



Leading in Complexity 2024

An Initial Enquiry in Tasmania

AUTHOR

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Agenda for today's event

- Brief introductions
- Overview of the enquiry and key insights
- Discussion questions
- Q&A with Angela & Aiden
- Mix and mingle



Dr Aiden M. A. Thornton

- Academic at The Australian National University (ANU) and co-lead of the ANU Complexity Leadership Lab
- Management consultant
- Psychometrics entrepreneur
- Street Epistemologist

Overview of my research on complexity leadership

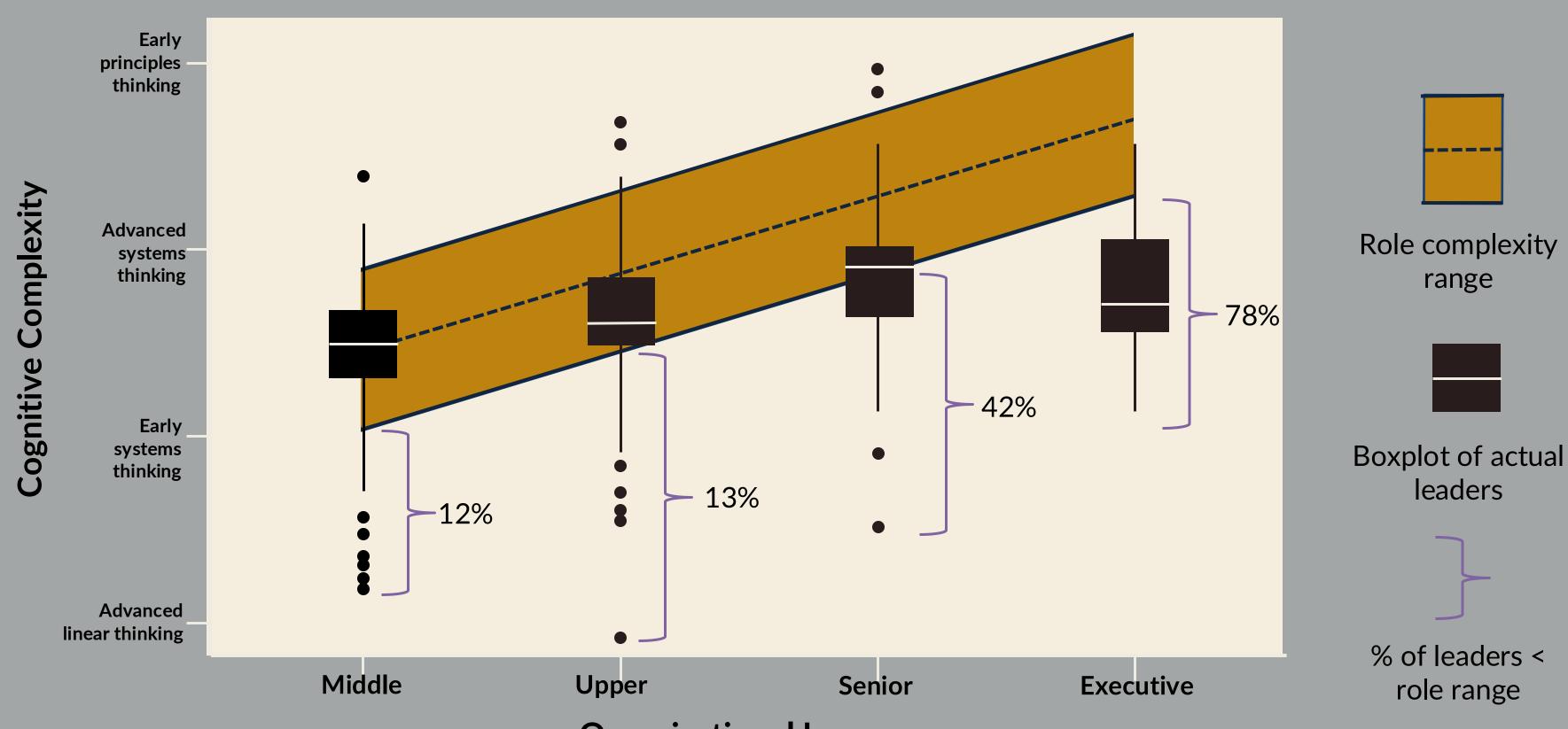
Past

- Examined different ways of measuring the psychological complexity of leaders
- Identified a significant gap between leaders' role complexity and cognitive complexity
- Identified growth in leaders' cognitive complexity in a longitudinal study

Present and future

- Relationship between systems thinking and effective leadership
- Complexity leadership capability framework for individuals and collectives
- Revising the mathematics of complexity
- Developing new ways of measuring complexity of individual leaders and leadership collectives
- And various other studies ...

The complexity gap



Adapted from Thornton (2023) ©

Organisational Layer

But what do we mean by complexity?

A scientific definition

• The behaviour of systems resulting from dense interconnectivity — within systems, between systems, and between systems and their environments — where a single change triggers multiple effects.

A workplace definition

• When unpredictable and ambiguous events occur that are difficult to navigate due to the interconnection between many aspects of our work lives — such as people, culture, processes, technology, structures, and governance, etc.



Our approach

Three lines of enquiry

- types of complexity
- making sense of complexity
- skills required to navigate complexity

Mixed-methods approach

- complexity leadership lab with 17 leaders (Tasmanian Leaders graduates)
- complexity leadership skills survey with 39 respondents (41% Tasmanian Leaders graduates)

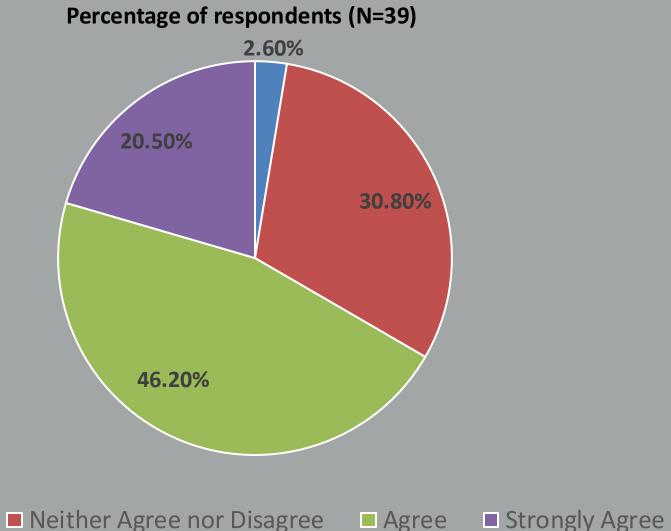
Key limitations

- self-selected sample
- small samples i.e.,framed as an initial enquiry
- focus on complex issues
- focus on more subjective perceptions

Why does leading in complexity matter to leaders in Tasmania?

Complexity in Tasmania has increased significantly over the past 5 years

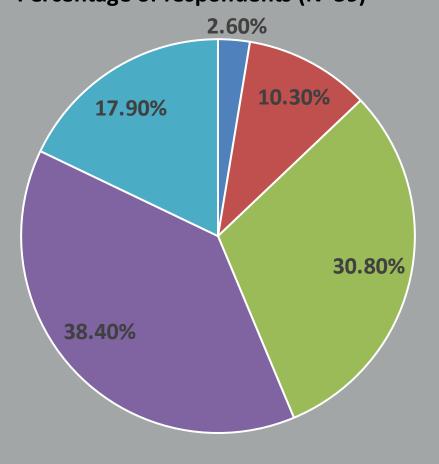




Disagree

To what extent are you currently experiencing complexity as a leader in Tasmania





■ Very low extent ■ Low extent ■ Moderate extent ■ High extent ■ Very high extent



We've been let down by our leaders. The future is not just complex. It's scary. Too many vested interests. Too much inflexibility. A changing world."

Experience of different types of complexity

Intrapersonal complexity

Interpersonal complexity

Systemic complexity

e.g., technological, organisational, political, social & cultural, environmental

Foundational complexity

e.g., epistemic, ethical



A METAPHOR

"These dynamics collectively evoke the metaphor of socio-political terrarium – a self-contained system that is both fragile and complex, requiring careful stewardship to balance preservation and progress"

(Thornton, 2025)

Making sense of complexity

- How often do you need to directly address complex challenges within this domain? e.g., intrapersonal, interpersonal, systemic, etc.
- From a leadership perspective, how difficult is it to navigate these challenges?

- Most frequent and most difficult:
 - -Interpersonal
 - -Technological
 - Organisational
 - Political
 - -Social & cultural
 - Epistemic
 - Ethical

Making sense of complexity

Potential root causes of complexity:

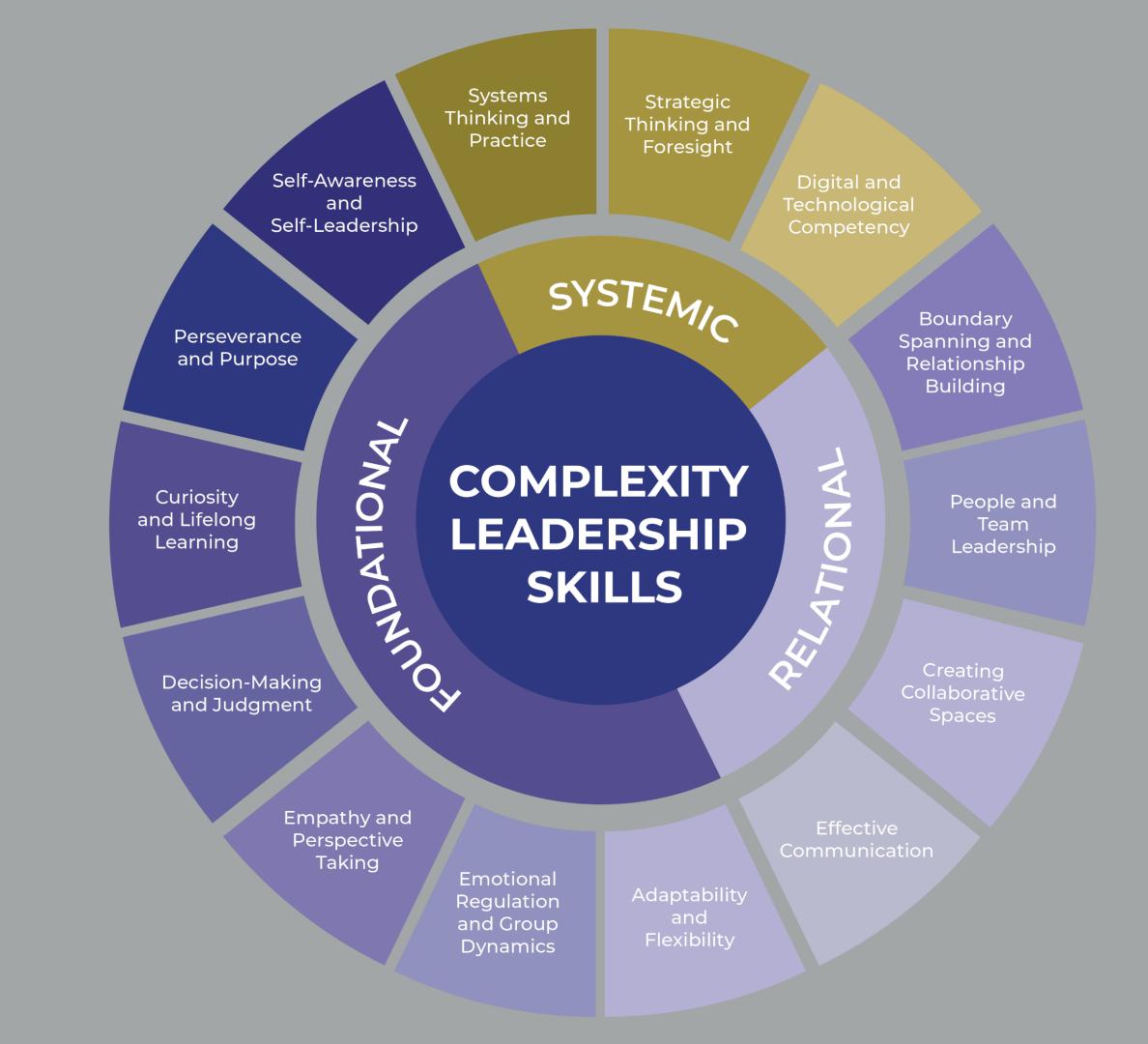
- competing goals
- lack of clear boundaries
- Interconnectedness within and between systems



The leadership we need will not happen by chance. There needs to be ever-stronger purposeful support and development."



Skills required to navigate complexity



Insights about complexity leadership skills

What level of capability do you believe will be required for leaders in Tasmania to lead effectively in 2024 and beyond?

How would you rate your current level of capability?

How would you rate the typical level of capability among the leaders you work with regularly?

- all 14 skills were rated between high and very high
- no significantdifferences betweenratings for skills

- all 14 skills were rated between moderate and high
- digital and technological competency was rated lower than some skills
- all 14 skills were rated between low and moderate
- no significantdifferences betweenratings for skills



RECOMMENDATIONS:

- Focus on complexity leadership skills in management and leadership education and development.
- Shift emphasis from leader development to leadership development.
- Invest in digital and technological competency.

- Embed systems thinking and practices into organisational processes.
- Establish shared visioning and conflict resolution frameworks.

So what? Discuss with someone near you

- What resonates with your personal experience of leading in Tasmania?
- What additional opportunities or solutions do you see for strengthening leadership in Tasmania?



Q&A

with Angela Driver & Dr Aiden M. A. Thornton





Download the report:

bit.ly/complexity-report



Mix & Mingle





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