not-knowing where transformation occurs.

In this dimension we consider the different bodies we inhabit and co-exist with and how embodiment allows us to explore new boundaries between the self, environment and world.



Stories from practice

Complex systems tableaux: embodying and enacting system states and change



Complex systems tableau

The learning activity

Exploring complexity concepts through the embodiment and enactment of complex systems, where students can:

- Explore different perspectives and agencies by embodying any human and non-human element or relationship within the system
- Experience and sense systems change through the physically enactment of interventions
- Surface hidden dynamics and intentions within complex systems through reflection and discussion in-situ
- Make sense of complexity in new ways as they led the building and enactment of complexity in collaboration with one another

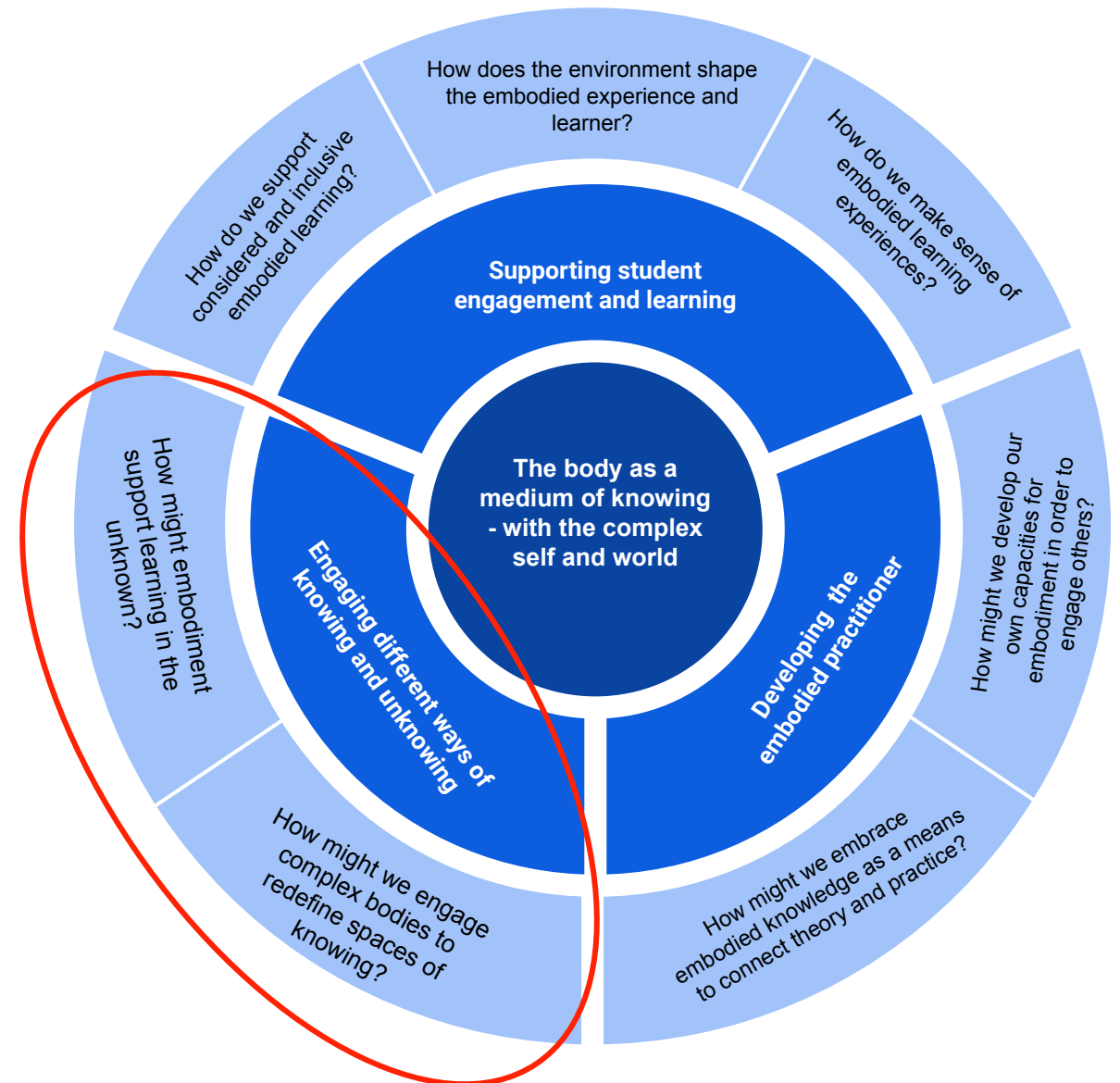


Figure 6. Complex systems tableau learning activity developed and run by Lucy Allen

Complex systems tableaux

Why embodied learning?

- Learners ‘feel’ not just ‘think’ about what it means to be part of social complex systems and to enact change within this
- Learners generate new spaces of knowing and being as they explore boundaries between the self, others and world differently:
 - Recognising and shifting between our complex bodies and selves
 - Extending embodied being to others
 - Embodying beyond anthropomorphism
 - Engaging the body in multiple ways
- Learners engage and develop the ability to act within spaces of uncertainty and not knowing

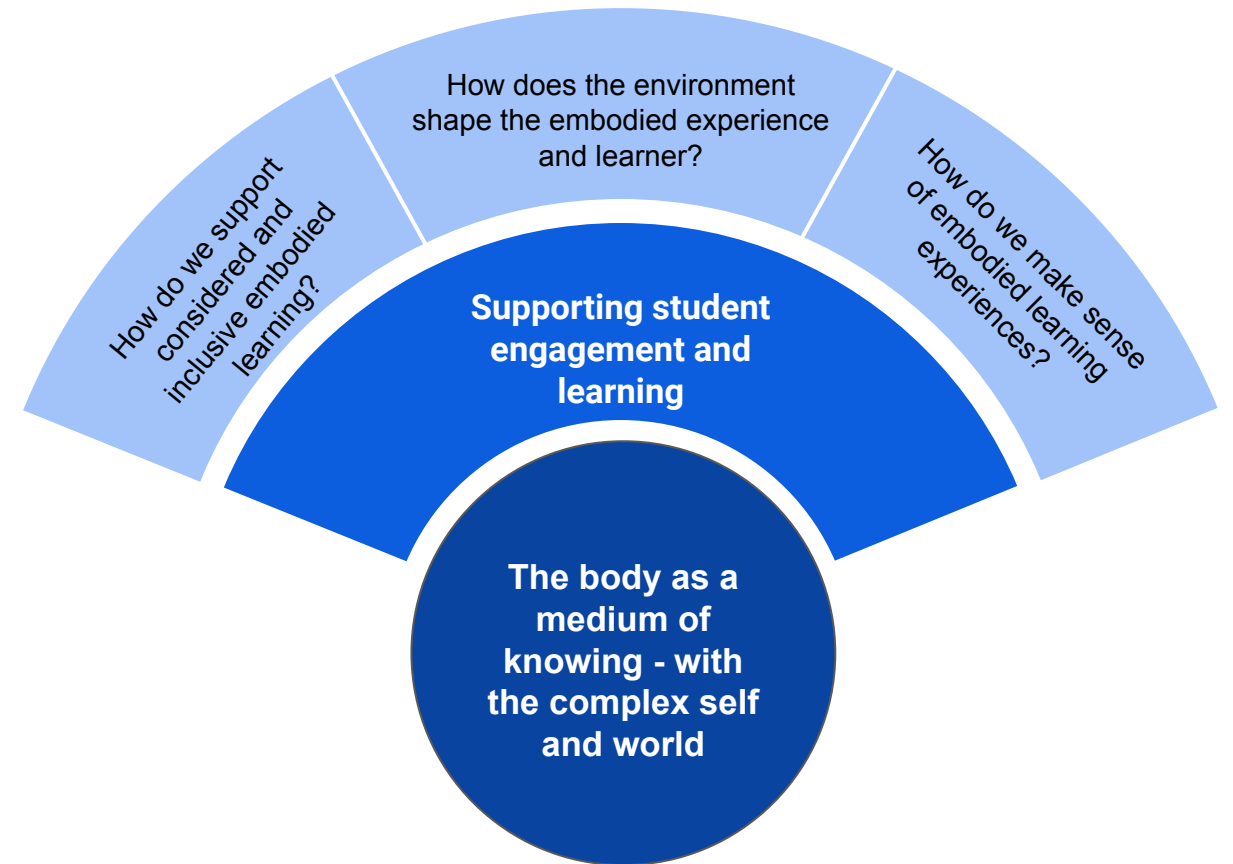


Dimension 2: Supporting student engagement and learning

“How do we sense and create a safe space for embodiment?”

When engaging the body as a medium of knowing with the complex self and world, it is crucial to consider with the conditions that support student engagement and learning. As argued by Dewey (1938, p.), careful attention must be paid to interplay of objective environmental conditions and the internal conditions of the learner that shape the experience to be had.

In this dimension we consider conditions for learning and engagement from the perspective of the environment, sensemaking process and body inclusion and exclusion.



Stories from practice

Slow walk


Created by Geraldine Balcazar

Dimension 2: Supporting student engagement and learning

The learning activity

The slow walk: using embodied experience as a way to reconnect with and understand our bodies

- Introduced as a mechanism for students to check in with themselves as they entered online learning
 - A tool for reflective practice
- Students participated in a 10 minute slow walk with an aim for them to focus on listening to their body
 - Introduction to embodied practice as a way of connecting your mind with your body



A word cloud of student reflections from the slow walk activity. The words are arranged in a roughly rectangular shape, with larger words being more prominent. The words include: reflective, air, calm, -confusing, calming, blank, ease, answe, garden, calm, tired, chill, gained, brain, cells, focus, fixated, challenging, awareness, concentrated, connected, grounded, confused, centre, sleepy, reflective, tired, mindful, at peace, time, off balance, relaxed, focused, sensory, cold, relaxing, grounding, interesting, calming, empty, different, motivating, quiet, balanced, zen, relax, cool, empowering, serenity, calm, present, focussed, harmonious, centring, transcend, flowing, peaceful, centered, free, slow, calming, relax, odd, still, slow, singular, awkward, aware, chill, meditative, clear, moving, confusing, serene, tranquil, distracted, balance, mindfulness, controlled, thorough, rejuvenating, calm, simple, slow, beautiful, boring, internally focused, heightened, slow, reflective, calm, control, time & calm, centred, calm, focus.



Figure 7. Student reflections from the slow walk activity developed by Geraldine Balcazar

Figure 8. Geraldine Balcazar demonstrating the slow walk activity

Dimension 2: Supporting student engagement and learning

The learning activity

The slow walk: using embodied experience as a way to reconnect with and understand our bodies

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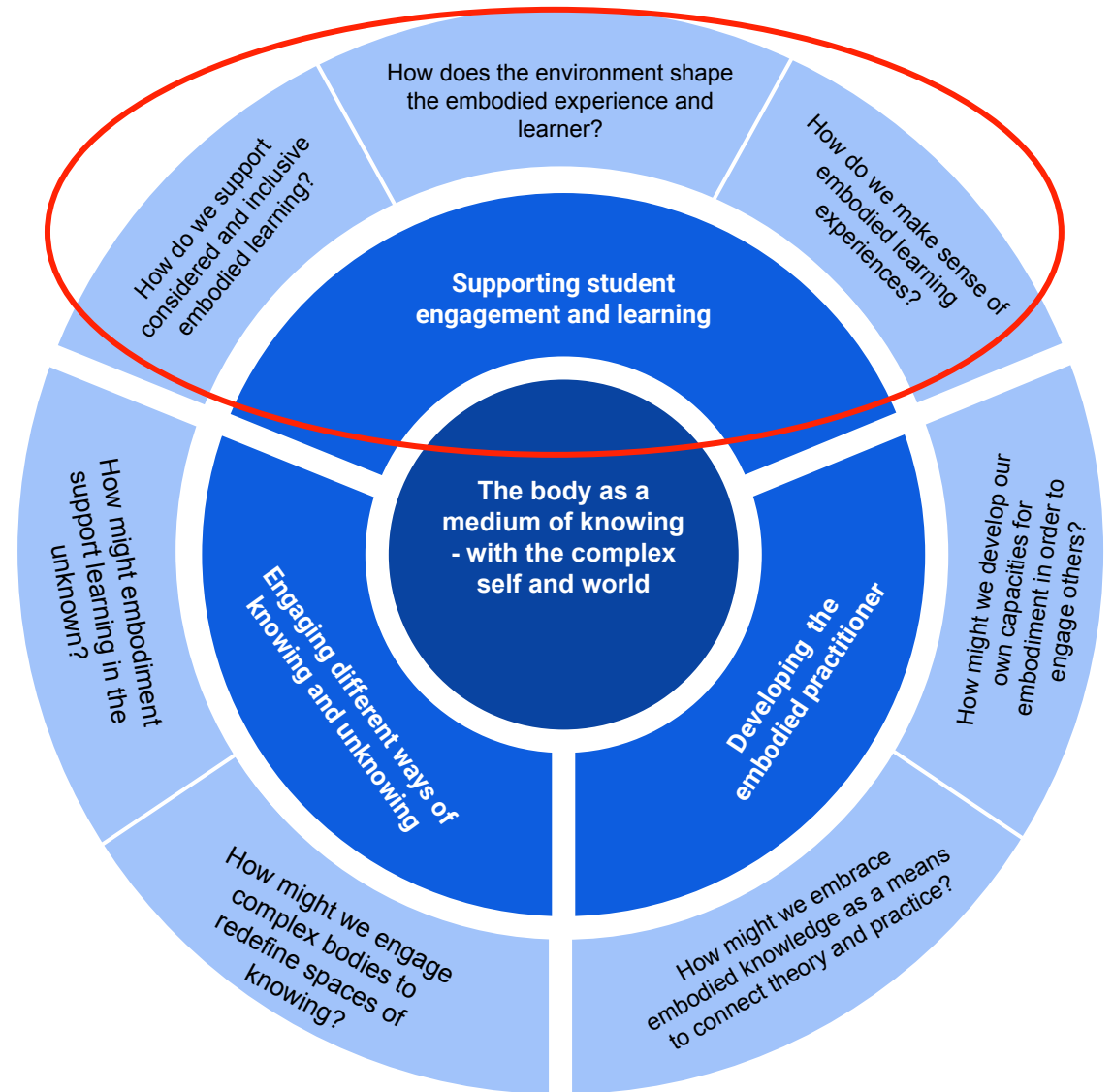


Figure 10. Slow Walk video developed by Geraldine Balcazar

Slow walk

Supporting student engagement and learning

- Student wellbeing - in a world of online learning (particularly in block mode teaching) we want students to be able to 'check in' with themselves
 - Engaging in embodied practice remotely in a safe space
- An introduction to embodied practice as a mechanism for mindfulness
 - A way to disconnect and re-centre your focus
 - A way of understanding what your body needs (e.g. to be away from the screen, to get up and stretch, etc.)

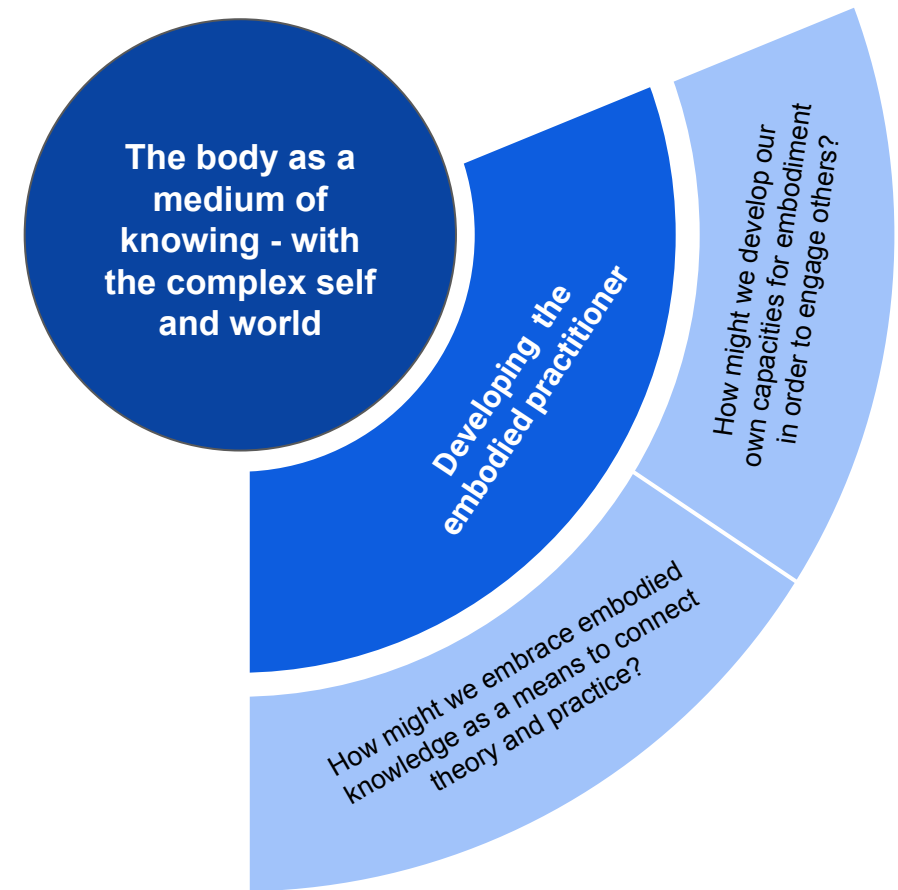


Dimension 3: Developing the embodied practitioner

“As an educator not familiar with the space, how do I support myself to be better at this in the classroom when I'm not too good at it myself?”

For the body to be engaged as a medium of knowing with the complex self and world in education, the practitioner must be aware, able and equipped. Through embodiment, the gap between understanding and action, theory and practice can be wrestled with (Macintyre Latta & Buck, 2008).

In this dimension we consider how the practitioner can deepen understanding and expand practice through embodied engagement with the self, theory and practice.



Stories from practice

Actor constellation

Actor Constellation

The learning activity

The Actor Constellation: Exploring how to bring embodied practice into the classroom

- Embodied experience assists in developing a shared understanding of a problem space as a team
 - Takes place as a low stakes activity in a safe space to test key assumptions and understandings of the role stakeholders play in a complex problem
 - Students learn to make decisions collectively
- Students complete the actor constellation activity individual on paper first, then compare and contrast and come to a shared understanding together

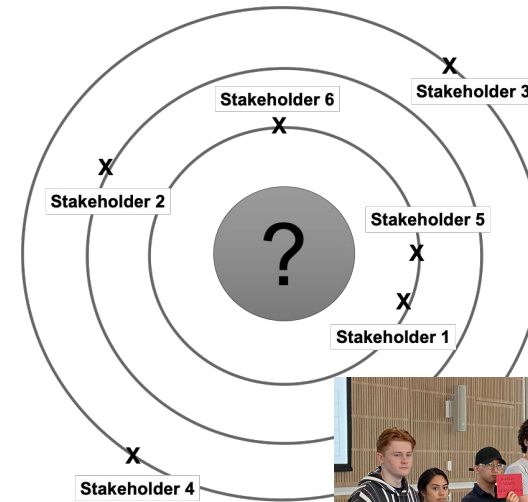


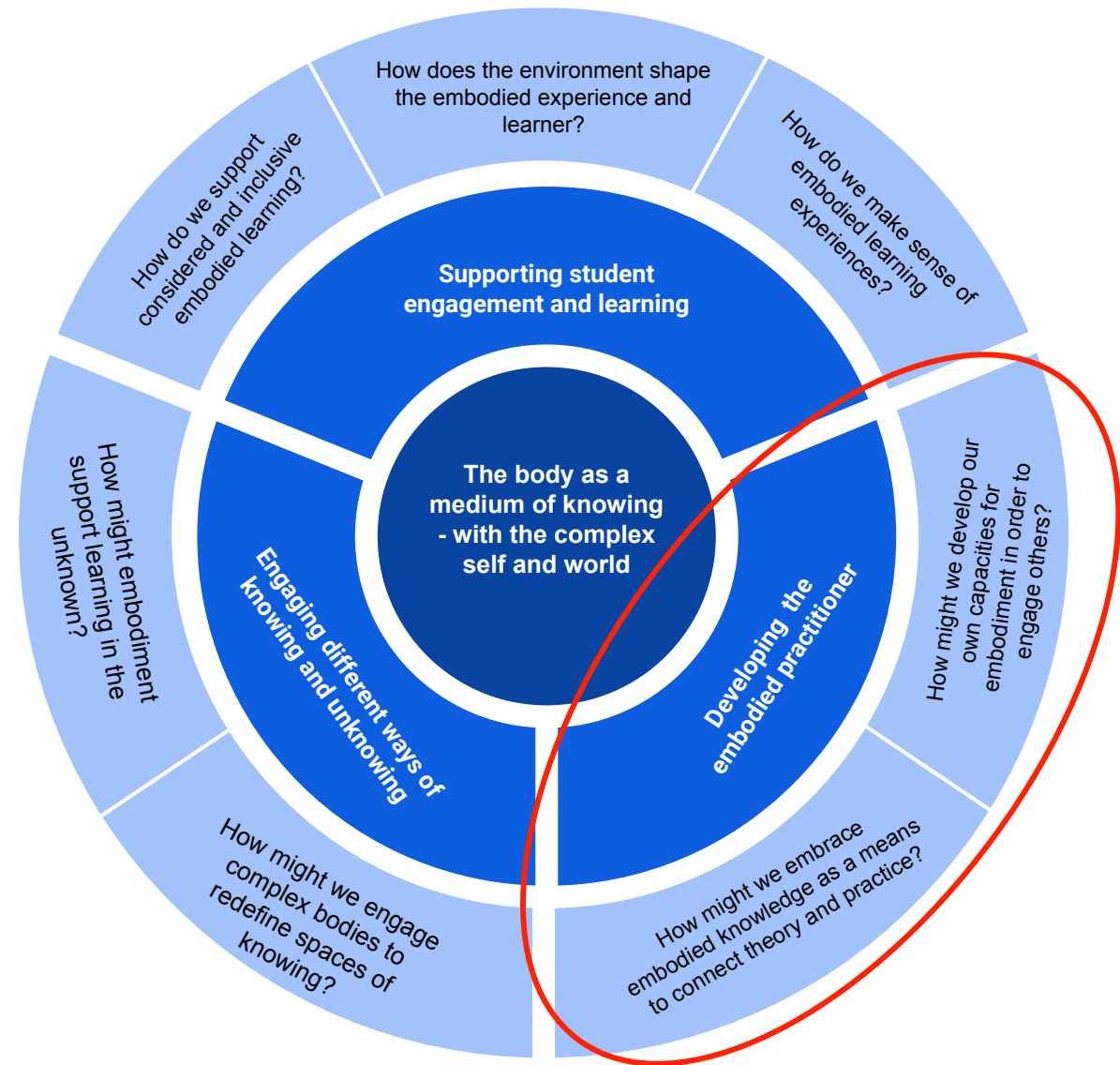
Figure 8. Actor Constellation diagram, adapted from https://naturalsciences.ch/co-producing-knowledge-explained/methods/td-net_toolbox/actor_constellation_final

Figure 9. Actor Constellation learning activity adapted and run by Jacqueline Melvold

The Actor Constellation

Developing the embodied practitioner

- Confidence in using embodied experiences in the classroom
 - Role play offered a great first kiss experience with embodied learning
- Understanding the value of using embodied learning in the classroom for the learner
 - Learners engage and develop the ability to act within spaces of uncertainty and not knowing
- Reflect on how to best use embodied learning as a tool to connect theory to practice
- Learners understand:
 - How to make collective decisions with their team
 - The importance of why you would work *with* stakeholders to solve complex problems
 - How to test their assumptions of stakeholders



Mapping and sharing our stories

Using the miro board, we will:

- Share embodied stories from practice
- Explore the framework and which aspects of this help us see and be in new ways
- Identify areas of uncertainty, not-knowing and questioning

You are welcome to use imagery, written text and any other forms to populate the board.

bit.ly/EmbodiedComplexity



03

Bringing it together

Sensemaking

Questions

Keeping in touch

Awareness and attention

Sit back from your screen, align your spine
and focus on your breath.

Extend your arm and hand out in front of you.

Three things

In the Zoom chat we invite you to share:

- One new thing you've brought your awareness to today
- One sensation you feel in your body right now
- One unknown, un-learning or question that remains

Resources

- Miro board: <https://bit.ly/EmbodiedComplexity>
- Framework with prompts (PDF):
<https://bit.ly/ELCFramework>
- Actor constellation activity:
https://naturalsciences.ch/co-producing-knowledge-explained/methods/td-net_toolbox/actor_constellation_final

Please reach out to lucy.allen@uts.edu.au if you would like to:

- Receive a copy of these slides
- Know more about our specific embodied complexity learning activities
- Share any feedback on the framework and today's session
- Let us know how you apply and experiment with these practices and framework

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Thank you

Please stay in touch and let us know how you experiment within your own practice!

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TD School: www.uts.edu.au/about/td-school