ΛNZSOG



Leadership
Capability
Framework for
the Queensland
Public Sector –
Interim Evidence
Review

Leadership Capability Framework for the Queensland Public Sector – Interim Evidence Review



UNSW Business Insights
Institute
University of New South
Wales

Authors: Bradley Hastings, Shayne Gary, Christopher Jackson, Christian Criado-Perez, Ann Cahill, Batoul Hodroj, Giovanni Cunico

18 March 2024

DOI: 10.54810/CVPC9985

ANZSOG Research Insights ISSN: 2653-7281

© ANZSOG

For further information on the ANZSOG Research Insights series and the commissioning of this report: research@anzsog.edu.au

Suggested Citation:

Bradley Hastings, Shayne Gary, Christopher Jackson, et al. Leadership Capability Framework for the Queensland Public Sector – Interim Evidence Review: ANZSOG Research Insights No.32. Melbourne: ANZSOG, March 2024

Executive Summary

Queensland Public Sector (QPS) seek clear insights on how to create leaders for the future in a way that is collaborative, people-centred, place-based and driven by a clear understanding of the context and needs of Queensland. One aspect of this enhancement is to understand contemporary leadership science including the latest, evidence-based, conceptualisations of leadership, leadership development, and progression pathways. The scholarly discussion on these themes is vast. This document is not meant to be a full summary of what is known – this would be unwieldy. Instead, we (the Business Insights Institute) have begun by exploring the present state of QPS, asking what works and what doesn't? With this information, we have provided a more targeted overview of leadership literature that is, hopefully, aligned with the issues that matter for QPS. We also want to make it clear that this document is not a final report, nor does it provide detailed recommendations. Instead, it presents phase 1 of a three-stage process. Here we present a broad sweep of the available science and practical knowledge across five workstreams: (1) leadership frameworks and development pathways, (2) mechanisms for developing capabilities, (3) technology enablement, (4) diversity and inclusion, and (5) learning from other jurisdictions.

The second step is an engagement phase where this evidence is discussed and explored with QPS to identify what resonates, what doesn't, and what needs to be explored further. With this context, the final stage will be a more detailed and tailored report that combines both the evidence and the view of 'what works' into a coherent path forward.

Given this phased approach, we suggest reading this report with the following questions in mind:

- 1. Which themes resonate with your vision of a thriving future public sector?
- 2. Which themes do not resonate?
- 3. Which themes would resonate if a challenge were overcome what is that challenge?

 Below we provide highlights and key takeaways from the five workstreams of this interim report.

Leadership frameworks and development pathways

- Traditional leadership frameworks, such as the existing QPS framework, tend to outline a 'one-size fits all' pathway for leadership and describe a linear set of steps to progress up the leadership ladder.
- This linear perspective does not reflect real-world development and can unintentionally create structural career progression barriers for young people, women, regional leaders, people with disabilities, and people from diverse cultural backgrounds.
- Traditional frameworks also tend to prioritise individual leadership capabilities, such as leading oneself
 and managing others, while overlooking relational capabilities (e.g. developing a shared leadership
 philosophy) that empower teams to excel.
- In response, recent leadership research has advanced a two-dimensional (2D) perspective of leader development (the Wallace 2D framework). A horizontal dimension differentiates individual

- competencies from relational competencies. The vertical dimension explores the maturation of a leader's cognitive frames and thinking as they advance from novice to expert leaders.
- This Wallace 2D framework opens the opportunity for multiple development pathways, greater emphasis on relational leadership, essential to harnessing the benefits of diversity, and provides focus for targeted assessment and interventions tailored to individual needs.

Leader development mechanisms

- The idea that leaders can participate in an annual appraisal discussion, identify learning priorities, then check-in to a 2-day training program with the idea of emerging as better leaders is simplistic and not reflective of the science of adult learning.
- Training programs provide knowledge and opportunity to experience frameworks and ideas, however
 learning is maximised via structural approaches that help participants apply these learnings via on-thejob activities such as reflection, storytelling, feedback-seeking, and group learning as relevant to both
 individual and group learning.
- A benefit of the Wallace 2D framework is more targeted development mechanisms that are aligned horizontally, to promote better relational leadership, and/or vertically to mature leader mindsets. We outline learning approaches and some underlying leadership ideas that are supportive of the Wallace 2D framework.

Diversity and Inclusion

- Under-represented groups are disadvantaged by a one-dimensional model of leadership development
 which favours a narrow top-down approach to solving organisational problems and limits opportunities
 to include diverse voices and perspectives.
- To ameliorate this problem, we recommend developing inclusive leadership practices, aligned to the 2D
 Wallace framework to reduce some of the unfair barriers associated with the current leadership
 framework.
- Leadership science also explains that leadership development, on its own, is not enough to promote
 diversity and inclusion. Structural considerations that cater for inclusion of all groups include: (a) flexible
 working arrangements at all levels, (b) inclusive networking and development opportunities, (c)
 coaching and mentoring, (d) reducing biases and removing criteria that might discriminate against
 certain groups in recruitment and selection processes.

Technology-enabled leadership development

 Online or blended teaching results in similar leadership learning outcomes to traditional face-to-face settings and, for certain types of content, online can improve learning outcomes. However, learners rate face-to-face teaching higher in terms of satisfaction. Also, face-to-face teaching is more effective than online learning for achieving transfer outcomes (i.e., transferring learning from the classroom to on-the-

Australia and New Zealand School of Government (ANZSOG)

- job performance). Therefore, leadership training programs should include a mix of online and face-to-face teaching.
- Simulation microworlds, serious games and immersive virtual reality (VR) applications can significantly
 enhance learning for individuals and groups but must be carefully chosen or designed to align with the
 specific pedagogical goals and desired learning outcomes.
- Simulations, serious games and immersive VR content should be integrated with other delivery methods
 (e.g., lectures, presentations, role-plays, in-basket exercises, guided practice, and negative or positive
 examples applying learned skills in-person, or via audio or video) to achieve better leadership
 development outcomes.

Learning from others

- What do other jurisdictions do? We compared how different Australian jurisdictions articulate
 leadership development with the Wallace 2D framework and found differences as well as consistent
 oversights. Across public sector frameworks, there is a strong focus on soft skills, but there are clear
 differences in which skills are considered important.
 - The main focus across the public sector frameworks, including the existing QPS framework, is on the development of the individual leader competencies with limited consideration of relational and maturing leadership competencies.
 - There are also variable approaches to how leadership development is delivered. Typically, this comprises a hybrid of online and face-to-face programs and external programs that may be generic university qualifications or tailored programs offered by universities, institutes, or private sector providers. Some entities use leadership academies, but it is not apparent whether these are more effective in providing leadership development. New Zealand may be an exception with their focus on Māori leadership and mentoring and their consideration of how to cost effectively deliver consistent core competencies at scale, leaving specialised needs to individual departments.
- With this context, 'learning from others' may not advance QPS as far as desired.

Overall takeaway

We provide an evidence-based review of the best leadership approaches in the literature that directly address the problems faced by QPS. We believe that the Wallace 2D leadership framework has the potential to provide more opportunities for all members of the QPS community to climb the leadership ladder in a way that works for them. This 2D conceptualisation is not completely catered for by other jurisdictions and thus there is an opportunity for QPS to leapfrog others and be at the forefront of public sector leadership development in Australia and New Zealand.

Australia and New Zealand School of Government (ANZSOG)

Contents

<u>1.</u>	Present day Leadership Development and Opportunities in the Queensland Public Sector	10
<u>1.1</u>	A complex service	10
<u>1.2</u>	Coaldrake Report	10
<u>1.3</u>	<u>Understanding the present context – Interviews</u>	10
<u>1.4</u>	What do QPS currently aim for?	12
<u>1.5</u>	Looking forward	12
<u>2.</u>	Key Terms - What we mean by Leaders, Leadership and Development	14
<u>3.</u>	Leadership Framework and Development Pathways	14
<u>3.1</u>	Evolution in leadership knowledge	14
<u>3.2</u>	Introduction to a 2D leadership framework	15
	Vertical development	17
	Horizontal development	18
<u>3.3</u>	Multiple development pathways	23
	A pathway for managers	23
	Relational-focussed leaders	24
	'All stations' pathway	24
	Leadership in the middle – Individual and relational capabilities	24
<u>4.</u>	Mechanisms for Developing Capabilities	25
<u>4.1</u>	Successful leadership development practices	25
<u>4.2</u>	Wallace 2D framework and leadership development strategies	28
<u>4.3</u>	Horizontal competency-level development mechanisms	29
	Inclusive practices	29
	<u>Leader-member exchange</u>	30
	Psychological safety and trust	31
	Cultivating social identity	32
<u>4.4</u>	Horizontal stewardship development mechanisms	33
<u>4.5</u>	Vertical development mechanisms	34
	Team skills training	35
	Feedback seeking	35
	Narrative approaches; self and others	36
	Vertical development approaches in practice	36
<u>4.6</u>	Measuring progress	39
<u>4.7</u>	Organisational structures that support development	40
<u>5.</u>	Placing Diversity and Inclusion Considerations Front and Centre	41
<u>5.1</u>	The challenge	41

Australia and New Zealand School of Government (ANZSOG)

Page 8

<u>5.2</u>	Structural barriers	42
<u>5.3</u>	How coaching and mentoring translates in practice	43
<u>5.4</u>	Representation and quotas	43
<u>5.5</u>	Enabling flexible working arrangements at executive levels	44
<u>5.6</u>	Inclusive networking and development opportunities	44
<u>5.7</u>	Reducing bias in career progression and selection decisions	45
<u>6.</u>	Technology Enablement	46
<u>6.1</u>	Online / e-Learning	46
<u>6.2</u>	Simulations, serious games and virtual reality	48
	6.3 Summary of technology enablement findings	51
<u>7.</u>	<u>Learning from Others</u>	53
<u>7.1</u>	Competency frameworks	53
<u>7.2</u>	Leadership development programs in comparative sectors	55
	New South Wales public sector	55
	Victorian public sector	56
	New Zealand public service leadership development	57
	Western Australia public service leadership development	58
<u>8.</u>	Summary and Future Directions	59
<u>8.1</u>	<u>Conclusions</u>	59
<u>8.2</u>	What was beyond the scope of this report	60
<u>8.3</u>	Assumptions and limitations	60
Refe	erences	. 61

1. Present day Leadership Development and Opportunities in the Queensland Public Sector

1.1 A complex service

The Queensland Public Sector (QPS) employs nearly 300,000 people across 36 agencies and other entities, including 21 Departments. The median age of the workforce is around 44 years old and the under 25 years age group is substantially smaller than older age groups. Queensland public sector employees are located across a vast geography with a significantly higher ratio of frontline workers and frontline support workers to corporate workers in regional areas.

The career path at QPS is highly variable reflecting the size of the sector, the broad range of agencies and roles involved, levels of education, career entry points and whether a role is in a technical specialty or generalist in nature. In some agencies workers can progress linearly upward through an established hierarchy, while in others, workers move between agencies (or in and out of the service) to progress. At senior levels, time, place, relationships, and machinery of government changes all impact career progression opportunity.²

1.2 Coaldrake Report

The Coaldrake Report³ recommended a rejuvenation of the capability and capacity of the Queensland public sector, emphasising a culture of performance and integrity. Coaldrake acknowledges that agency restructuring, downsizing, and leadership changes have led to uncertainty and confusion about purpose, roles, values, and employment security. The report identifies challenges for leadership within QPS including interpersonal skills for managing people, a lack of diversity within the leadership cohort and a need for a rigorous approach to specifying roles, then recruiting, managing and developing skills and leadership. Barriers preventing regional workers from reaching senior leadership positions are also mentioned along with the sector-wide issue of loss of workers to the private sector, offering more pay, certainty, and flexibility.

1.3 Understanding the present context – Interviews

As part of the data gathering process, interviews were conducted with senior QPS staff capturing their insights into challenges with career and leadership development. Key issues were identified and are summarised collectively here.

- i. There is a need to build authentic cultural capability that:
 - embraces safety and collective learning,

¹ queensland-public-sector-biannual-workforce-profile-mar-2023.pdf

² Interview A

³ https://www.coaldrakereview.qld.gov.au/assets/custom/docs/coaldrake-review-final-report-28-june-2022.pdf?refresh Australia and New Zealand School of Government (ANZSOG)

- ensures that the needs of workers and the people of Queensland are listened to, understood, and addressed,
- challenges entrenched cultures and practices that hamper development for all,
- promotes appropriate risk-taking,
- promotes connection for all workers, including networking and effective mentoring,
- facilitates meaningful engagement with diversity and inclusiveness, including seeing the whole worker and their attributes, and
- creates an environment in which all workers can thrive, act fairly, be responsive, be treated equitably,
 act inclusively, have a sense of belonging,
- while promoting a culture of service to the people of Queensland and the State.
- ii. Location impacts career progression and leadership opportunities at the most senior levels, due to less exposure across other agencies and to more senior leaders. This can create a lack of representativeness and lack of understanding of rural issues at senior levels and leads to underutilisation and loss of talent.
- iii. There is a need to build relational leadership capability, with a focus on stewardship, collaboration, and collective accountability, taking a long-term focus and understanding the impacts of the decisions made from the perspectives of all stakeholders.
- iv. While there are policies in place to address diversity and inclusion, there is still work to be done in translating this into representation in leadership particularly at more senior levels. All diversity groups are impacted. Initiatives to address these barriers are progressing. There is a role for a new leadership capability framework within QPS to remove barriers to leadership development for these impacted groups.
- v. Leadership competencies need to reflect behaviours, mindsets and attitudes that equip leaders to be adaptable, serve the people of Queensland and the State in a complex and changeable environment, and strive for continual improvement.
- vi. The Public Sector Commission (PSC) is the systems-leader, steward, and enabler of the whole of QPS, yet it is also by ratio the smallest PSC in Australasia. This may impact the ability of the service to steer the service toward a better future in two ways, (1) agencies may progress their own path and (2) limited capability to deliver development programs may limit access to leadership resources within and between agencies, meaning that aspiring leaders rely on local versions of 'what good looks like'.

1.4 What do QPS currently aim for?

At QPS, good leadership is defined *by Leadership competencies for Queensland* describing necessary behaviours and performance expectations at different levels of leadership. Use of the QPS leadership competency framework varies between agencies, from being fundamental to assessment through to being a guideline with workers assessed more on their technical experience. The QPS competency framework does not drive behaviours, but helps leaders learn what is expected of them.⁴

The QPS leadership competencies are:

- Vision: leads strategically, stimulates ideas and innovation, leads change in complex environments, makes insightful decisions.
- Results: develops and mobilises talent, builds enduring relationships, inspires others, drives accountability and outcomes.
- Accountability: fosters healthy and inclusive workplaces, pursues continual growth, demonstrates sound governance.

The steps of QPS career progression include:

- The individual contributor: primary role comprises technical duties and leadership is limited to selfmanagement.
- Team leader: responsible for leading individual contributors usually under the direction of a program leader.
- Program leader: responsible for multiple team leaders or areas of work usually under a more senior program leader or executive
- Executive: responsible for leading in areas of policy, regulation, strategy, service delivery or geographic region.
- Chief executive: responsible for leading an agency.⁵

1.5 Looking forward

We understand that QPS desires an updated leadership framework that addresses:

Policy: Updating to reflect the requirements of the new Public Sector Act 2022.

_

⁴ Interview A

⁵ capability-leadership-framework.pdf

- *Service*: Reflect the responsibility to serve the people of Queensland and the State; a competency framework developed five or six years ago may not adequately articulate current contexts.
- *Fit:* The framework needs to fit the entire organisation. The 21 agencies have very different functions and in terms of how the leaders interact with the community.⁶
- Complexity and ambiguity Serving the public in a complex and changeable environment requires leaders
 with relevant skills. Development of policies, strategies and programs, requires skills responsive to
 change in context and a more adaptive approach to respond at all levels to what the community needs.
 QPS needs to broaden its thinking.
- *Culture:* QPS is not one culture. Agencies function in different contexts and serve in different ways and need different cultures to drive and support performance in different ways. The directors general of the 21 departments over the last eight years have pushed to see themselves as stewards of the sector and put in place a lot of mechanisms to work collaboratively on important issues for the sector. In addition to being responsible for their department they keep each other accountable.

⁶ Interview A

2. Key Terms- What we mean by Leaders, Leadership and Development

In this report we refer to key leadership and management terms as follows:

- Leadership is the influence that individuals exert over team level and organisational outcomes.⁷
- Leaders are those tasked with "facilitating individual and collective efforts to accomplish shared objectives".⁷
- Leader development describes the activities that improve individual leadership capabilities.
- Leadership development refers to collective-level interventions that enhance group interaction.⁸
- Managers vs leaders. Managers direct groups of individuals to perform well-understood tasks to achieve
 pre-specified objective(s). On top of these managerial skills, leaders also influence, motivate, and enable
 others to contribute to the organisation's strategic success.
- Competencies are the attributes and skills that make one a good leader. Competencies refer to the sets
 of knowledge, skills, and abilities essential for effective leadership and management behaviours across a
 broad spectrum of situations.⁷

3. Framework and Development Pathways

3.1 Evolution in leadership knowledge

Traditional scholarship and practice have tended to define leadership as a destination, describing effective leadership as a set of behavioural outcomes, knowledge, skills, and abilities. Correspondingly, development is considered as an 'acquisition' of capabilities and development pathways are framed as linear, stepwise pathways. The existing QPS leadership competencies framework adopts this perspective. The problems with this traditional conceptualisation of leadership include:

- 1. A single destination for leadership that may not be appropriate for diverse natural abilities and cultural backgrounds. 10
- 2. A linear progression of steps does not always reflect how adult development occurs in practice.

⁷ Gary Yukl, "Effective leadership behavior: What we know and what questions need more attention," *Academy of Management perspectives* 26, no. 4 (2012).

⁸ David V Day, Stephen J Zaccaro, and Stanley M Halpin, *Leader development for transforming organizations: Growing leaders for tomorrow* (Psychology Press, 2004).

⁹ J Kevin Ford, Kurt Kraiger, and Stephanie M Merritt, "An updated review of the multidimensionality of training outcomes: New directions for training evaluation research," *Learning, training, and development in organizations* (2009).

¹⁰ Robert G Lord and Rosalie J Hall, "Identity, deep structure and the development of leadership skill," *The leadership quarterly* 16, no. 4 (2005).

Australia and New Zealand School of Government (ANZSOG)

- 3. A focus on knowledge and skill acquisition overlooks the changes in leaders' cognitive frames and identities that denote their progression from novice to expert leaders. 11
- 4. An emphasis on individual development, with little attention paid to relational capabilities that empower teams and the collective. This oversight becomes important as organisational systems become more complex, as it becomes increasingly hard for an individual leader to make all required decisions. For leaders to thrive in complex systems they must focus on creating environments where wider teams can step forward and positively contribute to desired outcomes.
- 5. Important factors such as cultural awareness and 'cultural diversity' are add-ons to traditional frameworks as opposed to core leadership principles.
- A failure to delineate adult development processes that promote leadership maturation in the journey from novice to expert. A shared understanding, philosophy, identity, and the capacity to function collectively, are essential.¹⁴

Despite acknowledgement that leadership is a collective phenomenon and that no single leader can enact change on their own, the QPS framework prioritises **individual** competencies, while overlooking the **relational** competencies essential for teams and organisations to collaborate, build shared understanding and function collectively. The existing framework also provides a linear perspective on development where the journey from novice to expert is explained, largely, as an acquisition of behaviours, skills, knowledge, and abilities.

3.2 Introduction to a 2D leadership framework

With the above limitations in mind, it is necessary to move away from traditional linear frameworks of leader development competencies, and their matched development pathways, to consider the multi-dimensional nature of leaders and how leadership maturation and leadership competencies evolve. Wallace *et al.* (2021)¹⁵ provide an extensive review of the leadership development and competency literature and formulate a two-dimensional (2D) framework that addresses these deficits. This framework is shown in Figure 3.1.

The vertical dimension shows the progression in leadership mindset, i.e., from novice to expert.

¹¹ David V Day and Michelle M Harrison, "A multilevel, identity-based approach to leadership development," *Human Resource Management Review* 17, no. 4 (2007).

¹² D Scott DeRue and Christopher G Myers, "Leadership development: A review and agenda for future research," (2014).

¹³ Gosling, J., & Mintzberg, H. (2003). The five minds of a manager. *Harvard Business Review*, 81(11), 54-63.

¹⁴ David V Day, "Leadership development:: A review in context," *The leadership quarterly* 11, no. 4 (2000).

¹⁵ David M Wallace, Elisa M Torres, and Stephen J Zaccaro, "Just what do we think we are doing? Learning outcomes of leader and leadership development," *The Leadership Quarterly* 32, no. 5 (2021).

Australia and New Zealand School of Government (ANZSOG)

• The horizontal dimension differentiates individual and relational competencies, contrasting the capabilities that individuals exhibit to bring forward the best version of themselves from the capabilities that enable others to bring forth the best version of themselves.

Figure 3.1: The Wallace 2D framework

Horizontal Development - Knowledge, skills and abilities

Vertical Development – Maturation of leader mindset Steering the maturation of leadership Maturing as a leader **Matured** within the collective mindset Development beyond knowledge and skills to encompass a growing complexity Stewardship of a unit or system that leads leader of leadership identities, values, itself and others conceptualizations, and mindsets Competencies that support the Personal competencies that support empowerment of the collective leading Competency-E.g., skills that foster collective based Leader E.g., knowledge, skills, abilities, and knowledge, mutual respect, psychological attitudes that improve an individual's safety, trust, social bonds capacity to lead Relational capabilities **Individual capabilities** Motivation and ability to develop leadership **Foundations** E.g., metacognitive ability, self-awareness, learning orientation, and developmental selfefficacy

The Wallace 2D framework has advantages over linear leader development frameworks:

- The vertical perspective responds to challenges presented by earlier thinking that led organisations to focus on skill acquisition and behavioural outcomes, at the expense of the development of identity, cognitive structures (i.e., mental models), conceptualisations, mindset, and values that differentiate novice leaders from experts.¹⁴
- The horizontal dimension separates individual from relational competencies, with this latter emphasis
 highlighting the importance of skills that promote the best in others and ultimately lead to a learning
 organisation. Considering QPS's desire for cultural diversity, it is this relational perspective that
 encompasses the capabilities that promote inclusion and contribution amongst diverse teams.
- It is not a one-size-fits-all model; instead, individual journeys can differ (see Wallace 2D Framework Development Pathways section below).

 Both vertical and horizontal dimensions frame more specific, tailored, and targeted leader development mechanisms that are more finely tuned to individual and organisational requirements.

Vertical development

Decades of research in adult psychology have explored how cognition advances as people develop and learn from life experience. This theme has gained traction in leadership scholarship as researchers and practitioners have sought to understand leadership in an age of increasing complexity. 10,16 As an illustration, when organisations were simpler it was possible for leaders to be both the central point of decision-making and frame decisions around existing knowledge, i.e., "this is what I know will work". However, in the modern world complexity has increased and organisations present a constantly shifting landscape of ever more interconnected issues. In this context, leaders take care of far larger groups, are far more disconnected from those that implement action, and are often faced with decisions they have not encountered before. In this high-complexity environment, 'knowing' the future becomes difficult, instead leaders need to become more agile, systemic, and flexible in their thinking and sensemaking. They need a matured mindset that can take on board multiple perspectives, connect these ideas with organisational purpose and values, then develop future-focussed narratives that inspire others to act. The Wallace 2D framework categorises this progression under three broad levels of development:

- Foundations. This layer encompasses self-leadership and motivation. Self-leadership is a process by
 which individuals exert influence over their own thoughts, feelings, and behaviours at work. It is a
 mechanism by which leaders are encouraged to take personal initiative and focus on their personal selfdevelopment.
- 2. Competency-based leadership. This level captures capabilities relating to acquisition of knowledge or skills around competencies that support leading. These could be general interpersonal skills that include things such as general problem solving, planning and implementation, solution construction, solution evaluation, social judgement, and meta-cognitive processing, self-regulation, creativity, and intelligence that assist with the execution of these skills.
- 3. Mindset-based leadership. This refers to the development of mindsets that integrate leadership-related identities, values, and frameworks. As an example, these leaders combine multiple stakeholder perspectives, leadership knowledge, and situational knowledge and distil simple, powerful insights that help others make sense of complex situations and, in doing so, encourage action.
- 4. The concept of vertical development has thrived in both adult psychology and private practice.

 Leadership science, a relatively late adopter, is increasingly integrating vertical development in

¹⁶ Modesto A Maidique and Nathan J Hiller, "The mindsets of a leader," *MIT Sloan Management Review* (2018). Australia and New Zealand School of Government (ANZSOG)

leadership theory.^{17,18} Given this late adoption, empirical studies of vertical development are limited. Two non-peer reviewed studies published in popular press found a strong correlation between leaders with more mature mindsets and organisational success.^{19,20} In practice, vertical development has thrived, spawning a global network of practitioners and coaches who help leaders advance their thinking.

Horizontal development

The horizontal axis discerns the skills required to promote productive and healthy collaborations between people that lead to effective collective actions from skills required to lead oneself and to correspondingly direct teams. The Wallace 2D framework distinguishes individual leadership competencies from relational leadership competencies – also termed shared leadership, dyadic leadership, empowering leadership, or servant leadership. With an individual perspective, competencies are allied toward capabilities that support how leaders can influence others, for instance through sharing knowledge, building plans, or communicating ideas and outcomes. In contrast, a relational perspective presents a shift in focus in leadership behaviour from directing, managing, and controlling outputs to promoting environments where team members and colleagues can bring the best version of themselves forward to contribute collectively to outcomes.

A popular, non-academic leadership expert, Nick Udall, eloquently summarises the difference between individual and relational leadership as the difference between leaders who **take up space** and those that **hold space**. Taking up space represents management actions such as planning and directing others, activities which are not conducive for individuals to come forward and share their ideas about how things could be done differently. In contrast, holding space describes "leaders who have the quiet humility to create and hold spaces where diverse groups and communities can come together, become greater than the sum of their parts, and consciously and wisely shape, and make, the unmade future".²¹

Leadership studies have found that, in the context of complex systems (such as large organisations, including government agencies), relationship-focussed leadership behaviours improve perceived team effectiveness compared to task focused behaviours.²² Similarly, when it comes to leading transformation and change, leaders who exhibit relational leadership qualities are more likely to achieve successful organisational change.¹⁵

¹⁷ Robert Hogan and Rodney Warrenfeltz, "Educating the modern manager," *Academy of management learning & education* 2, no. 1 (2003).

¹⁸ David V Day, Michelle M Harrison, and Stanley M Halpin, *An integrative approach to leader development: Connecting adult development, identity, and expertise* (Routledge, 2008).

¹⁹ William R Torbert, *Action inquiry: The secret of timely and transforming leadership* (Berrett-Koehler Publishers, 2004).

²⁰ Jim Collin, "Good to great," New York: HarperBusiness (2001).

²¹ Udall, N, "Holding space, the high art of leadership", Last modified March 28, 2018. https://www.linkedin.com/pulse/holding-space-high-art-leadership-nick-udall

²² C Shawn Burke et al., "What type of leadership behaviors are functional in teams? A meta-analysis," *The leadership quarterly* 17, no. 3 (2006).

Australia and New Zealand School of Government (ANZSOG)



Table 3.1. Descriptions of the capabilities that support leading, leadership and their maturation

	Individual	Relational	
Foundational	Competencies that enable learning about leadership represent the starting inputs of development.	Emergent states that enhance team learning (e.g., shared norms for learning, cohesion) through supporting, propelling, and	
	The ability to develop as a leader (e.g., metacognitive ability and self-awareness).	reinforcing relational learning.	
	The motivation to develop as a leader (e.g., learning orientation, implicit theories of leader development, and developmental self-efficacy.		
Competencies	Intrapersonal competencies are combinations of knowledge, skills,	Emergent states for leadership are collective-level psychological	
that support	abilities, and attitudes that enable leaders to recognise and engage in	states that support, propel and reinforce leadership in the	
leadership	behaviours demanded or afforded by the leadership context.	collective. These include emergent states that enhance the effectiveness of individual leader behaviour and enhance shared leadership.	
	Interpersonal competencies are social competencies that promote effective interactions with others and include knowledge, skills and abilities around receiving, processing, and sending verbal (social) and non-verbal (emotional) expressions and extraverted behaviours such as being open and warm with others and understanding and influencing others as well as knowledge, skills, abilities and attitudes about managing group processes, collaborative problem solving and working in a team setting. Management competencies are sets of knowledge, skills, and abilities required for effective management behaviours common to most leadership situations and include planning, monitoring, and assigning tasks; developing motivating and empowering individuals; collecting, disseminating, and leveraging information; envisioning, planning for and implementing change efforts; and boundary spanning.	Relational leadership competencies enable effective leadership functions that support the collective's capacity to self-lead and to lead others. In multiteam systems these functions support the capacity for teams to lead other teams. These competencies promote intra- and inter- team alignment behaviours contributing to the overall leadership of a multiteam system.	
	Technical competencies involve the knowledge, skills, and abilities expected of leaders. Leaders are expected to have relevant technical expertise to promote effective leadership and management of technical tasks through facilitating, relating to others, shared language, and basic assumptions that mark organisational culture.	Relational technical competencies involve task and learning process outcomes around collective, technical task performance which may serve as catalysts for abstraction of collective leadership in the team.	
Maturing leading and leadership		Common abstractions of leadership refer to emerging agreement between individual leaders regarding what it means to be a	

cognitions, affective reactions and behavioural choices. Those who self-	leader and how a leader or a collective approaches leadership,
identify as leaders are likely to take on leadership roles, perceive leadership	based on shared leadership developmental experiences. These
demands and opportunities in situations and develop appropriate mental	experiences can include experienced leadership situations and
models of the leadership networks around them.	collective learning situations. Collective learning requires
iniouels of the leadership hetworks around them.	
	engagement with processes that enable development of shared
Landa Marita de la contra de la Colonia de l	understanding.
Leader identity strength and integration	Social networks of leadership
Development of leader identity requires reflective practices through which	As social networks form between leaders, their ability to adapt
leadership experiences are understood and incorporated.	quickly and accurately in response to change builds collective
Leader identity level with increasing leadership expertise, leader identity	efficacy around the ability of these structures to lead and
develops from an individual self-concept focusing on distinction from	generates collective endorsement of the network, as well as
followers and other leaders to a leader of others who understands their	changes in individual understanding of the network.
own identity through their relationship with followers, to expert leaders	
who see their leader identity as part of a collective.	
Abstraction of leadership relates to having a coherent idea of what it	
means to be a leader, and how one approaches leadership. Also involves	
creating a leadership philosophy: a personal framework of how leadership	
"works" that guides a leader in perceiving situational leadership demands	
and opportunities, and how those perceptions guide actions to achieve	
leadership outcomes.	

Table 3.2. Examples of competencies

Maturing	Individual Competencies	Relational Competencies
Foundational	Learning agility, motivation to develop as a leader, metacognitive ability, self-awareness, implicit theories of leader development, developmental self-efficacy.	Collective adaptive reflection, knowledge storage and retrieval systems
Competency-	y- Intrapersonal competencies Emergent states for leadership	
based	Creative thinking, problem-solving, decision-making, personal	Psychological safety, group cohesion, group trust, collaborative problem-
	courage, resilience, proactivity.	solving, collective identity, motivation to work on behalf of the collective,
		voice, social support, shared purpose
	Interpersonal competencies	Collective leadership competencies
	Emotional intelligence, social intelligence, extraverted behaviours,	Supporting team self-leadership, team staffing, defining mission,
	warmth	establishing expectations and goals, structure and planning,
	Management competencies	development, and training, sensemaking, providing feedback,
	Planning, delegating, monitoring, developing others, motivating	monitoring the team, managing team boundaries, challenging the team,
	others, empowering others, collecting, interpreting, and disseminating	supporting team leadership of other teams, monitoring other teams,
	information, building networks, spanning boundaries, advocating for	setting overarching objectives, monitoring between team/cross-
	change.	organizational interactions, co-ordinating between team actions,
	Technical competencies	prompting other teams
	Budgeting, sales skills, customer relations management, HR processes	Collective technical competencies
		Financial planning, strategy forecasting, operational planning
Matured		
mindset	Leader identity strength, leader identity centrality, leader identity	Common leadership philosophies, congruence, differentiation, collective
	integration	leadership identities
	Level of leader self-concept	
	Individual, relational, collective identity	Social networks of leadership
	Abstractions of leadership	Structure of leadership networks, peer leadership networks,
	Leadership philosophy, transformational leadership,	organizational leadership networks, cognition, and efficacy for engaging
	authentic leadership, servant leadership	leadership networks.

3.3 Multiple development pathways

Individual development journeys differ depending on personal preferences and job contexts. Here we outline the potential leader development pathways that a 2D perspective enables. The pathways are illustrated in Figure 3.2.

Horizontal Development - Knowledge, skills and abilities Vertical Development – Maturation of leader mindset Maturing as a leader Steering the maturation of leadership **Matured** within the collective mindset Development beyond knowledge and Stewardship of a unit or system that leads skills to encompass a growing complexity leader of leadership identities, values, itself and others conceptualizations, and mindsets Competencies that support the Personal competencies that support empowerment of the collective leading Competency-E.g., skills that foster collective **based Leader** E.g., knowledge, skills, abilities, and knowledge, mutual respect, psychological attitudes that improve an individual's safety, trust, social bonds capacity to lead **Individual capabilities** Relational capabilities Motivation and ability to develop leadership **Foundations** E.g., metacognitive ability, self-awareness, learning orientation, and developmental self-

Figure 3.2: Potential leader development pathways

A pathway for managers

There are many situational contexts that present technical, as opposed to relational challenges, for instance leading a forensic laboratory, or running a clinical theatre. In these situations, the necessity for adherence to structure and process dictates the need for a leader who can direct and assist their team to achieve specific objectives – more management than leadership. This approach may be necessary when there are more specific goals that need to be completed within a short period, or tasks where rapid decision-making is beneficial.

efficacy

A management development pathway prioritises the left-hand domains of the Wallace 2D framework in Figure 3.2, as shown by the green arrows. It is recommended that this approach only be used when necessary as it may be perceived as too heavily focused on using authoritarian tactics to ensure there is compliance with a specific

strategy, as opposed to leadership being consultative and inclusive.²³ This, more task focused, development pathway may be beneficial for workers from cultural backgrounds that align with this approach, or workers who may be more naturally pre-disposed to this leadership philosophy. This pathway can still utilise aspects of relational leadership, for instance where team participation is required, intermingling this approach with leader-given direction or decision making, when required.

Relational-focused leaders

Some workers are more predisposed to seeing, thinking, and feeling the world via a relational perspective. These individuals can be seen working in organisations as network connectors, conversation facilitators, and coaches. The concept that leadership can be conducted as a direct influence of one worker over another is foreign for those with this predisposition. Potential examples could include First Nations groups that deprioritise individual needs and celebrate a view that 'we are one'. Here a development pathway continues up the right-hand side of the Wallace 2D framework, as shown by the orange arrows in Figure 3.2.

'All stations' pathway

If the Wallace 2D framework were to yield a conventional pathway, it would follow the blue arrows in Figure 3.2 – foundational P individual capabilities P relational capabilities P maturing as a leader steering (or stewardship) of the organisation. Most leaders will not progress along this path sequentially step-by-step, as in reality development typically consists of several back-and-forth iterations as differing needs arise. For instance, a promotion may ignite a desire to focus more on relational skills. Alternatively, the establishment of a functioning team may direct a leader to focus more on leadership maturation.

Leadership in the middle – Individual and relational capabilities

Next, we deviate from the pathways shown in Figure 3.2 to deal with a potential structural constraint. Ideally, a true relational leadership model engages all team members in decision-making. However, achieving this ideal is challenging, especially in a traditional hierarchical organisation or situations where structural limitations require a designated leader. ²⁴ In this case, a hybrid 'yin and yang' approach is possible where leaders flip between individual and relational leadership styles depending on the situational context. For example, if teams are confounded by choice, it might be appropriate to adopt a leader-led approach for decision-making over a shared leadership approach. ²⁵ Contrastingly, relational leadership may be more appropriate in contexts where

²³ Kerrie Doyle and Catherine Hungerford, "Leadership as a personal journey: An Indigenous perspective," *Issues in Mental Health Nursing* 36, no. 5 (2015).

²⁴ Leonie Backhaus and Rick Vogel, "Leadership in the public sector: A meta-analysis of styles, outcomes, contexts, and methods," *Public Administration Review* 82, no. 6 (2022).

²⁵ Lauren D'Innocenzo, John E Mathieu, and Michael R Kukenberger, "A meta-analysis of different forms of shared leadership—team performance relations," *Journal of management* 42, no. 7 (2016).

designated leaders see value and importance in team members designing and achieving their own goals. ²⁶ In these situations, the development pathway should encompass both individual and relational competencies, with addition emphasis on concepts that help leaders distinguish between contexts so that they can appropriately match their leadership style. At the centre of this decision are 'choice points', which are explained by Heifetz's Adaptive Leadership²⁷ as either organisational paradox (where two sources contradict), organisational tension (where two sources disagree) or organisational polarities (where organisational priorities pull against each other). The central idea is that by helping leaders identify these choice points, they can then assess the situation and determine whether to be relational or individualistic.

4. Mechanisms for Developing Capabilities

Having identified a leadership framework that addresses the needs articulated by QPS, this section focuses on how the relevant capabilities can be developed in practice. The research evidence identifies four broad features of leadership development needed to advance effective leadership capabilities across QPS. These are:

- 1. Understanding successful development practices that will allow effective *learning*, *transfer* of knowledge into practice, and *results* for QPS.
- 2. Identifying the key development topics required to cultivate foundational, competency-based, and relational competencies outlined in the Wallace 2D framework.
- 3. Anticipating organisational barriers and enablers that detract/promote leadership capability.
- 4. Embedding methods to measure leadership capability and maturity over time.

4.1 Successful leadership development practices

Leadership learning outcomes are maximised when development programs combine information, demonstration, and practice delivery modes over several learning sessions.³⁵ Therefore, leadership development programs should be purposefully designed to integrate all three delivery modes. On-the-job experience and interactions with peers in the workplace, provide the required opportunities to practice over time to embed classroom learning in the organisation (i.e., the transfer of learning from the classroom to the workplace). Therefore, development programs should be deliberately designed to integrate classroom learning with specific on-the-job activities that involve practising the skills and capabilities learned in the classroom setting, to experiment with new ideas, and monitor and reflect on the outcomes. With this perspective, leadership development and learning become a career-long process.

²⁶ Meng Tian, Mika Risku, and Kaija Collin, "A meta-analysis of distributed leadership from 2002 to 2013: Theory development, empirical evidence and future research focus," *Educational Management Administration & Leadership* 44, no. 1 (2016).

²⁷ Ronald Abadian Heifetz, Alexander Grashow, and Martin Linsky, *The practice of adaptive leadership: Tools and tactics for changing your organization and the world* (Harvard business press, 2009).

It is also important to note that each leader learns differently, depending on their individual learning modes, experience, talent, and engagement with training programs. Therefore, it is valuable to incorporate a multitude of different pedagogical approaches into leadership development programs.²⁸

More broadly, the evidence on effective leadership development suggests that successful transfer of learning relies on a few key factors.²⁹ These features are summarised in Table 4.1 and provide evidence-based guidance for designing effective leadership development programs.

²⁸ Manfred FR Kets de Vries and Konstantin Korotov, "Developing leaders and leadership development," (2010).

²⁹ Christina N Lacerenza et al., "Leadership training design, delivery, and implementation: A meta-analysis," *Journal of applied psychology* 102, no. 12 (2017).

Table 4.3. Features of Effective Leadership Training

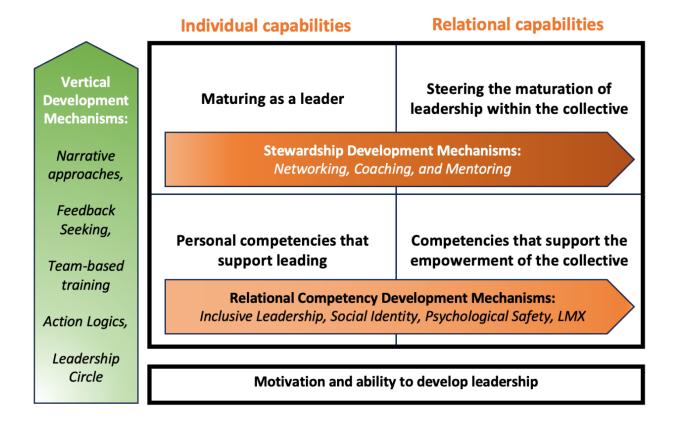
Content	Delivery method	Context	Length
The training content needs to be based	Deliver training using a diverse range of	Training held on site is more	Training programs delivered over
on an identified development need	modalities. Wherever possible, combine	effective than off-site training.	multiple sessions are more effective
before designing the program.	information, demonstration and practice		than single sessions.
Specifically, where do leaders need to	delivery modes.		
develop skills, and how does the training			
program address this need?			
Integration of feedback throughout the	While delivering training voluntarily is	Facilitation by an internal or	Longer training programs are more
training process is important for transfer	better for transfer of knowledge, if leaders	external trainer is more effective	effective than shorter ones.
of learning to on-the-job practice,	are not enthusiastic about attending	than self-administered training	
however 360-degree feedback does not	leadership training, then mandatory	(i.e., by someone who is not an	
provide any additional value compared	training may be necessary to achieve	experienced, impartial trainer).	
to single-source feedback.	organisational change.		
Training programs need to be evidenced-	Practice-based delivery methods deepen	Face-to-face training programs are	
based and relevant.	knowledge transfer when compared with	more effective than virtual	
	information only or demonstration only	courses, as there are less	
	delivery modes. Classroom practice-based	opportunities to demonstrate	
	delivery includes role-play, simulations, in-	learnings and practice in virtual	
	basket exercises, guided practice, and	environments. However, the use	
	others. Many on-the-job activities also	of simulation-based virtual	
	provide practice opportunities.	learning can overcome the	
		limitations of online learning.	

4.2 Wallace 2D framework and leadership development strategies

Now that we have identified the basic design features needed for effective leadership development programs, the following sections discuss the mechanisms (or approaches) research finds effective for developing the horizontal relational competencies and the vertical leader and leadership maturation capabilities in the Wallace 2D framework. We start with the horizontal relational competencies because more research evidence exists for how to develop relational competencies. Then we focus on the vertical leader and leadership maturation dimension, where we draw on the limited relevant scholarly research and draw on the work emerging from different communities of managerial practice focused on this area of leadership development.

In addition, we provide evidence that may guide organisational design considerations for upskilling leaders, as well as evidence for the most effective ways to track and measure leadership progress and maturation over time.

Figure 4.3. Leader Development Mechanisms Mapped to Wallace



4.3 Horizontal competency-level development mechanisms

In this section we discuss six different mechanisms (or approaches) for developing relational leadership competencies. They are: Inclusive leadership practices, Leader-member exchange (LMX), developing psychological safety and trust, cultivating social identity using the 5R shared leadership approach, social networking, and coaching and mentoring. These last two mechanisms contribute to stewardship development (i.e. the top right quadrant of the 2D framework). We explain each of these mechanisms in separate subsections in the rest of this section. This section covers the theoretical mechanisms of horizontal development only. In practice there are a variety of leadership conceptualisations and approaches that can be applied in learning environments – our purpose is to explore these mechanisms first to understand which ones resonate, then we can go deeper in Phase 2 to delineate the approaches that foster these desired capabilities.

Inclusive practices

Inclusive leadership practices are important for developing collective leadership identities that account for diversity and inclusion. Inclusive leadership is a relational-based leadership process, and it involves a balancing act between ensuring that team members feel included, connected, and prototypical of the group (for cohesion and identity), whilst also ensuring that there is a level of uniqueness and distinctiveness about them that

provides value to the team (e.g., promotion of diversity). To develop inclusive leadership, practices need to be targeted at the individual, group, and organisational levels.³⁰

At the *individual level*, an inclusive leader moves away from traditional viewpoints of leading to a more inclusive and relational point of view. Inclusive leaders:

- Focus on forming strong relationships and networks across the team by developing reciprocal social interactions and collective identity.
- Use their leadership position to enable collaboration across networks, question dominant and normative practices, and focus on building equity for team members.
- Empower others through transparency and include team members in decision-making by facilitating spaces for dialogue and idea-sharing.

At the group level, an inclusive team:

- Nurtures dyadic relationships between leaders and members (for instance Leader-Member Exchange or LMX).
- Has high levels of psychological safety.
- Fosters mutual respect and openness between all members.

At an *organisational level*, an inclusive workplace is one with social norms and collective behaviours that:

- Value and utilise individual and intergroup differences within its workforce.
- Demonstrate stewardship by cooperating with and contributing to the community it serves.
- Alleviate the needs of disadvantaged groups in its wider environment.

Leader-member exchange

Leader-member exchange (LMX) is an approach used to develop high-quality relationships between leaders and their team members. These relationships are characterized by mutual trust, respect, and reciprocity, as well as a social and working partnership, between leaders and members.³¹ LMX assists in developing collective leadership competencies such as group trust and cohesion.

³⁰ Lize Booysen, "The Development of Inclusive Leadership Practice and Processes," (San Francisco: John Wiley & Sons, Inc, 2013).

³¹ George B Graen and Mary Uhl-Bien, "Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective," *The leadership quarterly* 6, no. 2 (1995).

LMX works by using a three-step process of leaders engaging in the purposeful development of a dyadic relationship with each member of the team. Step 1, role taking, involves the leader making the purposeful decision to engage in developing their relationship with a team member. Step 2, role making, involves the leader purposefully finding social relatedness and connection with the team member. Step 3, role routinisation, involves a stable exchange of ideas between each dyad (or relationship between two people), and the monitoring of any disruptions to the quality of that relationship.

Building relationships (i.e., Steps 1 and 2) can be developed using vertical development mechanisms – that will be discussed in a later section – such as narrative approaches, feedback seeking, developing psychological safety and trust. Step 3 integrates the monitoring processes and systems to assess for any disruptions to the relationship by using feedback mechanisms, measuring trust and psychological safety, and in some cases directly measuring the quality of leader-member exchange.

Psychological safety and trust

Developing psychological safety and trust within a team is very closely related to positive intra-team relations.³² For trust to develop within a team, members of the team must perceive that they have been vulnerable, or taken a risk, with other team members, and that this vulnerability or perceived risk was treated with respect.

Similarly, psychological safety refers to the willingness of individuals to voice their opinion, ask for help and take risks without the fear of negative repercussions from their workplace.³³ Psychological safety allows for staff to demonstrate openness and transparency as these characteristics are valued, and work can be scrutinised in a positive and consultative fashion. A climate of psychological safety is aggregated from the organisation's members and their beliefs that honesty, feedback, and risks are acceptable in the workplace.³⁴ The common elements of psychological safety include:

- Willingness to seek and provide honest feedback;
- Being comfortable in voicing ideas;
- Feeling able to show and be oneself; and
- Willingness to collaborate, take risks, and experiment.

³² Robin Martin et al., "Leader–member exchange (LMX) and performance: A meta-analytic review," *Personnel psychology* 69, no. 1 (2016).

³³ Amy C Edmondson and Zhike Lei, "Psychological safety: The history, renaissance, and future of an interpersonal construct," *Annu. Rev. Organ. Psychol. Organ. Behav.* 1, no. 1 (2014).

³⁴ Alexander Newman, Ross Donohue, and Nathan Eva, "Psychological safety: A systematic review of the literature," *Human resource management review* 27, no. 3 (2017).

Some examples of how leaders can develop their ability to promote psychological safety within their team include:³⁵

- explicitly inviting input from others;
- encouraging others to share risky or experimental ideas;
- modelling vulnerability by admitting to their own mistakes or lack of knowledge/skills in certain areas;
 and
- setting up opportunities for teams to practise new knowledge and skills in safe environments before trialling them in high stakes environments (for example, a trial run for a presentation to a client with the team/leaders before the real presentation).

Cultivating social identity

Once inclusive leadership practices are incorporated into leadership, the next level of leadership maturation is the development of a collective identity³⁶. To assist in the development of relational leadership competencies, such as collective leadership identities, leaders must engage team members in the leadership process.³⁷ This means that leadership is *shared* between team members and that leaders use strategies to form a collective social identity.

The 5R shared leadership approach provides a process for creating a collective social identity. The 5R approach involves a sequence of five team workshop topics: Readying, Reflecting, Representing, Realising and Reporting (see Figure 4.2)³⁸. Working through this sequence of topics as a team helps cultivate a collective social identity.

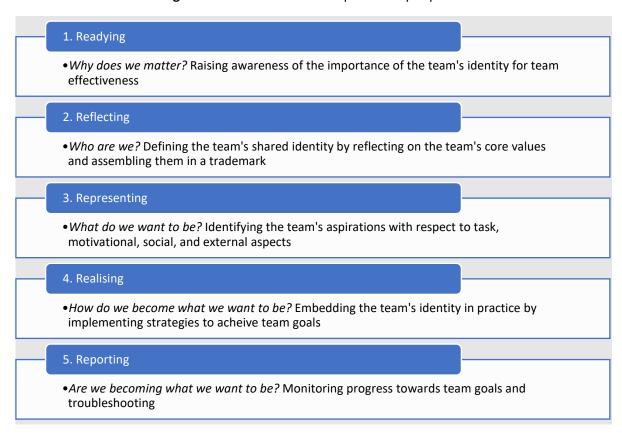
³⁵ Amy C Edmondson, Roderick M Kramer, and Karen S Cook, "Psychological safety, trust, and learning in organizations: A group-level lens," *Trust and distrust in organizations: Dilemmas and approaches* 12, no. 2004 (2004).

³⁶ Daniela Christos, "Perceived Inclusive Leadership and Discrimination: The Mediating Roles of Work and Personal Identities" (M.Com., University of Johannesburg (South Africa), 2020) (28278416).

³⁷ Cynthia D McCauley and Charles J Palus, "Developing the theory and practice of leadership development: A relational view," *The Leadership Quarterly* 32, no. 5 (2021).

³⁸Katrien Fransen et al., "All for us and us for all: Introducing the 5R shared leadership program," *Psychology of Sport and Exercise* 51 (2020).

Figure 4.4 5R Shared leadership workshop topics³⁸.



4.4 Horizontal stewardship development mechanisms

Networking mechanisms

The development of social networks and social relationships is aligned with collective and relational leadership approaches which emphasise the importance of connectivity. Social networking and leadership networks are viewed as being a key part of leadership capability, as leaders need to be connected to others to aid in problem solving, creativity, and delivering team goals to the appropriate internal and external stakeholders. Avenues that assist leaders in developing their ability to network include: ³⁹

- developing individual capabilities related to intra- and inter-personal communication to aid in autonomous relationship development;
- providing structural mechanisms to develop their networks through coaching, mentoring, cross-team
 learning opportunities, or networking events; and

https://www.sciencedirect.com/science/article/pii/S1048984316300911.

³⁹ Kristin L. Cullen-Lester, Cynthia K. Maupin, and Dorothy R. Carter, "Incorporating social networks into leadership development: A conceptual model and evaluation of research and practice," *The Leadership Quarterly* 28, no. 1 (2017/02/01/2017), https://doi.org/https://doi.org/10.1016/j.leaqua.2016.10.005,

 embedding a culture of connectivity and networking where all members feel comfortable to engage in their own efforts to develop connections, network and collaborate whenever they perceive it will assist in their collective goals.

Coaching and mentoring

The practice of coaching and mentoring benefits leadership development by increasing leadership identity and leadership-capacity building through the development of relationships, and the co-creation of a learning environment between leaders and their team members. ⁴⁰ Mentoring benefits leaders, whether as a mentor or a mentee, depending on their confidence in engaging in mentoring activities and their specific developmental needs.

Integration of coaching and mentoring schemes across the organisation facilitates development of mentoring and coaching relationships. This requires organisation level support for the development of partnerships between people based on leader needs and scheduling regular guided partnership meetings every four to six weeks over a 6–12-month period.⁴⁰

4.5 Vertical development mechanisms

The concept of vertical development has thrived in both adult psychology and managerial practice. Contrastingly, in leadership scholarship exploration of this theme is limited. With this context, in this section we describe both leadership science and management practice, with a view to provide a fuller, and more helpful, explanation of vertical development.

Leadership scholarship describes the underlying development mechanisms for vertical development – teams skills training, feedback seeking and narrative approaches. These mechanisms, on their own, represent important ingredients of development practices but do not provide an overarching picture of how vertical development evolves in practice. In management practice, research on learning mechanisms and adult development stages has been crafted into practical leadership approaches that, in turn, have inspired a global network of leadership coaches and facilitators who help leaders apply these concepts. For instance, Professor Bill Torbet's work on the evolution of meaning-making in organisational contexts sparked Action Logics, which delineates seven unique mindsets that correspond to the leadership maturation journey. Also, Bob Anderson's work has evolved into the popular Leadership Circle which, similarly, describes an evolution in leader mindset.

⁴⁰ Valerie Stead, "Mentoring: a model for leadership development?," *International Journal of Training and Development* 9, no. 3 (2005), https://doi.org/https://doi.org/10.1111/j.1468-2419.2005.00232.x, https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-2419.2005.00232.x.

⁴¹ https://hbr.org/2005/04/seven-transformations-of-leadership

⁴² Robert J Anderson Jr, "The leadership circle profile: Breakthrough leadership assessment technology," *Industrial and Commercial Training* 38, no. 4 (2006).

Both these approaches were initiated in scholarship, are discussed to some extent in leadership literature, and have thrived in management practice.

In this section, specific development mechanisms that underpin both these practices – teams skills training, feedback seeking and narrative approaches – are described. We then discuss Action Logics and the Leadership Circle as practical approaches that build on these mechanisms and guide leaders through the process of mindset maturation.

Team skills training

Skills that assist teamwork represent the interpersonal qualities required to effectively lead. These skills include conflict resolution, collaborative problem solving, communication, goal setting and performance management, and planning and task coordination. To develop these skills, training programs immerse leaders and team members in challenging situations that require the use of inter-personal skills. This involves the following steps:

- 1. Instructional training on the skills required (i.e., conflict resolution, collaborative problem solving, communication, goal setting and performance management, and planning and task coordination).
- 2. An opportunity to practice those skills through the presentation of a complex case which requires collaboration between team members to solve the problem. Each team member should have a unique role, and to solve the problem, all team members must use the skills taught in Step 1 (above) to achieve success at Step 2.
- 3. Collaborative team reflection on how the task went afterwards with feedback mechanisms embedded in the process to assist in learning.

Feedback seeking

Feedback seeking refers to the conscious process of gathering information to assess whether actions have led toward achieving specific goals. Feedback seeking behaviour is reflective of inter- and intra-personal leadership qualities such as proactivity, self-awareness and adopting a learning orientation. ⁴⁴ Some examples of feedback seeking behaviour include leaders seeking feedback from their team regarding their performance (or other work-related concerns), demonstrating that they are listening to the feedback provided by actioning or addressing the concerns, and role modelling a learning culture within the organisation by also providing feedback. These practices can be integrated into daily, weekly, or monthly rituals.

⁴³ Aleksander PJ Ellis et al., "An evaluation of generic teamwork skills training with action teams: Effects on cognitive and skill-based outcomes," *Personnel psychology* 58, no. 3 (2005).

⁴⁴ Samantha Crans et al., "Learning leadership and feedback seeking behavior: Leadership that spurs feedback seeking," *Frontiers in Psychology* 13 (2022).

Narrative approaches; self and others

Narrative approaches involve the practice of reflecting, journaling, or sharing impactful positive or negative stories (self-narrative) and recalling the stories of others from their perspectives (other narrative). ⁴⁵ Research suggests that leaders who engage in narrative building develop empathy, authenticity, self-awareness, and identity formation over time. Narrative approaches are also a leadership development tool that can be incorporated into a life-long practice for most leaders.

Some aspects of narrative approaches are similar to traditional methods of First Nations storytelling, where the purpose is to develop community through understanding, co-creation, building relationships and forming meaningful ambitions collectively. ⁴⁶ The action of re-telling a story from another's perspective is also designed to aid in the formation of new ideas, strategies, and creation of solutions to problems which incorporates the viewpoints of multiple stakeholders. ⁴⁷ This assists in the development of intrinsic motivation as it allows leaders to consider the purposeful meaning behind their actions for themselves and for others. ⁴⁸ Developing this meaning with others also increases social relatedness, which involves feeling connected to others and having a sense of belonging within the group, another significant motivator for leaders and their team.

Vertical development approaches in practice

Action Logics

Action Logics is a leadership development approach that combines the above three mechanisms – narrative, feedback seeking, team skills and coaching – into an overall development structure. Action Logics describe seven stages of mindset progression: Opportunist, Diplomat, Expert, Achiever, Individualist, Strategist and Alchemist.⁴⁹ These stages are described in Figure 4.3. Each of these stages correspond to a distinct and different way in which leaders observe and interact with the world. For instance, an expert is more likely to lead through the application of knowledge, thus they tend to see decisions as either right or wrong, and as such communicate in ways that describe how they think things should work, or not work. These types of leaders tend see leadership as a set of outputs or deliverables. In contrast, strategists recognise that there may not always be a right or

for a developmental perspective The Hidden Talent Essay 7: Emergent Leadership: Linking Competency, Cognitive Processes, Adaptability, an Innovation," *Harvard business review* (2005).

⁴⁵ Barbara Fresko et al., "Developing narratives as a pedagogical approach to fostering professional interpersonal competences," *Studies in Educational Evaluation* 39, no. 4 (2013).

⁴⁶ Adrienne S Chan, "Storytelling, culture, and Indigenous methodology," in *Discourses, dialogue and diversity in biographical research* (Brill, 2021).

⁴⁷ Raymond T Sparrowe, "Authentic leadership and the narrative self," *The leadership quarterly* 16, no. 3 (2005).

⁴⁸ Fabio Veglia and Giulia Di Fini, "Life Themes and Interpersonal Motivational Systems in the Narrative Self-construction," Hypothesis and Theory, *Frontiers in Psychology* 8 (2017-October-27 2017), https://doi.org/10.3389/fpsyg.2017.01897, https://www.frontiersin.org/articles/10.3389/fpsyg.2017.01897.

⁴⁹ David Rooke and William R Torbert, "Welcome: Background Material 7 Transformations of Leadership Making the case

wrong choice, instead there are multiple perspectives on issues. With this view, strategists tend to listen to and understand various perspectives, connect these ideas to overarching values and then communicate new directions in a way that unites contrasting voices, while also providing direction and motivation. These contrasting ways of seeing, interpreting, and responding to the world derive from differing underlying action logics which act subconsciously but have a huge influence over how leaders effect their roles.

Figure 4.5. Action Logic seven stages of mindset progression

Action Logic	Characteristics	Strengths	% of research sample profiling at this action logic	
Opportunist	Wins any way possible. Self-oriented; manipulative; "might makes right."	Good in emergencies and in sales opportunities.	5%	
Diplomat	Avoids overt conflict. Wants to belong; obeys group norms; rarely rocks the boat.	Good as supportive glue within an office; helps bring people together.	12%	
Expert	Rules by logic and expertise. Seeks rational efficiency.	Good as an individual contributor.	38%	
Achiever	Meets strategic goals. Effectively achieves goals through teams; juggles managerial duties and market demands.	Well suited to managerial roles; action and goal oriented.	30%	
Individualist	Interweaves competing personal and company action logics. Creates unique structures to resolve gaps between strategy and performance.	Effective in venture and consulting roles.	10%	
Strategist	Generates organizational and personal transformations. Exercises the power of mutual inquiry, vigilance, and vulnerability for both the short and long term.	Effective as a transforma- tional leader.	4%	
Alchemist	Generates social transformations. Integrates material, spiritual, and societal transformation.	Good at leading society-wide transformations.	1%	

Research shows that Opportunists, Diplomats and Experts account for 55% of the population, Achievers account for 30% and Strategists comprise just 4%.⁵⁰ The limited scholarly research that has been undertaken in this space shows that successful organisations need to be led by Strategists (or Alchemists) and that organisations run by Experts often fail.¹⁹

Mapping the Action Logics stages of mindset progression to the Wallace 2D framework, the Diplomat, Expert and Achiever stages represent conventional mindsets that facilitate competency-based leadership in the lower two boxes of the Wallace 2D framework. The Individualist, Strategist and Alchemist stages describe post-

Australia and New Zealand School of Government (ANZSOG)

⁵⁰ William R Torbert and Reut Livne-Tarandach, "Reliability and Validity Tests of the Harthill Leadership Development Profile in the Context of Developmental Action Inquiry Theory, Practice and Method," *Integral Review: A Transdisciplinary & Transcultural Journal for New Thought, Research, & Praxis* 5, no. 2 (2009).

conventional mindsets that underpin matured leadership and stewardship in the top two boxes of the Wallace 2D framework. Action logics are typically measured on an individual basis via a sentence completion tool and a subsequent debrief from an accredited coach. It is possible to use this tool to widely survey an organisation to spot unknown Strategists that should be promoted and, potentially, Expert leaders that need be developed into more advanced action logics. Development of Action Logics is mostly through one-on-one coaching, with the possibility to extend to small learning communities at a later stage.

Leadership Circle

The leadership circle approach derives from the universal model of leadership, which itself explores how consciousness can evolve into a higher-order capacity to better respond to complexity.⁵¹ Like Action Logics, the universal model involves stages of progression (this approach has five), with each stage of progression highlighting how an individual's meaning-making is deconstructed to make way for a new way of thinking. This approach is illustrated in Figure 4.4.

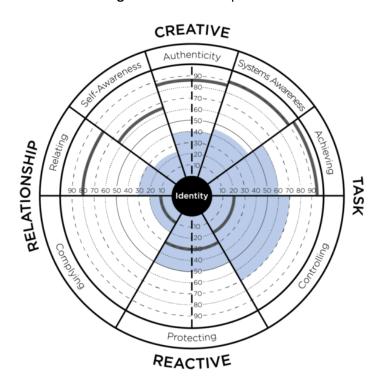


Figure 4.6. Leadership Circle

The approach differs from Action Logics in that the stages are not explicitly represented. Instead, the circle maps the leadership behaviour that derives from progressive stages of mindset maturation. On the lower side of the circle are reactive behaviours, which are least desired in leadership contexts, and the top quadrants describe more desired outcomes – authenticity and values – that correspond to higher order mindsets. This horizontal delineation maps neatly to the Wallace 2D framework with the lower half of the circle matching competency

⁵¹Robert J Anderson and William A Adams, *Mastering leadership: An integrated framework for breakthrough performance and extraordinary business results* (John Wiley & Sons, 2015).

level development and the upper half representing matured leaders. Similar to Action Logics, this approach has inspired a global movement of practitioners and coaches who provide evaluation and developmental assistance.

4.6 Measuring progress

We close this section on leadership development mechanisms with a discussion about how to measure progress towards developing effective individual leaders and collective leadership. Leadership development should involve both internal (i.e., individual) and external (i.e., relational) changes over time. Measuring leadership capabilities should occur at regular intervals to compare progress in line with the introduction of any leadership development mechanisms or training programs. This includes:

- 1. Pre, post, and follow-up changes in leadership capabilities.
- 2. Pre, post, and follow-up changes in leadership mindset.
- 3. The efficacy of the training itself (training evaluations).
- 4. Any relationships between leadership capability improvements and changes in QPS objectives (e.g., improvement in service delivery).

Feedback

For both horizontal and vertical development, as highlighted already, feedback is a significant aspect of leadership development. While leaders are encouraged to be proactive in their feedback seeking behaviours, integrated processes of measuring leadership development through organisational systems can be a key mitigation strategy and an additional prompt for leaders to receive information and coaching on their leadership. These tools can also be used to identify emerging leaders. Feedback should be managed through normalised team check-ins with leaders during coaching and mentoring sessions.

Horizontal development measurement

There are a variety of validated measurement tools that can measure relational leadership, briefly these include the Relational Leadership Scale⁵², Psychological Safety Climate Scale⁵³, LMX Scales⁵⁴, Social identity instruments⁵⁵, Inclusion Measurement Survey⁵⁶, and trust instruments⁵⁷.

Vertical development measurement

Both the Leadership Circle and Action Logics provide validated measurement scales for mindset maturation, as discussed above.

Social network analysis – a possible measurement for stewardship

Social network analysis provides another tool for measuring progress in leadership development. A social network analysis involves mapping leader and team connections based on their working relationships⁵⁸. While mapping the social network within an organisation can be a time intensive process, this analysis can provide valuable information regarding leadership connections, networks and relationships, and can help identify opportunities for leadership development.⁵⁸ For example, this analysis can provide information regarding which leaders have the most connections, which leaders are pivotal "bridges" or "brokers" between groups or individuals, which leaders are most influential, and if there are any clusters of people who are well connected compared to others.

It is feasible to use social network analysis tools to assess relational capability gaps, opportunities, and growth. As a leadership development tool, a social network analysis enables leaders to measure changes to relational aspects of leadership over time by observing whether their networks are better connected, communicating more often, and are composed diverse teams. The analysis also can help leaders identify barriers regarding collective maturation related to bottlenecks in communication or silos.

4.7 Organisational structures that support development

Interviews with stakeholders highlighted that QPS leadership development processes are often disparate across divisions, leading to silos and different understandings about how to engage in leadership development. While the Wallace 2D framework allows for a decentralised means of developing leadership relative to the unique

⁵² James Carifio, "Development and validation of a measure of relational leadership: Implications for leadership theory and policies," *Current Research in Psychology* 1, no. 1 (2010).

⁵³ Amy Edmondson, "Psychological safety and learning behavior in work teams," *Administrative science quarterly* 44, no. 2 (1999).

⁵⁴ Robert C Liden et al., "Leader-member exchange measurement," *The Oxford handbook of leader-member exchange* (2015).

⁵⁵ Bob Heere and Jeffrey D James, "Stepping outside the lines: Developing a multi-dimensional team identity scale based on social identity theory," *Sport Management Review* 10, no. 1 (2007).

⁵⁶ Nathaniel J Ratcliff et al., "Inclusive Leadership Survey Item Development," *US Army Research Institute. Retrieved from https://apps. dtic. mil/dtic/tr/fulltext/u2/1060743. pdf* (2018).

⁵⁷ Fatih Semerciöz, Masoodul Hassan, and Zelal Aldemir, "An empirical study on the role of interpersonal and institutional trust in organizational innovativeness," *International Business Research* 4, no. 2 (2011).

⁵⁸ Stanley Wasserman and Katherine Faust, "Social network analysis: Methods and applications," (1994).

collective identities and needs of each work team, these activities should still map onto the competencies outlined in the framework. Therefore, support structures related to program implementation across the sector are advised. These include:

- Centralised engagement with the Wallace 2D framework, supported by learning and development regarding the framework competencies, its relevance to QPS objectives, and best practice methodology regarding leadership development.⁵⁹
- The integration of a standardised means of identifying existing and emerging leaders in relation to the Wallace 2D framework and means of tracking their development over time. These form part of integrated feedback mechanisms discussed above.

5. Placing Diversity and Inclusion Considerations Front and Centre

5.1 The challenge

QPS have highlighted, in their Moving Ahead Strategy and Inclusion and Diversity Strategy (2021-2025), that the necessity for greater inclusion of leaders from diverse backgrounds is pivotal for the success of QPS in meeting the needs of the Queensland Public. One-dimensional models of leadership development, focused on individual leadership capabilities, intrinsically limit inclusive practices. A benefit of the Wallace 2D framework is that it emphasises inclusive and relational leadership practices – the very capabilities required to promote diversity and inclusion. Thus, these relational leadership capabilities will help leaders cultivate teams that feature diverse members who feel included and safe to contribute innovative and well-balanced solutions to community problems, whilst also finding common ground to form collective identities, without conforming to an individualist (aligned with a dominant leader) way of thinking.

Enabling relational leadership competencies, on their own, does not guarantee a complete solution for diversity and inclusion. Responses to the annual *Working for Queensland Survey* reportedly suggest that while leaders have improved in their fairness, respect, and psychological safety practices (important underpinnings of relational leadership), there has been a significant increase in people feeling that their culture, sexual orientation, gender, disability status, or age is a barrier to their success. This points to the challenge in creating an inclusive and diverse service and the need to consider both leadership development and structural barriers to inclusion. In this section we explore the evidence on structural and systemic considerations that also promote diversity.

⁵⁹ Jacob JJ Boonzaaier, "Centralisation versus decentralisation of the organisation development function within the Western Cape Provincial Administration" (Stellenbosch: Stellenbosch University, 2003).

5.2 Structural barriers

Insight into practices that create barriers at QPS has been provided by stakeholder interviews and the *Working* for Queensland Survey. One example cited in interviews was the absence of flexible work conditions at executive levels of leadership, which may exclude employees who have care-taking duties from applying for affected roles. Other barriers include the pigeonholing of members to roles that specialise in issues related to those members' backgrounds such as Aboriginal and Torres Strait Islander leaders working in roles that target Aboriginal and Torres Strait Islander issues. This presents a barrier to the representation of diverse people across different sectors and prevents valuable insights which may otherwise be overlooked because they are not typical of the group that usually work in that space.

The literature reports that, more generally, barriers to leadership inclusion can largely be attributed to:60

- a lack of mentoring and role models for people from under-represented groups;
- exclusion from informal networks of communication;
- stereotypical ideas of what roles and responsibilities diverse groups might want to be a part of (i.e., pigeonholing);
- a lack of assignment of challenging work opportunities to develop individual talents;
- a lack of visibility of talents that contribute to leadership progression (e.g., for remote workers); and
- underplaying the importance of allocating time for non-work commitments such as care-taking duties.

Some of these factors coincide with information arising from the QPS interviews we conducted.

Systemic changes employed to mitigate barriers to inclusion and diverse representation have the added benefit that they provide an avenue for all staff to discuss structural barriers impacting their progression and ability to work effectively, with the expectation that they will be provided with the necessary supports to guide their success. Specific barriers will vary between individuals. Consequently, general, illustrative systemic changes to mitigate exclusion are provided here by way of example only, together with an indication of relevant worker groups.

These systemic changes are discussed in more detail below and include:

- providing coaching and mentoring opportunities;
- providing flexible working arrangements at all levels;

⁶⁰ Claire McCarty Kilian, Dawn Hukai, and C Elizabeth McCarty, "Building diversity in the pipeline to corporate leadership," *Journal of Management Development* 24, no. 2 (2005).

- providing inclusive networking and development opportunities; and
- reducing biases and removing criteria that might discriminate against certain groups in recruitment and selection processes.

5.3 How coaching and mentoring translates in practice

Interviewees identified a low level of shared understanding amongst workers at QPS about the role of coaching and mentoring. It was reported that employees see coaching and mentoring as tools for performance management rather than recognising their role as important leadership development tools. Coaching and mentoring are related but distinct programs. Coaching is a learning and development tool in which a coach works with an individual to identify their strengths and challenges, sets goals related to the goals of the organisation, and ideally tracks goal progress with the help of ongoing feedback from colleagues. Mentoring is built on a relationship between a more senior professional and a worker, with the mentor providing support based on their expertise and drawing from their professional experience.⁶¹

Evidence shows that mentoring and coaching enhances career progression for members of under-represented groups. ⁶¹ Mentors need to be aware of the challenges that diversity can present for career development and advancement, so they can assist with strategies to overcome them. Investment by mentors can provide motivation, a focus on personal growth, resilience to cope with setbacks and reduce the risk of falling performance and departure from the organisation as the worker navigates the challenges they confront. ⁶¹

5.4 Representation and quotas

Research suggests that diverse representation at the leadership level is a significant factor in increasing inclusivity across organisations. ⁶⁰ Workers who perceive that there are appropriate role models for them within higher positions are more likely to feel that they are represented within the group. Further, diversifying workers into roles that are not related to their backgrounds (e.g., cultural background, work history, etc.), is also important to mitigate issues related to a lack of diversity in teams or units. This lack of diversity can be based on pre-conceived ideas of who is appropriate to work in a role as well as failing to provide opportunity for minority groups to participate more broadly.

However, research also suggests that representation of group members by using interventions such as quotas alone might be problematic. Specifically, interventions that do not engage in initiatives to increase the participation of diverse groups into leadership roles across the sector through coaching and mentoring opportunities working in tandem with inclusive leadership and collective identity development practices, could paradoxically have adverse long-term effects of reduced diversity and inclusion. For example, a paradoxical

⁶¹ Ida Abbott, "High-quality mentoring and sponsorship can increase diversity and inclusion," *Modern Legal Practice* 2, no. 3 (2018).

outcome of selection quotas is that under-represented groups might experience increased selection failure if they are not selected for executive roles and become less likely to apply for them in the future. ⁶² Similarly, effects such as "the queen bee" phenomenon (for women in leadership for example) can occur, where selected women leaders distance themselves from other women they lead within the team in an attempt to socialise themselves with the perceived "male-dominant" culture. ⁶³

5.5 Enabling flexible working arrangements at executive levels

Our interviews with QPS leaders indicated that flexible working arrangements are not included in working conditions at higher positions, and any needed flexibility is dependent on the relationship between the worker and the leader they report to. This lack of flexibility can be a barrier to progression for affected workers. For example, workers managing care responsibilities or living with disability might need access to flexible working arrangements due to needing extra time, resources, and flexibility to handle their various responsibilities and recover from work. However, if these flexible working arrangements are managed on an individual basis between leaders, it might create a paradox where executives avoid promoting or giving development opportunities to workers with disabilities or care-taking duties due to the perception that they might be "stretching" those individuals and causing them stress if they do so.⁶⁴ Therefore, despite efforts to be inclusive and understanding, unintentional exclusion may occur in these situations at the individual level. Based on this, structural barriers at the executive levels preventing flexible working arrangements (for example, resourcing problems, hard deadlines, hierarchical management structures or lack of job sharing), need to be addressed through appropriate interventions to increase participation of under-represented groups into executive positions.

5.6 Inclusive networking and development opportunities

QPS has a range of diversity networks that support traditionally under-represented groups such as the *All Abilities Action Group* for disability inclusion, *Generations in the Workplace* for employees transitioning into retirement, *Parents' and Carers' Network, Proudly Me Committee* for LGBTQ+ inclusion and *Young Professionals' Network* for workers under 30 years of age. These networks provide valuable avenues for individuals from under-represented groups to engage with others in QPS and advocate for their needs, receive social support, and strengthen their ties to QPS. However, these networks might also re-produce inequality and create exclusion

⁶² Brands, R.A., & Fernandez-Mateo, I. (2017). Leaning out: How negative recruitment experiences shape women's decisions to compete for executive roles. *Administrative science quarterly*, *62*(3), 405-442.

⁶³ Belle Derks, Colette Van Laar, and Naomi Ellemers, "The queen bee phenomenon: Why women leaders distance themselves from junior women," *The Leadership Quarterly* 27, no. 3 (2016/06/01/ 2016), https://doi.org/https://doi.org/10.1016/j.leaqua.2015.12.007.

⁶⁴ Dana Wilson-Kovacs et al., "'Just because you can get a wheelchair in the building doesn't necessarily mean that you can still participate': barriers to the career advancement of disabled professionals," *Disability & Society* 23, no. 7 (2008).

if individuals perceive that the only networks available to them relate to their identification with an underrepresented group, rather than their career prospects or having access to influential or higher-level connections within the organisation. ⁶⁵

Interviews with leaders suggests that QPS has a prominent culture of informal networking. ⁶⁶ By nature, these informal networks can be exclusive due to their lack of transparency and accessibility. Informal networking that is not inclusive may have a detrimental impact on leadership effectiveness. Research suggests that effective leaders build their networks strategically through cultivating connections with others who provide them with a diverse range of information and expertise (as opposed to building networks with others who share their views) and developing high quality relationships to receive developmental feedback, support, and influence. ³⁹ Limited diversity in informal social networks may limit the scope of relationships developed. There are other challenges too. In informal networks, social connections develop which may promote a member candidate for a leadership position over an equally suited candidate without opportunity to socialise with people in influential positions ⁶⁶. Further, informal networking events which increase the visibility and connectivity of leaders in the workforce do not always factor in issues related to responsibilities outside of work (such as care-taking duties), cultural considerations (such as participation in activities that involve drinking), or accessibility considerations (such as fatigue, wheelchair access, noise, etc.). These issues could be resolved by providing opportunity for all workers to network with others embedded within regular work activities.

Location can present another barrier to networking for workers who are working remotely or are based in regional and remote areas. These can be mitigated through formal online networking events or funded inclusive networking opportunities (such as a working retreat in regional areas with accommodations made for those with care-taking duties or disabilities). ⁶⁷ This can also create connections between leaders in regional remote areas and those located in urban locations.

5.7 Reducing bias in career progression and selection decisions

Discrimination and bias may arise through the criteria for selection, promotional processes, and evaluation of leadership. For example, interviews with stakeholders suggested that career progression might depend on the number of social networks one belongs to as this is seen as reflective of their ability to demonstrate leadership activity. However, as noted, under-represented groups might not have access to the same level of networking or development opportunities as other groups despite having the skills to be able to cultivate relationships. Further, the number of networks is not a valid criterion for leadership relationship building, as research suggests that the quality and diversity of networks may be more reflective of leadership performance.³⁹

⁶⁵ Marjolein Dennissen, Yvonne Benschop, and Marieke Van den Brink, "Diversity networks: networking for equality?," *British Journal of Management* 30, no. 4 (2019).

⁶⁶ Sven Horak and Fadi Alsarhan, "Social exclusion-The dark side of informal networks," *Global encyclopedia of informality* 3 (2022).

⁶⁷ Elena Procaccini, "Factors that Impact Career Development in Virtual Environments," (2021).

In other examples, young professionals at QPS⁶⁸ state they get overlooked for opportunities to progress in their careers due to limited experience within the organisation, despite being able to demonstrate competencies that would make them suitable for the position required. These examples highlight the importance of ensuring that the criteria by which leaders are being evaluated are valid and reliable indicators of leadership capability. As discussed above, there is a need to ensure that unnecessary barriers to inclusion are not built into job descriptions. Critical evaluation of the criteria applied to selection and promotion of leaders is needed to ensure that they do not unnecessarily discriminate against certain groups.

6. Technology Enablement

Becoming an effective leader involves acquisition of the constellation of capabilities identified in the previous sections and engaging in deliberate practice to apply those capabilities in different situations over time to cumulatively construct a mature set of identities, conceptualisations, and mindsets about how to be a successful leader. These leadership capabilities are discussed in Section 3 and are multidimensional. ^{15,29} Leadership development needs to engage with the acquisition of cognitive (i.e., knowledge about facts, structures, principles, and procedures), behavioural (i.e., the capacity to connect knowledge with action, for example, to perform a task or enact the correct behaviour at the right time) and affective (i.e., attitudes, motivations, and intentions around a learned behaviour and also emotional intelligence, social skills, and situational awareness) elements. Successful leadership programs must engage these elements to deliver meaningful learning experiences. In addition, the learner's motivation (a foundational capability in the Wallace 2D framework) also plays a critical role in leadership development, as the fuel that can sustain such complex and prolonged learning journeys. In short, leadership training poses greater challenges than technical training, because it involves much more than just a simple process of information transfer.

6.1 Online / e-Learning

The evolution and diffusion of new hardware and software information and communication technologies and substantial increases in internet connectivity and bandwidth in the contemporary digital age have revolutionised teaching and learning methods, diverging from traditional approaches by facilitating asynchronous and remote learning. Educational interactions are no longer confined by the need for learners and instructors to be physically present in the same location at the same time, which can be particularly beneficial for geographically dispersed groups (e.g., workers dispersed across remote/distant towns and cities). This shift provides cost and time efficiencies while enhancing flexibility and convenience. Moreover, online settings offer more opportunities for customised learning experiences than traditional approaches.

Equity and Diversity Strategy 2023-https://www.resources.qld.gov.au/__data/assets/pdf_file/0007/1742254/equity-diversity-plan-2023-24.pdf

2024.

Online learning typically involves the use of an e-learning platform, also known as a learning management system. E-learning platforms consolidate all educational materials – lectures, videos, podcasts, and other resources – in one online environment for students, and provide evaluation opportunities (e.g., quizzes, tests, essays, projects) and interactive spaces to connect with peers and educators. Example e-learning platforms include Moodle*, Blackboard*, and Canvas*. The flexibility offered by these platforms empowers learners to control the pace, access content on-demand, and decide the timing of their educational experiences. ⁶⁹ Research shows that well-designed learning experiences through e-learning platforms can significantly enhance student performance and satisfaction, especially when tailored to individual needs and characteristics. ⁷⁰ Furthermore, technological advancements have streamlined the implementation of adaptive learning ^{71,72}, providing an interactive educational approach leveraging computer algorithms and artificial intelligence to generate specific and customised learning pathways. Unlike traditional one-size-fits-all curricula, adaptive learning addresses the unique needs of each learner by tailoring the sequence of information, tasks, and feedback presented. ⁷³ Incorporating adaptive learning elements into online learning experiences involves using established adaptive learning applications/plug-ins or developing new applications on an existing adaptive learning platform (e.g., Smart Sparrow). ⁷⁴

In terms of effectiveness for leadership training, when well designed and executed, online or blended teaching results in similar leadership learning outcomes to traditional face-to-face settings and can improve learning for some types of content. 75,76,77,78,79 Furthermore, the convenience, customisation, and flexibility that recent technologies offer can significantly enhance learning effectiveness and dissemination. However, achieving learning outcomes through online learning depends on the quality of the course design and alignment with the online teaching modality, the interaction between instructors and learners, and the establishment of an online learning community. Higher quality online course designs include open-ended online discussions/team

⁻⁻⁻

⁶⁹ Nurul Nadirah Mohd Kasim and Fariza Khalid, "Choosing the right learning management system (LMS) for the higher education institution context: A systematic review," *International Journal of Emerging Technologies in Learning* 11, no. 6 (2016).

⁷⁰ Haozhe Jiang et al., "Technology-enabled e-learning platforms in Chinese higher education during the pandemic age of COVID-19," *Sage Open* 12, no. 2 (2022).

⁷¹https://educationaltechnology.net/adaptive-learning-what-is-it-what-are-its-benefits-and-how-does-it-work/

⁷² Valter Moreno, Flavia Cavazotte, and Isabela Alves, "Explaining university students' effective use of e-learning platforms," *British Journal of Educational Technology* 48, no. 4 (2017).

⁷³ Florence Martin et al., "Systematic review of adaptive learning research designs, context, strategies, and technologies from 2009 to 2018," *Educational Technology Research and Development* 68 (2020).

⁷⁴ https://www.smartsparrow.com/

⁷⁵ Barbara Means et al., "The effectiveness of online and blended learning: A meta-analysis of the empirical literature," *Teachers college record* 115, no. 3 (2013).

⁷⁶ Tuan Nguyen, "The effectiveness of online learning: Beyond no significant difference and future horizons," *MERLOT Journal* of online learning and teaching 11, no. 2 (2015).

⁷⁷ Leisi Pei and Hongbin Wu, "Does online learning work better than offline learning in undergraduate medical education? A systematic review and meta-analysis," *Medical education online* 24, no. 1 (2019).

⁷⁸ Anna Sun and Xiufang Chen, "Online education and its effective practice: A research review," *Journal of Information Technology Education* 15 (2016).

⁷⁹ Traci Sitzmann et al., "The comparative effectiveness of web-based and classroom instruction: A meta-analysis," *Personnel psychology* 59, no. 3 (2006).

projects with active instructor facilitation, inclusion of interactive elements under the control of the learner such as videos, prompts to reflect on information and/or problem solving strategies, alignment of instructional content and assessment with learning objectives, and critical feedback from the instructor.⁸⁰

Also, the impact of online teaching on learners' motivation and engagement – two crucial components for a successful leadership training program – can either be positive or negative depending on course design and quality, individual student characteristics and instructors' capabilities. ^{70,80} Specifically, learners' perceived benefits of online teaching, IT literacy of students and instructors, and students' perceived ease of use of the online environment, have all been shown to impact learners' motivation and engagement. ⁷⁰ In settings where IT literacy and perceived ease of use of online learning environments is likely to be low, face-to-face training to improve IT skills may be required to increase the effectiveness of subsequent online learning. Lastly, technical factors such as device and connection accessibility also influence the effectiveness of online and blended learning experiences. ⁷⁰

Two important caveats for leadership development include: (1) learners typically rate face-to-face teaching higher in terms of satisfaction, and (2) face-to-face teaching is more effective than online training for transferring learning from the classroom to on-the-job performance.²⁹ Why does online learning lead to lower transfer outcomes in leadership training? More research is needed to address this question, but Lacerenza et al. (2017)²⁹ speculate that online-based courses may be less effective for achieving transfer because online teaching historically involves fewer opportunities for demonstration and practice. Meta-analysis findings show that leadership development programs incorporating multiple delivery methods (i.e., conveying information, demonstrating skills and abilities, and offering practice opportunities) achieve better outcomes than single-mode training.²⁹

6.2 Simulations, serious games and virtual reality

Simulations, serious games and immersive virtual reality (VR) digital applications provide one pathway for increasing opportunities for demonstration and practice, in both online and face-to-face teaching. 81,82 New simulation, artificial intelligence, virtual and augmented reality technologies enable the development of more immersive, engaging and personalised virtual learning environments (VLEs) that simulate real or imagined realities for users to interact with and become immersed within. VLEs can include a mix of multiple technologies, including software-only computer simulation microworlds (e.g., Project Management Simulation 83,

Australia and New Zealand School of Government (ANZSOG)

⁸⁰ Heather Kauffman, "A review of predictive factors of student success in and satisfaction with online learning," *Research in Learning Technology* 23 (2015).

⁸¹ Thomas M Connolly et al., "A systematic literature review of empirical evidence on computer games and serious games," *Computers & education* 59, no. 2 (2012).

⁸² Dimitrios Vlachopoulos and Agoritsa Makri, "The effect of games and simulations on higher education: a systematic literature review," *International Journal of Educational Technology in Higher Education* 14, no. 1 (2017).82

⁸³ https://mitsloan.mit.edu/teaching-resources-library/project-management-simulation

En-ROADS Climate Solutions simulation⁸⁴), simulators involving both software and hardware (e.g., airplane flight simulators⁸⁵, racing car simulators⁸⁶), simulation microworlds combined with virtual reality headsets (e.g., workplace safety⁸⁷), and learning environments combining simulation, virtual reality and artificial intelligence (e.g., soft skills training⁸⁸). Also, VLEs can be used interactively by an individual learner, in groups or as a full class in a facilitated discussion. The course designer can decide whether to facilitate a VLE online or face-to-face, depending on the learning objectives of the specific session and other program considerations.

The unique features of VLEs contribute to a sense of immersion, enabling users to engage in a more realistic and interactive learning experience compared to traditional teaching methods. Moreover, VLEs allow learners to practice and repeat complex and demanding tasks in a safe environment, allowing for correction, repetition, and failure in a low-risk setting. When used in online learning, VLEs can preserve the advantages of remote and asynchronous access for learners, while increasing their engagement and providing opportunities for practice and skills acquisition that reduce some of the limitations of online learning.

Through providing opportunities for conveying information, demonstrating examples of superior and poor task-performance and enabling learners to practice applying the skills and capabilities under different scenarios, VLEs have significant potential for enhancing cognitive, behavioural and affective learning. 89,90,91,92,82 For leadership development specifically, VLEs can enhance training by facilitating practical and experiential learning sessions that support the acquisition of advanced thinking skills like systems thinking and problem-solving.

To achieve the potential beneficial learning outcomes of VLEs, the choice of which VLE(s) to use in a course should align with the specific pedagogical goals and desired learning outcomes. For example, VLEs differ in the degrees of realism they aim to achieve, ranging from high-fidelity replication of the world (e.g., flight or surgery virtual realities), simplified depictions of scenarios tailored to specific learning objectives (e.g., police reactions in potentially dangerous situations or nursing care across different patient scenarios), or highly simplified abstractions of reality to provide learning of broader concepts (e.g., managing a business, planning military strategy, or examining the impact of national policies on the environment). More immersive and realistic environments enhance learning in some contexts but may be counterproductive in other contexts. For example, elevated levels of realism can overshadow the learning process when users become too engrossed in playing the

⁸⁴ https://www.climateinteractive.org/en-roads/

⁸⁵ https://sydney.flightexperience.com.au/

⁸⁶ https://entertainmentpark.com.au/racing-car-simulators/

⁸⁷ https://www.epigroup.com.au/whs-training/face-to-face-whs-training/safety-leadership-training/

⁸⁸ https://www.oes.edu.au/solutions/simulations-vr/

⁸⁹ Mélanie Despeisse, "Games and simulations in industrial engineering education: a review of the cognitive and affective learning outcomes" (paper presented at the 2018 Winter Simulation Conference (WSC), 2018).

⁹⁰ Lasse Jensen and Flemming Konradsen, "A review of the use of virtual reality head-mounted displays in education and training," *Education and Information Technologies* 23 (2018).

⁹¹ Tassos A Mikropoulos and Antonis Natsis, "Educational virtual environments: A ten-year review of empirical research (1999–2009)," *Computers & education* 56, no. 3 (2011).

⁹² Mario A Rojas-Sánchez, Pedro R Palos-Sánchez, and José A Folgado-Fernández, "Systematic literature review and bibliometric analysis on virtual reality and education," *Education and Information Technologies* 28, no. 1 (2023).

"game" to carefully consider their responses or reflect on the simulated outcomes to gain insights. Also, if a more immersive and realistic VLE involves users making choices or decisions that do not match the learning objectives, then the additional realism can detract from, rather than enhance, the learning experience. In addition, the decision of what technology to use also appears to be crucial as more immersive and realistic VLEs can result in cybersickness, particularly when VR headset technologies are employed.

To support behavioural learning, VLEs enable students to repeatedly go through the actions and behaviours being trained until a satisfactory level of proficiency is reached. Furthermore, research shows that learners can successfully transfer behavioural skills acquired in virtual environments to real-life situations. ^{93,90,82} This encompasses a spectrum of skills, ranging from basic psychomotor abilities like juggling three balls to more analytical skills such as identifying armed persons in an urban setting. Again, the general recommendation is that there is not a technology or approach that appears to be better than others, but the choice should be tailored to the desired learning outcomes. For example, in the case of learning how to juggle, a high degree of immersion and presence is needed so that head-mounted displays and tactile devices work well, whereas in the training of visual skills for identifying urban threats, more realistic virtual urban scenarios lead to better learning outcomes. Research also finds that providing timely and customised feedback and debriefs is especially important²⁹, signalling that the presence of an instructor or the use of advanced algorithms could be highly beneficial.

Like behavioural learning, affective learning requires practice as well as introspection and interpersonal activities. In this context, effective VLEs should emphasize high interactivity, involving real individuals (e.g., fellow students or instructors) or virtual entities (i.e., virtual characters or agents). The capability to recreate believable social situations becomes pivotal. While the use of high-quality video and sound may have potential benefits, there is currently no robust evidence indicating that more immersive technologies (e.g., head-mounted devices, 3D glasses for augmented reality, peripheral devices capturing body movement) yield superior learning outcomes compared to VLEs based solely on desktop computers. Instead, the success of affective learning is closely tied to the VLE's ability to elicit and evoke emotional responses in learners. Examples of affective learning outcomes achieved through VLEs include acquiring diagnostic interview skills or practicing stress management strategies. Looking ahead, advancements in artificial intelligence algorithms will facilitate the development of more realistic and interactive social situations in VLEs, providing more opportunities to use VLEs for learning affective leadership capabilities.

When multiple group members acquire leadership skills and achieve maturation as leaders, this promotes collective leadership and improves group leadership outcomes. Research on VLEs and collective/group learning is not as broad and substantial as research on individual learning. However, the empirical research provides

⁹³ David Hamilton et al., "Immersive virtual reality as a pedagogical tool in education: a systematic literature review of quantitative learning outcomes and experimental design," *Journal of Computers in Education* 8, no. 1 (2021).

some relevant clues. VLEs are frequently recognized as potent instruments for fostering teamwork and team dynamics, collaboration, social and emotional skills, as well as other soft skills like project management, self-reflection, and leadership skills. ^{94,95,96,82} These skills are typically cultivated through reality-based scenarios and action-oriented activities. However, designing learning tools that allow meaningful group collaboration and interaction may be much more complex. ⁹⁷ Moreover, online learners may miss the social interactions and non-verbal cues present in traditional face-to-face group learning environments that are necessary to develop leadership skills and collective leadership synergies. Therefore, VLEs may be more effective if used by a group located in the same place.

While VLEs present numerous opportunities for enhancing learning, implementing these technologies also introduces several new challenges, some of which have been highlighted in the previous paragraphs. Challenges include: (i) VLEs may introduce technical issues, including connectivity problems, software compatibility, and the necessity for digital literacy, all of which can impede learning; (ii) in the case of more immersive virtual environments, it is crucial to ensure that the technological support is adequate (e.g., lagging graphics or lower-resolution images of virtual patients significantly impacted the feeling of presence felt by medical trainees and negatively impacted learning outcomes); (iii) the costs of immersive virtual reality devices have drastically decreased over the last decade, but may still be a financial barrier; (iv) while more immersive VLEs have the potential to enhance engagement, they may also introduce challenges such as increased confusion and the occurrence of cybersickness; (v) learners' attitudes toward immersive virtual reality technologies, individual personality traits, and prior experiences with VLEs can influence the effectiveness of the learning process; (vi) developing successful pedagogical strategies within VLEs, capable of fostering active engagement and meaningful interactions, presents many more challenges for educators and instructional designers and requires more resources than relying on traditional lecturing methods.

6.3 Summary of technology enablement findings

Online E-learning offers multiple opportunities in terms of flexibility, personalisation, and convenience compared to traditional face-to-face teaching. Moreover, online learning performs at least as well, if not better than traditional methods, in achieving learning outcomes. However, challenges arise in transferring online leadership training back to the workplace. Transfer requires use of multiple delivery modes (i.e., information, demonstration, and practice) and deep learning of behavioural and affective capabilities necessitates practice,

⁹⁴ Mauricio Capobianco Lopes et al., "Business games for leadership development: A systematic review," *Simulation & Gaming* 44, no. 4 (2013).

⁹⁵ Anna Siewiorek et al., "Learning leadership skills in a simulated business environment," *Computers & Education* 58, no. 1 (2012).

⁹⁶ Anna Siewiorek et al., "The effects of computer-simulation game training on participants' opinions on leadership styles," *British Journal of Educational Technology* 44, no. 6 (2013).

⁹⁷ Hani Bani-Salameh et al., "Collaborative education in a virtual learning environment," *International Journal of Business Information Systems* 25, no. 4 (2017).

repetition, and interpersonal interaction, which can be challenging to execute through online training.

Historically, online learning involves fewer demonstrations, less practice, and reduced relational engagement opportunities.

VLEs have the potential to address these challenges and can be used to enhance both online and face-to-face learning. Simulation, virtual reality and artificial intelligence technologies enable the creation of virtual experiences where learners can see demonstrations of and also practice applying acquired skills across a variety of realistic scenarios and can interact with realistic digital agents or other participants (e.g., in multiplayer VLEs). To achieve these promising learning outcomes with VLEs, the VLEs selected for training must align strongly with the specific learning objectives, and the role of instructors and feedback remains pivotal. The interactive nature of VLEs can also facilitate group training, although this area lacks robust and extensive research, and it may be necessary that such activities occur with participants using and debriefing the VLEs together in one location.

Overall, the evidence shows that leadership training programs should include a mix of online and face-to-face teaching, and that VLEs should be integrated with other delivery methods (e.g., lectures, presentations, role-plays, in-basket exercises, guided practice, negative or positive examples applying learned skills via in-person, audio, video) to achieve better leadership development outcomes.

7. Learning from Others

We reviewed how leadership conceptualisations (i.e. competency frameworks) and development approaches compare across the Queensland, New South Wales, Victoria, Western Australia, and New Zealand public services.

7.1 Competency frameworks

Competencies articulated by the public sector commissions in New South Wales, Victoria and Western Australia were compared with those adopted by QPS in their current *Leadership Competencies for Queensland* framework. The competencies from the Wallace 2D framework described in Section 3 of this report were used as a basis for comparison. The comparison is shown in Table 7.1 using summaries of relevant competencies for the sake of conciseness.

QPS has taken an approach where leadership capabilities are incorporated at all employee levels and therefore form part of a single capability framework. In NSW and Victoria, leadership and worker competencies are provided in separate frameworks. Their leadership framework competencies have been included in bold in Table 7.1. Competencies common to both the relevant worker capability framework and leadership framework are shown in italics. Western Australia differs further by having a two-tiered worker capability framework that identifies all senior employees as having leadership competencies. For Western Australia, Table 7.1 focuses on employees with leadership requirements. There are also specific leadership competencies articulated through the WA public sector leadership program in *Leadership Expectations*. ⁹⁹ These competencies are included in bold in Table 7.1.

In the agencies considered, individual competencies receive most attention. Intrapersonal, interpersonal and management capabilities also dominate. Inclusion of individual technical competencies is variable and reflects differences in ethos around whether these are organisation-wide or department specific competencies. There is little focus on leader identity. Foundational competencies of ability and motivation to lead are addressed across all the frameworks. The focus on relational leadership competencies in all entities is limited to some provision of competencies relating to catalytic emergent states and technical competencies.

Overall, our review indicates that QPS is in a similar position to other Australian public sector organisations with respect to articulation of leadership competencies and there is an opportunity for QPS to lead the way in developing a more complete, contemporary, and robust approach.

⁹⁸ Leadership competencies for Queensland

⁹⁹ leadership expectations.pdf (www.wa.gov.au)

Table 7.4. Comparison of capability and leadership frameworks between public sectors

Competencies	Examples	NSW	Victoria	WA	QLD
Ability to develop as a leader	Metacognitive ability, self- awareness	Growth mindset	Self-awareness	self-awareness, commitment to personal development.	Pursues continuous growth
Motivation to develop as a leader	Learning orientation, developmental self-efficacy	Innovative	Innovation and continuous improvement	Growth mindset, adaptive to change, adjusts leadership style to context	Stimulates ideas and innovation
Intrapersonal- characteristics that enable leaders to engage in behaviours relevant to leadership context	Creative thinking, problem solving, decision-making, courage, resilience, proactivity	Resilience, courage, integrity, delivers results, solves problems, accountable, adaptable	Resilience, adaptability, outcomes focus, systems thinking, integrity, accountable, impartial	Critical thinking, ambiguity, assess impact, judgement, courage, resilience, listen	Makes insightful decisions
Interpersonal – social competencies that promote effective interactions with others	Emotional intelligence, social intelligence	Values diversity, communicates effectively, collaborative, influences, negotiates, authentic, empathetic	Works collaboratively, promotes inclusion, responsive, respectful, engage, motivate, inspire	builds relationships, values diversity, communicates clearly, negotiates, inspires direction, empathy, humility, integrity	Builds enduring relationships, fosters healthy and inclusive workplaces
Management - characteristics for effective management behaviours common to most leadership contexts	Planning, delegating, monitoring, developing others	Strategic, plans, prioritises, effective management, develops people	Strategic, fosters talent, builds capability, continuous improvement	Harnesses information and opportunities, guides, coaches and develops people	Develops and mobilises talent, demonstrates sound governance
Technical- skills expected of leaders to lead technical performance	Customer relations, human resources	Customer service, finance, technology	Policy design and development	professional expertise	not included
Leader identity	Strength, centrality, integration	not included	not included	not included	not included
Catalyst emergent states- catalytic psychological states relevant to leadership within a collective	Psychological safety, group trust, shared purpose	Inspire direction and purpose, manage reform and change	Inspires a sense of purpose and direction	Delivers, prioritises, tenacity, resilience, builds skill, responsiveness	Leads change in complex environments, inspires others
Collective leadership -Leader identity and self-efficacy	Collective reflection, define mission	not included	not included	not included	not included
Social networks of leadership – develop adaptable networks to respond to change	Cognition of and efficacy for engaging in networks	not included	not included	not included	not included
Abstraction of leadership -agreement between leaders - what leading means	Philosophy, congruence, differentiation	not included	not included	not included	not included
Collective technical- relevant to collective technical task performance	Financial planning, strategic forecasting	Optimise business outcomes	Future focus, define, shape and adapt to the future	Focuses strategically	strategic, drives accountability, outcomes

7.2 Leadership development programs in comparative sectors

Next, the delivery of leadership opportunities by the New South Wales, Victorian, Western Australian and New Zealand public sectors was examined.

New South Wales public sector

The NSW Public Sector Commission (NSWPSC), which is an agency within the Department of Premier and Cabinet, has responsibility for public sector workforce management in NSW including workforce development. NSWPSC provides leadership development through the NSW Academy. 100

The NSW Academy was established in 2015 to provide a comprehensive program to develop leadership capability at all levels of public sector management. The initial focus was on delivering differentiated, context appropriate leadership programs to support talented individuals at key transition points through:

- Experience support for individuals to develop and actively manage their career plans through practice and on the job experiences.
- Social learning through networking events, conferences, coaching, mentoring and other forums to expose current and emerging leaders to innovative ideas and practices.
- Targeted executive education courses. These courses are designed to target specific capabilities required to succeed at the next leadership level.¹⁰¹

The Academy currently provides the following leadership programs:

- level specific executive programs open to high potential/high performing senior executives in ongoing roles, nominated through department/ agency talent review processes and NSW Government diversity targets.
- level specific First Nations leadership development programs open to high potential/high performing
 Aboriginal and Torres Strait Island public sector workers, nominated through department/ agency talent
 review processes and NSW Government diversity targets.
- executive leadership essentials for new senior executives at the required levels who have joined from the private sector or have been promoted from a non-executive role within the public sector within the previous 6-12 months.¹⁰²

¹⁰⁰ https://www.psc.nsw.gov.au/

¹⁰¹ 2015-2016 Public Service Commission Annual Report (nsw.gov.au)

¹⁰² <u>Victorian Leadership Academy | Victorian Public Sector Commission (vpsc.vic.gov.au)</u>

The Academy continues to host events to provide executives with the latest leadership thinking and to support capability development, focusing on contemporary issues facing public sector leaders. They also promote relevant external courses.

The 2022-2023 NSWPSC Annual report indicates satisfaction with the uptake and outcomes of their offerings. The significance of the supporting data they provide is not explained. 103

The NSW Academy has a Leadership framework which is used together with the Capabilities framework. Both frameworks are summarised in Table 7.1.

Victorian public sector

The Victorian Public Sector Commission (VPSC) works to strengthen the efficiency, effectiveness, and capability of the public sector to meet existing and emerging needs and deliver high quality services and maintain and advocate for public sector professionalism and integrity. Developing outstanding leadership and stewardship is one of their strategic priorities. ¹⁰⁴ Leadership development is provided through the Victorian Leadership Academy which is a branch of the VPSC supported by the Victorian Secretaries Board, leaders of government departments and leaders of Victoria Police. ¹⁰²

The Victorian Leadership Academy¹⁰⁵ was established in 2016 in response to a review calling for a new leadership development model for the public sector. The Academy designs and delivers programs to support leadership development for public service executives. Co-design with diverse expertise underpins their program design and development. Their leadership programs are characterised as "intensive and collaborative development experiences" that focus on helping executives further develop new ways of thinking, leading and working. The Victorian Leadership Academy has a leadership framework that has been incorporated into Table 7.1.

The Victorian Leadership Academy provides a director development program that is a 3-stage program run over a 12-month period exploring leader mindsets, stewardship, people, and performance and translating the learning to the work context. The executive director program was reported on their website¹⁰² as still under development in October 2019 and at the most recent review of the webpage in April 2023 this has still not been updated. The program has a first stage relating to leader mindsets. The Deputy Secretary program offered by the Academy is reported as being for the most senior executives and explores the challenges of leading transformational change.

Australia and New Zealand School of Government (ANZSOG)

¹⁰³ 2022-23 Annual Report - Activating our strategy (nsw.gov.au)

¹⁰⁴ About us - VPSC

¹⁰⁵ Victorian Public Sector Commission Generic (vpsc.vic.gov.au)

Although the Academy webpage is still active, the Academy may be at least under review. Its activities are not mentioned in the VPSC 2022-2023 annual report, but they are mentioned in the 2021-2022 annual report and show an elevated level of participant satisfaction with the programs offered. In 2022-23, VPSC established the Organisational Executive Development Group (OEDG) to connect, collaborate and consult across the VPS on topics of leadership development, peer support models, common core learning, career pathways and mobility, strategic workforce planning and diversity, equity and inclusion. The group aims to ensure investment and effort is directed to initiatives that add unique value, deliver greatest impact, and achieve scale and efficiency.

Interview responses from QPS included the view that leadership academies may have a limited life span and a need to be focused on senior executives in the programs they offer. Beyond this observation and the question regarding the future of the Victorian Academy, evidence regarding limitations around the use of leadership academies has not so far been identified.

Other Victorian public sector programs

Through a partnership with the Australian Graduate School of Management, University of New South Wales, VPSC delivered Leading through Challenging Times, an online program designed to support participants in building knowledge and skills to use human-centred, agile, and adaptive leadership to lead through disruption and challenging times. Since it commenced in 2020, more than 700 executives and people leaders have participated in the program.

VPSC convened cross-departmental development and peer support initiatives, providing opportunities for developing leaders to learn from senior VPS leaders, build networks for collaboration, share challenges, and solve problems together, develop strategies to improve wellbeing and self-care, and feel inspired and connected. More than 200 new VPS executives completed the Executive Induction Program in 2022-2023. This program is designed to accelerate the transition into public service leadership. ¹⁰⁶

New Zealand public service leadership development¹⁰⁶

The New Zealand Public Service Commission (NZPSC) is one of the central agencies of the New Zealand public service. Public sector leadership development is delivered through the Leadership Development Centre (LDC).

The LDC was established in 2018 following agreement between New Zealand's core public service chief executives to take a common approach to leadership development. As a result, the LDC supports member agencies to identify and develop an efficient and cost-effective delivery model for Common and Core Development and provides resources to help agencies develop their leaders against core development priorities

¹⁰⁶ pdf-download.php (vpsc.vic.gov.au)

specific to each level of transition, embed consistent leadership development across the Public Service and to provide new leaders with the transition support they need to succeed.

The LDC is a member organisation, that connects individual leaders and member agencies across the public sector with development programs, resources and experiences that amplify their leadership potential. The Centre works in collaboration with executives, senior leaders, human resources/organisational development communities, a network of expert providers, and the local and international academic community. Member agencies pay a subscription fee.

LDC provides an aspiring leaders' self-paced learning hub aimed at those with leadership potential who are not yet in formal leadership roles. There is also an emerging leadership program to support early-in-career Māori with the skills and confidence to step into leadership and governance roles of the future and a program that matches senior Pacific leaders in the Public Service with Pacific public servants. They also provide leadership assessment, a knowledge and information sharing hub, toolkits and online resources, access to expert leadership advice and international research and access to facilitators and coaches.

The NZPSC reports on the effectiveness of LDC programs in their annual report. Data in the 2022-2023 annual report shows an elevated level of participant support for program efficacy.¹⁰⁷

The LDC has a leadership success profile but there does not appear to be a single public sector workforce capability framework for the New Zealand public service. Agencies are working through a capability review program. 108

Western Australia public service leadership development¹⁰⁷

Western Australia's public sector (WAPS) has a different approach to leadership development. There is no leadership development academy. Leadership development is managed directly by the Western Australian Public Sector Commission (WAPSC). WAPSC have produced a guide entitled *Building Leadership Impact* and *Leadership Expectations* that sets out the leadership behaviours and mindsets expected in different leadership contexts together with a *Learning and Development Prospectus*. The prospectus covers Public Sector Commission offerings that include induction and graduate programs as well as learning experiences for workers at different classification levels and leadership contexts. There are also agency accessible components for supporting workers on their personal leadership journey and for enhancing leadership behaviours through curated learning. Guidance for agencies in implementing the program is also provided. These tools were launched in 2022-2023, following extensive consultation and development, establishing for the first time an agreed approach to strengthening leadership across the public sector.

¹⁰⁷ PSC-Annual-Report-2023-v2.pdf (publicservice.govt.nz)

¹⁰⁸ Leadership Success Profile - Te Kawa Mataaho Public Service Commission

The *Building Leadership Impact* approach is about making better use of existing resources by helping expert leaders to further their impact, better supporting those yet to reach their peak and nurturing upcoming leaders. WAPS identifies six conditions agencies must have in place to create the environment for positive leadership change:

- Clear expectations in context;
- Robust self-reflection;
- Personal responsibility for growth;
- Understanding what "good" leadership looks like;
- Productive feedback; and
- Opportunities for development and extension.

WAPS also identify expected behaviours and associated mindsets. The behaviours are captured in Table 7.1.

The program recognises the following leadership contexts: personal leadership, leading others, leading leaders, multiple area leader, executive leader, agency leader and statewide leader.

There are four elements in *Leadership Expectations:*

- Contexts -How and where we add value through our work
- Expected behaviours -How we lead and what is expected of us
- Mindsets -How we think about and approach our work
- Behaviours in action How we demonstrate leadership

Performance of the program is reported on in the WAPSC annual report 2022-2023. Although user satisfaction is not discussed, the metrics provided show that the program has slightly exceeded expected budget. The program release prioritised the Personal Leadership context as about 70% of public sector positions operate in this context. ¹⁰⁹

8. Summary and Future Directions

8.1 Conclusions

Given the phased approach of this review, there are no immediate conclusions to be made. Our intention with this report is to provide a broad overview of contemporary leadership science which is most pertinent to the

¹⁰⁹ <u>Public Sector Commission Annual Report 2022-23 (www.wa.gov.au)</u> Australia and New Zealand School of Government (ANZSOG)

issues faced by QPS. Our review therefore acts as a precursor to dialogue with QPS. In so doing, we have presented a well-researched and developed framework for QPS (the Wallace 2D framework) which, through a relationship focussed leadership approach, aims to provide better opportunities for all workers in QPS to thrive through progression up the leadership ladder. We present ideas regarding how this leadership approach can be established through systems and processes and how modern technology and training methods can be utilised to establish the new leadership approach. With that view, we encouraged readers to consider the following questions.

- 1. Which themes resonate with your vision of a thriving future public sector?
- 2. Which themes do not resonate?
- 3. Which themes would resonate if a challenge were overcome what is that challenge?

The next phase is to enter a dialogue with QPS to refine these themes and others into a clear, coherent, and tailored set of recommendations that will describe a viable and bright future for public sector leadership in Queensland.

8.2 What was beyond the scope of this report

In a topic as broad as leadership, diversity and inclusiveness, it is important to have some boundaries limiting what we can include. We focussed on the issues most pertinent to our mission. Some of the topics beyond the scope of our report include:

- A full discussion of some of the alternative approaches to encouraging greater diversity and inclusivity in the workplace such as the use of quotas.
- A full discussion of all approaches to leadership.
- A full discussion of structures and processes useful in encouraging diversity and inclusivity.
- How our approach to relational leadership might be implemented by QPS as a way of encouraging diversity and inclusiveness together with the costs of such an implementation.

8.3 Assumptions and limitations

To date, we have interviewed four members of QPS who were in strong positions to share their reflections about the QPS leadership context. We recognise this is a small sample, and these views may not be representative across the whole QPS community. We look forward to the on-going consultation with QPS once this report is delivered and more broadly made available so that the way forward becomes clearer.

References

- Abbott, Ida. "High-Quality Mentoring and Sponsorship Can Increase Diversity and Inclusion." *Modern Legal Practice* 2, no. 3 (2018): 36-41.
- Anderson Jr, Robert J. "The Leadership Circle Profile: Breakthrough Leadership Assessment Technology." *Industrial and Commercial Training* 38, no. 4 (2006): 175-84.
- Anderson, Robert J, and William A Adams. *Mastering Leadership: An Integrated Framework for Breakthrough Performance and Extraordinary Business Results.* John Wiley & Sons, 2015.
- Backhaus, Leonie, and Rick Vogel. "Leadership in the Public Sector: A Meta-Analysis of Styles, Outcomes, Contexts, and Methods." *Public Administration Review* 82, no. 6 (2022): 986-1003.
- Bani-Salameh, Hani, Jafar Al-Gharaibeh, Clinton Jeffery, and Ziad A Al-Sharif. "Collaborative Education in a Virtual Learning Environment." *International Journal of Business Information Systems* 25, no. 4 (2017): 474-89.
- Boonzaaier, Jacob JJ. "Centralisation Versus Decentralisation of the Organisation Development Function within the Western Cape Provincial Administration." Stellenbosch: Stellenbosch University, 2003.
- Booysen, Lize. "The Development of Inclusive Leadership Practice and Processes." 296-329. San Francisco: John Wiley & Sons, Inc, 2013.
- Burke, C Shawn, Kevin C Stagl, Cameron Klein, Gerald F Goodwin, Eduardo Salas, and Stanley M Halpin. "What Type of Leadership Behaviors Are Functional in Teams? A Meta-Analysis." *The leadership quarterly* 17, no. 3 (2006): 288-307.
- Carifio, James. "Development and Validation of a Measure of Relational Leadership: Implications for Leadership Theory and Policies." *Current Research in Psychology* 1, no. 1 (2010): 16-28.
- Chan, Adrienne S. "Storytelling, Culture, and Indigenous Methodology." In *Discourses, Dialogue and Diversity in Biographical Research*, 170-85: Brill, 2021.
- Christos, Daniela. "Perceived Inclusive Leadership and Discrimination: The Mediating Roles of Work and Personal Identities." M.Com., University of Johannesburg (South Africa), 2020 (28278416).
- Collin, Jim. "Good to Great." New York: HarperBusiness (2001).
- Connolly, Thomas M, Elizabeth A Boyle, Ewan MacArthur, Thomas Hainey, and James M Boyle. "A Systematic Literature Review of Empirical Evidence on Computer Games and Serious Games." *Computers & education* 59, no. 2 (2012): 661-86.
- Crans, Samantha, Persiana Aksentieva, Simon Beausaert, and Mien Segers. "Learning Leadership and Feedback Seeking Behavior: Leadership That Spurs Feedback Seeking." *Frontiers in Psychology* 13 (2022): 890861.
- Cullen-Lester, Kristin L., Cynthia K. Maupin, and Dorothy R. Carter. "Incorporating Social Networks into Leadership Development: A Conceptual Model and Evaluation of Research and Practice." *The Leadership Quarterly* 28, no. 1 (2017/02/01/ 2017): 130-52.
 - https://doi.org/https://doi.org/10.1016/j.leaqua.2016.10.005.
 - https://www.sciencedirect.com/science/article/pii/S1048984316300911.
- D'Innocenzo, Lauren, John E Mathieu, and Michael R Kukenberger. "A Meta-Analysis of Different Forms of Shared Leadership—Team Performance Relations." *Journal of management* 42, no. 7 (2016): 1964-91.
- Day, David V. "Leadership Development:: A Review in Context." *The leadership quarterly* 11, no. 4 (2000): 581-613.
- Day, David V, and Michelle M Harrison. "A Multilevel, Identity-Based Approach to Leadership Development." Human Resource Management Review 17, no. 4 (2007): 360-73.
- Day, David V, Michelle M Harrison, and Stanley M Halpin. *An Integrative Approach to Leader Development: Connecting Adult Development, Identity, and Expertise.* Routledge, 2008.
- Day, David V, Stephen J Zaccaro, and Stanley M Halpin. *Leader Development for Transforming Organizations: Growing Leaders for Tomorrow.* Psychology Press, 2004.
- Dennissen, Marjolein, Yvonne Benschop, and Marieke Van den Brink. "Diversity Networks: Networking for Equality?". *British Journal of Management* 30, no. 4 (2019): 966-80.
- Derks, Belle, Colette Van Laar, and Naomi Ellemers. "The Queen Bee Phenomenon: Why Women Leaders Distance Themselves from Junior Women." *The Leadership Quarterly* 27, no. 3 (2016/06/01/2016): 456-69. https://doi.org/https://doi.org/10.1016/j.leaqua.2015.12.007.

- DeRue, D Scott, and Christopher G Myers. "Leadership Development: A Review and Agenda for Future Research." (2014).
- Despeisse, Mélanie. "Games and Simulations in Industrial Engineering Education: A Review of the Cognitive and Affective Learning Outcomes." Paper presented at the 2018 Winter Simulation Conference (WSC), 2018.
- Doyle, Kerrie, and Catherine Hungerford. "Leadership as a Personal Journey: An Indigenous Perspective." *Issues in Mental Health Nursing* 36, no. 5 (2015): 336-45.
- Edmondson, Amy. "Psychological Safety and Learning Behavior in Work Teams." *Administrative science quarterly* 44, no. 2 (1999): 350-83.
- Edmondson, Amy C, Roderick M Kramer, and Karen S Cook. "Psychological Safety, Trust, and Learning in Organizations: A Group-Level Lens." *Trust and distrust in organizations: Dilemmas and approaches* 12, no. 2004 (2004): 239-72.
- Edmondson, Amy C, and Zhike Lei. "Psychological Safety: The History, Renaissance, and Future of an Interpersonal Construct." *Annu. Rev. Organ. Psychol. Organ. Behav.* 1, no. 1 (2014): 23-43.
- Ellis, Aleksander PJ, Bradford S Bell, Robert E Ployhart, John R Hollenbeck, and Daniel R Ilgen. "An Evaluation of Generic Teamwork Skills Training with Action Teams: Effects on Cognitive and Skill-Based Outcomes." *Personnel psychology* 58, no. 3 (2005): 641-72.
- Ford, J Kevin, Kurt Kraiger, and Stephanie M Merritt. "An Updated Review of the Multidimensionality of Training Outcomes: New Directions for Training Evaluation Research." *Learning, training, and development in organizations* (2009): 135-65.
- Fransen, Katrien, S Alexander Haslam, Niklas K Steffens, Kim Peters, Clifford J Mallett, Niels Mertens, and Filip Boen. "All for Us and Us for All: Introducing the 5r Shared Leadership Program." *Psychology of Sport and Exercise* 51 (2020): 101762.
- Fresko, Barbara, Lena Rubinstein Reich, Tina Eriksson Sjöö, and Carina Sild Lönroth. "Developing Narratives as a Pedagogical Approach to Fostering Professional Interpersonal Competences." *Studies in Educational Evaluation* 39, no. 4 (2013): 232-39.
- Graen, George B, and Mary Uhl-Bien. "Relationship-Based Approach to Leadership: Development of Leader-Member Exchange (Lmx) Theory of Leadership over 25 Years: Applying a Multi-Level Multi-Domain Perspective." *The leadership quarterly* 6, no. 2 (1995): 219-47.
- Hamilton, David, Jim McKechnie, Edward Edgerton, and Claire Wilson. "Immersive Virtual Reality as a Pedagogical Tool in Education: A Systematic Literature Review of Quantitative Learning Outcomes and Experimental Design." *Journal of Computers in Education* 8, no. 1 (2021): 1-32.
- Heere, Bob, and Jeffrey D James. "Stepping Outside the Lines: Developing a Multi-Dimensional Team Identity Scale Based on Social Identity Theory." *Sport Management Review* 10, no. 1 (2007): 65-91.
- Heifetz, Ronald Abadian, Alexander Grashow, and Martin Linsky. *The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World.* Harvard business press, 2009.
- Hogan, Robert, and Rodney Warrenfeltz. "Educating the Modern Manager." *Academy of management learning & education* 2, no. 1 (2003): 74-84.
- Horak, Sven, and Fadi Alsarhan. "Social Exclusion-the Dark Side of Informal Networks." *Global encyclopedia of informality* 3 (2022).
- Jensen, Lasse, and Flemming Konradsen. "A Review of the Use of Virtual Reality Head-Mounted Displays in Education and Training." *Education and Information Technologies* 23 (2018): 1515-29.
- Jiang, Haozhe, AYM Atiquil Islam, Xiaoqing Gu, Jonathan Michael Spector, and Suting Chen. "Technology-Enabled E-Learning Platforms in Chinese Higher Education During the Pandemic Age of Covid-19." *Sage Open* 12, no. 2 (2022): 21582440221095085.
- Kasim, Nurul Nadirah Mohd, and Fariza Khalid. "Choosing the Right Learning Management System (Lms) for the Higher Education Institution Context: A Systematic Review." *International Journal of Emerging Technologies in Learning* 11, no. 6 (2016).
- Kauffman, Heather. "A Review of Predictive Factors of Student Success in and Satisfaction with Online Learning." Research in Learning Technology 23 (2015).
- Kets de Vries, Manfred FR, and Konstantin Korotov. "Developing Leaders and Leadership Development." (2010).

- Lacerenza, Christina N, Denise L Reyes, Shannon L Marlow, Dana L Joseph, and Eduardo Salas. "Leadership Training Design, Delivery, and Implementation: A Meta-Analysis." *Journal of applied psychology* 102, no. 12 (2017): 1686.
- Liden, Robert C, Junfeng Wu, Aarn Xiaoyun Cao, and Sandy J Wayne. "Leader-Member Exchange Measurement." The Oxford handbook of leader-member exchange (2015): 29-54.
- Lopes, Mauricio Capobianco, Francisco AP Fialho, Cristiano JCA Cunha, and Sofia Inés Niveiros. "Business Games for Leadership Development: A Systematic Review." *Simulation & Gaming* 44, no. 4 (2013): 523-43.
- Lord, Robert G, and Rosalie J Hall. "Identity, Deep Structure and the Development of Leadership Skill." *The leadership quarterly* 16, no. 4 (2005): 591-615.
- Maidique, Modesto A, and Nathan J Hiller. "The Mindsets of a Leader." MIT Sloan Management Review (2018).
- Martin, Florence, Yan Chen, Robert L Moore, and Carl D Westine. "Systematic Review of Adaptive Learning Research Designs, Context, Strategies, and Technologies from 2009 to 2018." *Educational Technology Research and Development* 68 (2020): 1903-29.
- Martin, Robin, Yves Guillaume, Geoff Thomas, Allan Lee, and Olga Epitropaki. "Leader–Member Exchange (Lmx) and Performance: A Meta-Analytic Review." *Personnel psychology* 69, no. 1 (2016): 67-121.
- McCarty Kilian, Claire, Dawn Hukai, and C Elizabeth McCarty. "Building Diversity in the Pipeline to Corporate Leadership." *Journal of Management Development* 24, no. 2 (2005): 155-68.
- McCauley, Cynthia D, and Charles J Palus. "Developing the Theory and Practice of Leadership Development: A Relational View." *The Leadership Quarterly* 32, no. 5 (2021): 101456.
- Means, Barbara, Yukie Toyama, Robert Murphy, and Marianne Baki. "The Effectiveness of Online and Blended Learning: A Meta-Analysis of the Empirical Literature." *Teachers college record* 115, no. 3 (2013): 1-47.
- Mikropoulos, Tassos A, and Antonis Natsis. "Educational Virtual Environments: A Ten-Year Review of Empirical Research (1999–2009)." *Computers & education* 56, no. 3 (2011): 769-80.
- Moreno, Valter, Flavia Cavazotte, and Isabela Alves. "Explaining University Students' Effective Use of E-Learning Platforms." *British Journal of Educational Technology* 48, no. 4 (2017): 995-1009.
- Newman, Alexander, Ross Donohue, and Nathan Eva. "Psychological Safety: A Systematic Review of the Literature." *Human resource management review* 27, no. 3 (2017): 521-35.
- Nguyen, Tuan. "The Effectiveness of Online Learning: Beyond No Significant Difference and Future Horizons." MERLOT Journal of online learning and teaching 11, no. 2 (2015): 309-19.
- Pei, Leisi, and Hongbin Wu. "Does Online Learning Work Better Than Offline Learning in Undergraduate Medical Education? A Systematic Review and Meta-Analysis." *Medical education online* 24, no. 1 (2019): 1666538
- Procaccini, Elena. "Factors That Impact Career Development in Virtual Environments." (2021).
- Ratcliff, Nathaniel J, Melinda Key-Roberts, Mathias J Simmons, and Miliani Jiménez-Rodríguez. "Inclusive Leadership Survey Item Development." *US Army Research Institute. Retrieved from https://apps. dtic. mil/dtic/tr/fulltext/u2/1060743. pdf* (2018).
- Rojas-Sánchez, Mario A, Pedro R Palos-Sánchez, and José A Folgado-Fernández. "Systematic Literature Review and Bibliometric Analysis on Virtual Reality and Education." *Education and Information Technologies* 28, no. 1 (2023): 155-92.
- Rooke, David, and William R Torbert. "Welcome: Background Material 7 Transformations of Leadership Making the Case for a Developmental Perspective the Hidden Talent Essay 7: Emergent Leadership: Linking Competency, Cognitive Processes, Adaptability, an Innovation." *Harvard business review* (2005).
- Semerciöz, Fatih, Masoodul Hassan, and Zelal Aldemir. "An Empirical Study on the Role of Interpersonal and Institutional Trust in Organizational Innovativeness." *International Business Research* 4, no. 2 (2011): 125-36.
- Siewiorek, Anna, Andreas Gegenfurtner, Timo Lainema, Eeli Saarinen, and Erno Lehtinen. "The Effects of Computer-Simulation Game Training on Participants' Opinions on Leadership Styles." *British Journal of Educational Technology* 44, no. 6 (2013): 1012-35.
- Siewiorek, Anna, Eeli Saarinen, Timo Lainema, and Erno Lehtinen. "Learning Leadership Skills in a Simulated Business Environment." *Computers & Education* 58, no. 1 (2012): 121-35.
- Sitzmann, Traci, Kurt Kraiger, David Stewart, and Robert Wisher. "The Comparative Effectiveness of Web-Based and Classroom Instruction: A Meta-Analysis." *Personnel psychology* 59, no. 3 (2006): 623-64.
- Australia and New Zealand School of Government (ANZSOG)

- Sparrowe, Raymond T. "Authentic Leadership and the Narrative Self." *The leadership quarterly* 16, no. 3 (2005): 419-39.
- Stead, Valerie. "Mentoring: A Model for Leadership Development?". *International Journal of Training and Development* 9, no. 3 (2005): 170-84. https://doi.org/https://doi.org/10.1111/j.1468-2419.2005.00232.x. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-2419.2005.00232.x.
- Sun, Anna, and Xiufang Chen. "Online Education and Its Effective Practice: A Research Review." *Journal of Information Technology Education* 15 (2016).
- Tian, Meng, Mika Risku, and Kaija Collin. "A Meta-Analysis of Distributed Leadership from 2002 to 2013: Theory Development, Empirical Evidence and Future Research Focus." *Educational Management Administration & Leadership* 44, no. 1 (2016): 146-64.
- Torbert, William R. *Action Inquiry: The Secret of Timely and Transforming Leadership.* Berrett-Koehler Publishers, 2004.
- Torbert, William R, and Reut Livne-Tarandach. "Reliability and Validity Tests of the Harthill Leadership Development Profile in the Context of Developmental Action Inquiry Theory, Practice and Method." Integral Review: A Transdisciplinary & Transcultural Journal for New Thought, Research, & Praxis 5, no. 2 (2009).
- Veglia, Fabio, and Giulia Di Fini. "Life Themes and Interpersonal Motivational Systems in the Narrative Self-Construction." [In English]. Hypothesis and Theory. *Frontiers in Psychology* 8 (2017-October-27 2017). https://doi.org/10.3389/fpsyg.2017.01897. https://www.frontiersin.org/articles/10.3389/fpsyg.2017.01897.
- Vlachopoulos, Dimitrios, and Agoritsa Makri. "The Effect of Games and Simulations on Higher Education: A Systematic Literature Review." *International Journal of Educational Technology in Higher Education* 14, no. 1 (2017): 1-33.
- Wallace, David M, Elisa M Torres, and Stephen J Zaccaro. "Just What Do We Think We Are Doing? Learning Outcomes of Leader and Leadership Development." *The Leadership Quarterly* 32, no. 5 (2021): 101494.
- Wasserman, Stanley, and Katherine Faust. "Social Network Analysis: Methods and Applications." (1994).
- Wilson-Kovacs, Dana, Michelle K Ryan, S Alexander Haslam, and Anna Rabinovich. "'Just Because You Can Get a Wheelchair in the Building Doesn't Necessarily Mean That You Can Still Participate': Barriers to the Career Advancement of Disabled Professionals." *Disability & Society* 23, no. 7 (2008): 705-17.
- Yukl, Gary. "Effective Leadership Behavior: What We Know and What Questions Need More Attention." *Academy of Management perspectives* 26, no. 4 (2012): 66-85.





