

InSights

Aspiring Principal Preparation

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1. Executive summary

The role of the school principal, as defined in the Australian Professional Standard for Principals, is complex and diverse. Increasing principal autonomy and accountability has broadened the responsibilities of school leaders, making their role more challenging. Developing aspiring principals' knowledge, skills and abilities is more important than ever. But how is this achieved? How should training programs for school principals be developed? This is the challenge facing education systems.

This report draws on best-practice leadership development in education and other sectors to develop key considerations for the design of principal preparation programs to help systems meet this challenge. Five issues that need to be addressed to design preparation programs are discussed:

1. How does the program fit into broader leadership development? How does this impact the timing and design of the principal preparation program?

Leadership development is an ongoing process, and a principal preparation program is just one component. How leaders are developed throughout their teaching career impacts aspiring principals' immediate and longer-term performance, impact and development needs. This therefore affects what content is appropriate for a point-in-time program.

2. What is the purpose of the program? How does it align with the education system's strategic objectives to improve teaching and learning? What is the desired outcome of the program? Is it to develop knowledge or improve leadership behaviours (and what combination of the two is needed)? Does the education system expect improved student achievement as a result?

Principal preparation programs should align with an education system's strategic objectives of improving teaching and learning. While this may seem obvious, being explicit about the intended purpose of a program helps determine the intended outcomes of the program: is it to improve knowledge, or develop management skills and leadership behaviours, or a combination of both? Programs should also take specific education policy priorities and context into account, as these will help shape program content.

3. What content should the program contain? Once the strategic objectives and purpose of the program is established, content can be designed. Best-practice leadership preparation includes developing deeper subject matter expertise, new management and leadership skills and high-order leadership capabilities. The program should consider the knowledge and skills of aspiring principals coming into the program, and what balance of skills they need to develop. These decisions will inform both the content required, and how it can be delivered.
4. How should the program be designed and delivered? Once content is specified, it is easier to determine the leadership experiences to be emphasised in program delivery. Effective leadership development programs provide a variety of learning experiences encouraging collaboration, feedback and the opportunity to practice new skills in a real world context. Program features that support effective leadership development include collaborative learning, individual needs diagnosis and development plans, case studies, e-learning, coaching and mentoring, simulations and placements and applied learning projects. Different courses emphasise different learning experiences depending on their structure and objectives.

5. How should the program be evaluated? Measuring the impact of leadership development in any sector is difficult. However, program evaluation is important to assess the value and worth to participants, schools and systems, and to guide ongoing program improvement. The causal chain between principal preparation and student outcomes is long. Therefore, program evaluations may consider intermediate or 'proximal' outcomes (such as the change in participants' behaviours) as well as longer-term student performance data. A mixed methods approach helps paint a more realistic picture, and allows for triangulation of findings using different sources of data.

This report was prepared by Learning First for the Australian Institute for Teaching and School Leadership (AITSL) to identify the key considerations in the design of principal preparation programs in the Australian context.

2. Introduction

School principals matter, especially in decentralised systems; they lead students, staff and community to improve the quality of teaching and learning. Principals are also system leaders – they work in school networks to improve education and are the interface between system-wide reform and their own schools. It is unsurprising then that principals play a pivotal role in making schools more effective.¹

Decentralising education decisions to the school level means increased breadth and complexity of school principals' responsibilities. Developing aspiring principals' leadership capacity to undertake the role is therefore crucial.

To effectively develop leaders, we must recognise where they come from. Principals traditionally come from the teaching ranks, although the pathway from teacher to principal can vary considerably. The transition from teacher to principal is challenging – experience as a teacher does not necessarily develop the required knowledge, skills and leadership abilities required for their new role. They will need to take a broader, more strategic perspective.

The Australian Professional Standard for Principals (the Standard) defines the role and details what is required of aspiring – and existing – principals. It also provides a helpful and consistent framework for the design of programs aimed at preparing the next generation of school leaders.

There is little research that links the effectiveness of school leadership development programs to school outcomes.² There is, however, widespread consensus among practitioners, researchers and policy makers that professional training and development have an impact on participants by improving leaders' knowledge, skills and dispositions.³

This report sets out key considerations for the design of principal preparation programs. It examines contemporary theory and research on effective leadership development, and how leaders are prepared and supported in their roles. The report examines what Australian principal preparation programs can learn from exemplary programs around the world. Importantly, the report extends this knowledge with lessons from other sectors with a strong history of leadership development. These include the military, executive education, health administration and professional service sectors.⁴

1 Scheerens and Bosker (1997); Teddlie and Reynolds (2000); Townsend (2007) cited in Pont, Nusche and Moorman (2008); Leithwood et al. (2004); Bush and Jackson (2002); Slater (2008). Particular leadership practices are associated with measurable improvements in student learning – Hallinger and Heck (1998); Robinson (2007); Marzano, Waters and McNulty (2005); Waters, Marzano and McNulty (2003).

2 Davis et al. (2005). This is also the case in leadership development in other contexts: Hoole and Martineau (2014).

3 Pont, Nusche and Moorman (2008).

4 See Appendix 1 for a full list of leadership development programs examined.

3. The school principal role

School principals have a complex role. They need exceptional leadership and management skills, combined with up-to-date knowledge about educational practices to lead improvements in teaching and learning.

In successful schools, principals engage staff to develop a shared set of values and beliefs and commitment to improving teaching and learning.⁵ School leaders also need to navigate the particular cultural, political and economic environments of their schools.⁶ To achieve this, leaders need to develop their own leadership identity - a strong sense of self-efficacy and who they are as a leader.

Australian principals are generally senior and experienced educators, with significant classroom and school management experience. However, leadership experience within a school does not necessarily prepare teachers to undertake the principal role, and not all principals receive effective preparatory leadership training.

Box 1

Profile of Australian principals

Australian principals are senior and experienced educators. 73 per cent are aged 50 or over, with an average of 27 years of classroom experience before becoming a principal – one of the highest levels in the OECD. They also have approximately 12 years of experience in school management positions before becoming principals. Many principals must balance teaching obligations with their leadership responsibilities.

Despite this experience, 36 per cent of principals have had no school administration or principal training, and 31 per cent have not undertaken any instructional leadership training. Of those who had received formal training, 45 per cent reported receiving average or weak leadership training as part of their formal education.

Although most principals take action to ensure that their teachers take responsibility for their students' learning outcomes (82 per cent) and for improving their own teaching skills (76 per cent), only a third regularly observe instruction in the classroom. One in seven principals rarely or never observe classroom instruction.

Compared with other OECD countries, principals in Australia are generally more likely to find relevant professional development opportunities (89 per cent), but also to find that work (61 per cent) or family (28 per cent) commitments act as barriers to their participation.

Source: OECD (2014) Tables 3.2, 3.8, 3.10, 3.12, 3.13, 3.14, 3.15

5 Jacobson and Bezzina (2008).

6 Jacobson and Bezzina (2008).

3.1 The Australian Professional Standard for Principals

The Australian Professional Standard for Principals (the Standard) defines the role of the principal.⁷ The Standard describes what principals need to know, understand and do in their job (see Figure 1). Additionally, the Australian Professional Standard for Principals: Leadership Profiles describe the role of the school leader, on a continuum from least to most complex.⁸

School principals' main role is to positively impact student learning. However, their role and responsibilities are broad; principals must be able to do the following.

- **Lead teaching and learning** and its improvement in the school through a collaborative culture of planning, monitoring and reviewing.
- **Develop themselves and others** through building their own, and other teachers' capacity. This includes supporting their continual learning, providing feedback and enabling all to improve.
- **Lead improvement, innovation and change** to implement the school's vision and strategic plan.
- **Lead the management of the school** including managing the human, physical and financial resources effectively, ensuring good governance and meeting accountability requirements.
- **Engage and work with the community**, developing positive partnerships with students, families and carers and the broader school community.⁹

Principals require strong leadership skills and capabilities in order to accomplish these things. These are captured by the Standard's three school leadership requirements.

- **Vision and values:** principals must develop a vision for their school and take steps to implement it. This is evident in the strategic vision, school culture, traditions and positive ethos they promote within the school.
- **Knowledge and understanding:** principals need knowledge and understanding of both teaching and learning (including curriculum, pedagogy and assessment), but also leadership theory and practice. They must apply the combination of this knowledge in undertaking their role.
- **Personal qualities and social and interpersonal skills:** leadership and management of a school requires principals to be emotionally intelligent, resilient and to act with empathy. These qualities and skills ensure that principals can communicate, negotiate, collaborate and advocate effectively with everyone in the school community they lead.¹⁰

Principals must draw on these leadership skills in their role which are essential to, and interdependent with, their professional practices.

7 Australian Institute for Teaching and School Leadership (AITSL) (2011).

8 Australian Professional Standard for Principals: Leadership Profiles <http://www.aitsl.edu.au/leadership-profiles>.

9 Australian Institute for Teaching and School Leadership (AITSL) (2011).

10 Australian Institute for Teaching and School Leadership (AITSL) (2011, pp. 6-7).

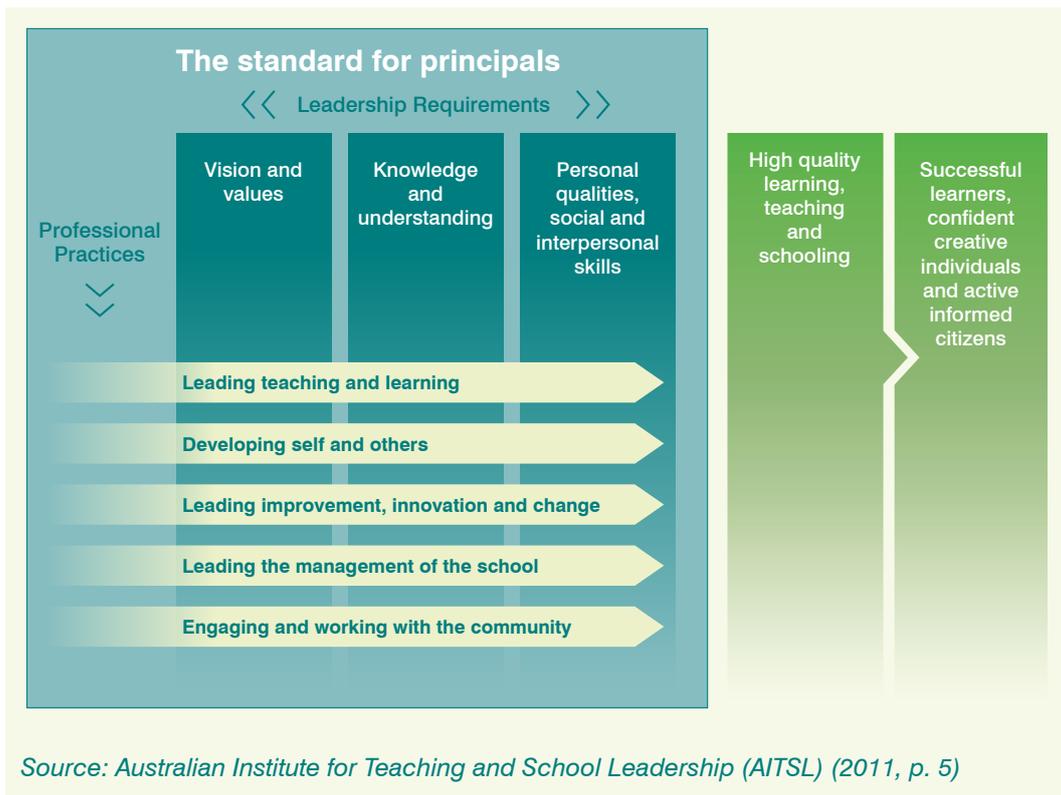


Figure 1: Australian Professional Standard for Principals

3.2 Principal preparation programs should align with the Standard

The Standard assists in developing aspiring principals by providing a framework for professional learning. It signposts the knowledge, understanding, skills and competencies that principals need to be effective. Through this, aspiring principals can map their knowledge, skills and experience against the Standard and the Leadership Profiles to identify areas for further development.

Aligning the content of principal preparation programs to the Standard has a number of benefits. Standards and frameworks are useful for managing the breadth and complexity of knowledge, skills, and competencies that might be included in leadership development programs. In so doing, this provides a framework for greater cohesion, rationale and structure to program content.¹¹ Further, program content aligned to the Standard can help shift the thinking and expectations of principals about their new role, and build their identity as instructional leaders.¹²

Many programs in the United States strongly reflect the Inter-State School Leaders Licensure Consortium Standards, whilst principal preparation programs in the United Kingdom and Ontario are closely aligned to national standards or leadership frameworks.¹³

Appendix 2 summarises the content of leading courses around the world and then maps these to the Standard.

¹¹ Darling-Hammond et al. (2007).

¹² Darling-Hammond et al. (2007).

¹³ The United Kingdom has National Standards for Head Teachers while Ontario has a Leadership Framework.

3.3 Leading and adapting to change

The role of the principal will continue to evolve in response to changing expectations and requirements.¹⁴ The role, and the standards that define it, will be influenced by changes in school autonomy, continued professionalisation of teaching, system policies and priorities, and career development structures and pathways.

We cannot predict how these changes will impact on the requirements of school principals, and how to best prepare them for the role. Therefore programs must prepare principals who can think strategically and are adaptable and flexible in their approach.

Effective standards and frameworks should evolve to reflect contemporary understanding about effective leadership development. Therefore, programs that are defined around such standards and our understanding of leadership should be periodically reviewed to ensure ongoing alignment.¹⁵ Programs should also be continuously revised to reflect updated and new educational knowledge.

¹⁴ Pont, Nusche and Moorman (2008).

¹⁵ Leithwood (2012).

4. Developing principal preparation programs within broader leadership development

Key questions

How does principal preparation fit into broader leadership development? How does this impact the timing and design of the principal preparation program?

Leadership development is an ongoing process, and principal preparation programs are just one component of leadership development within someone's career.¹⁶ For example, entrants to the Singapore principal preparation course are normally selected early in their career and placed on a leadership career track that provides a series of leadership training programs and on-going coaching before they enter the course. This contrasts with some systems where people self-select into principal preparation courses with little prior leadership development. The ideal principal preparation course for these people will substantially differ from the ideal course in Singapore; the structure and intensity of career development impacts the optimal timing and design of a principal preparation course.

As illustrated in Figure 2, optimal principal preparation program design depends on where a specific program sits on the continuum of individual development. Such development monitors leaders' progress over time, providing good information on leaders' skills and abilities. Systems with less structured ongoing leadership development and talent management regularly lack this information and therefore benefit greatly from more rigorous selection processes into principal preparation programs.

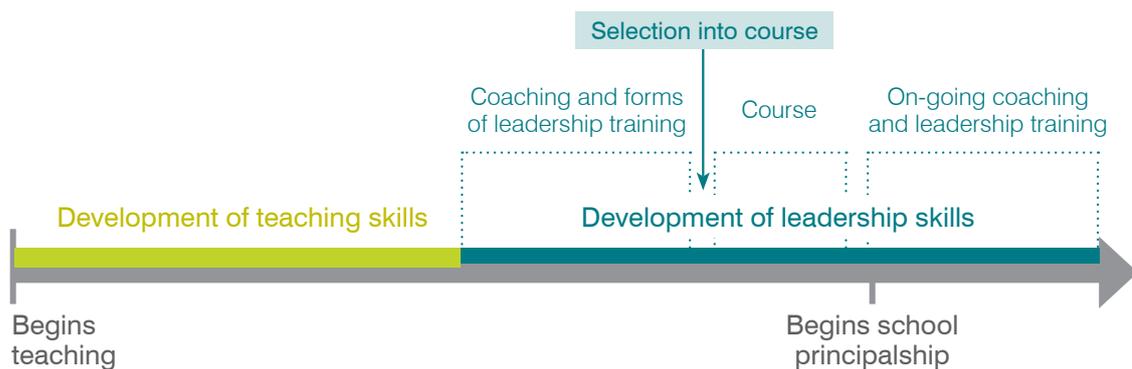


Figure 2: Stylised example of career teacher and leadership development

¹⁶ Pont, Nusche and Moorman (2008).

The optimal content and design of a principal preparation program therefore depends on the following.

- The knowledge, skills and abilities people bring to the course (which is a function of their leadership career development and course selection process).
- Their job after completing the course. For example, do they go straight into a school principal position? (This is a function of career development and job selection and placement.)
- The ongoing leadership development they will receive after the course that, again, is a function of leadership career development in the system.

After these are identified, it is possible to develop program content and delivery methods to meet:

- the immediate requirements of becoming a school principal
- the longer-term development needs for effective school principals.

This differentiates immediate and longer-term needs in order to sequence learning and development, and consequently to determine suitable content for a point-in-time principal preparation program.¹⁷

4.1 Career leadership development

Leadership career pathways provide clear signals and expectations for leadership behaviour and development. They detail the opportunities for people to progress, the skills and leadership behaviours required for progression and the feedback and performance management systems that support the pathway.

The rank-based promotion system within the Australian Defence Force clearly articulates how people can progress through the hierarchy. Promotion is based on annual performance reviews where candidates are rated on particular skills. At the more junior ranks, candidates are assessed on mastering increasingly complex technical skills related to their field. At the more senior levels, the emphasis shifts from technical to leadership skills, with candidates assessed on their demonstrated commitment to a range of core values. This system of assessment and promotion is open and transparent and has broad-based support within the Australian Defence Force (see Box 2 for more detail).¹⁸

¹⁷ This paper doesn't attempt to identify what elements of the Standard reflect immediate and longer-term competences and related learning requirements. However, it is proposed that one-off programs are ideally designed and situated in a longer term 'talent management' process that considers how and when potential leaders are identified, with an incremental approach to fostering their development in readiness for, and beyond, their first appointment to school leadership.

¹⁸ Interview with Lieutenant General Peter Leahy (28 August 2014).

Box 2

Australian Defence Force (ADF) support for leadership development

Internationally, the military has had a historical need to consistently produce excellent leaders and has developed effective leadership development processes to meet this need.¹⁹

The Australian military has a strong focus on leadership development from the outset of each recruit's career.²⁰

The Defence Leadership Framework (DLF) outlines the leadership capabilities, proficiencies and behaviours expected at each level or rank. It is underpinned by five key capabilities considered essential for leadership in the ADF: strategic thinking, results, relationships, personal drive and integrity, and communication.²¹

This facilitates development and promotion by providing detailed examples of the complex behaviours expected of emerging leaders in the military.

Source: Australian Government Department of Defence (2010), interviews with Lieutenant General Peter Leahy (28 August 2014) and Brigadier Peter Gates (10 September 2014)

In a number of professional service organisations clear leadership pathways are combined with detailed performance feedback. The organisation sets clear expectations for leadership responsibilities and competencies for each position in its career pathway. Employees are assessed against these, and other, competencies, provided with detailed feedback and supported to develop their skills. This feedback ensures that employees know where they stand and are continuously developing both technical and leadership skills as they progress.²²

Similar pathways exist in some education settings. Singapore provides the most explicit example of providing clear leadership pathways through distinct career tracks. Job positions within each track have clearly defined responsibilities and leadership requirements, supported by comprehensive performance management. Educators are assessed for promotion within each track, and lateral movement between tracks is possible, provided the applicant meets the necessary criteria of the new track. Requirements for promotion within each track are clearly set out and people are assessed according to defined criteria.

- **Teaching Track:** teachers can progress through teaching ranks by developing pedagogical skills and taking on leadership roles such as a lead, master or principal master teacher. These positions include increasing leadership responsibilities in developing professional capacity in subject content, pedagogy and assessment within individual schools, clusters and at the system level.
- **Senior Specialist Track:** teachers and educators develop high-level skills in specific areas of learning and teaching (such as subject-specific pedagogy). They work both within and between schools, as well as within the Ministry of Education.

¹⁹ Halpin (2011).

²⁰ Australian Government Department of Defence (2010).

²¹ Australian Government Department of Defence (2010).

²² Interviews with Larry Kamener (20 August 2014) and Stefan Fothe (27 August 2014), Boston Consulting Group.

- Leadership Track: teachers with high leadership potential are placed on the leadership track. These teachers can progress through the ranks of subject/year level head, head of department to vice principal and principal. Additional leadership experience before becoming a principal can include recruitment to academic and administrative committees and secondments to the Ministry of Education. The final step before becoming a principal is to undertake the six-month, full-time Leaders in Education Program at the National Institute of Education (NIE).²³ (See Box 20 in Chapter 7 for more detail.)

The role of principal is not the end of the Leadership Track. Principals can continue to progress by becoming a Cluster Superintendent, Deputy Director, or Director of Education in the Ministry of Education.²⁴

Other education systems situate principal preparation programs within pathways of broader leadership development programs. In the United Kingdom, the National College for Teaching and Leadership provides leadership programs at distinct levels including middle leaders, senior leaders, head teachers and system leaders. This provides a ladder or sequence of leadership and skill development that aspiring principals can progress through.²⁵

In the United States, the Knowledge Is Power Program (KIPP)²⁶ uses a Leadership Competency Model (LCM) as the basis for developing skills, knowledge and attitudes as educators progress through the most common sequence of leadership roles. In turn, this impacts the preparation courses that the KIPP foundation runs. A series of year-long, sequentially built programs develop leadership skills for each new level of school leadership.

- Teacher leader program: skills and competencies needed to be successful in new roles such as grade level chair, department chair, and program coordinator.
- Leadership team program: a program for assistant principals new to their roles to develop the school-wide leadership and management skills needed to be effective members of the school leadership team.
- Successor leader program: a program specifically tailored to prepare leaders who will take over an existing KIPP school at the start of the next school year.
- Regional leader program: a program for KIPP regional leaders new to their roles to develop the leadership skills and competencies needed to be successful in their roles.²⁷

All of the pathways above rely on a strong performance management system that either explicitly determines or strongly influences selection into leadership preparation programs. Such selection mechanisms define the knowledge, skills and abilities people bring to a leadership preparation course. The course can then be designed to scaffold learnings onto existing capabilities.

This differs from education systems where entrants largely self-select into principal preparation programs. Self-selection changes the optimal design of principal preparation courses as it is much harder to scaffold onto entrants' existing knowledge, skills and abilities because they will vary from one person to the next.

²³ Interview with Pak Te Ng, National Institute of Education, Singapore (19 August 2014); Ministry of Education, Singapore (n.d.).

²⁴ OECD (2009); Ministry of Education, Singapore (n.d.).

²⁵ Interviews with Maggie Farrer (30 August 2014) and Dr Jane Doughty (26 September 2014) both formerly of the United Kingdom's National College for Teaching and Leadership.

²⁶ KIPP is a national network of public charter schools across 19 states, serving more than 21,000 students, 80 per cent of which are from low-income families.

²⁷ KIPP Foundation (2014).

This does not mean that improving principal preparation courses requires a drastic overhaul of career pathways, but it highlights the benefits of improving the screening of applicants as part of a more comprehensive selection process.²⁸

4.1.1 Selection into courses

Comprehensive selection processes enable a better understanding of the development needs of individuals and systems. This allows for more targeted – and therefore more effective – program design. It also increases the effectiveness of courses as the quality of entrants, and their prior experiences, directly impacts the quality of peer-to-peer learning. A rigorous selection process ensures that all participants have the requisite skills, knowledge, prior experience and leadership disposition to undertake the course.²⁹

Selection processes for leadership development programs depend on whether individuals ‘opt-in’, or whether the organisation has a broader talent management program to identify and nominate individuals to complete leadership development programs.

The benefits of introducing comprehensive selection processes are greater in education systems where there is little system-level talent management. Shifting away from an opt-in approach to principal preparation programs sets a higher standard and identifies the skills and abilities of entrants. This in turn enables better targeting and program design.

In the United Kingdom, applicants for the National Professional Qualification for Headship (NPQH) are assessed against principal standards and a competency framework through an application process and assessment involving oral and written tasks. Assessors provide applicants, both successful and unsuccessful, with feedback on their performance, identifying their ongoing development needs to make the next step into principalship.³⁰

Several programs in the United States undertake proactive talent identification processes for admission to principal preparation programs. The New York Leadership Academy relies on a network of mentor principals, former graduates, and district leaders to recruit promising candidates, although any qualified candidate can apply. Network members know the program model well and are extremely effective recruiters who are able to help candidates determine whether the program is right for them.³¹

The New Leaders Program combines talent management with feedback. The program is highly selective with approximately seven per cent of applicants accepted into the program. Unsuccessful applicants that are deemed to be one to three years away from being ‘ready’ are given one-on-one feedback about their strengths and areas that need development. They are counselled on next steps and helped to map out individual development plans. In some cases, the program consults the applicant’s principal to explore leadership development opportunities within their school.³²

28 This could be combined with a broader needs analysis that compares the capabilities required of school leaders to continuously improve teaching and learning in their schools with the existing capabilities of entrants to principal preparation programs.

29 Mitgang (2012). It is also important for individuals to experience the ‘right amount of challenge’ in a program. Leadership development is slowed when individuals are asked to deal with experiences that are outside their current capabilities. See DeRue and Wellman (2009).

30 Interview with Dr Jane Doughty, formerly of the United Kingdom’s National College for Teaching and Leadership (26 September 2014).

31 Corcoran, Schwartz and Weinstein (2009), (2012).

32 Cheney et al. (2010).

Box 3

Selecting the right candidates for the New York City Aspiring Principals Program

The New York City Aspiring Principals Program requires participants to undertake multiple assessment activities including individual and group interviews, as well as tasks such as role plays. These are designed to assess applicants' problem solving, communication, self-awareness and interpersonal skills. Applicants must demonstrate baseline skills and dispositions: professional integrity, deep commitment to closing the achievement gap, sufficiently developed communication and problem-solving skills, resilience, the capacity to work collaboratively with others, and an openness to the goal of continuous and public learning.

During the group interview process, applicants must consider an authentic school dilemma involving issues of school culture and climate, and demonstrate an awareness of and attention to possible pitfalls and negative responses from various constituent groups. Throughout the group interview, the facilitator probes applicants' values, encourages them to work as a team, and pushes them to think through implementation challenges and the implications of their proposed actions. This process enables the Leadership Academy to obtain good information about each applicant's ability to analyse causation and develop a strategic plan.

Source: Cheney et al. (2010)

Outside of school education, executive education courses usually use a combination of organisational talent management processes and a university application process. The application process is highly selective and competitive given the prestige and reputation of the courses profiled. Selection criteria ensure that participants have the requisite level of work experience, a strong academic record, demonstrated leadership ability, a global perspective, letters of recommendation and organisational support for the application.³³ Interviews are also regularly conducted.

4.2 Summary

How aspiring principals are developed throughout their career impacts the preparation they require in transitioning to their new role. Principal preparation program design, including content and delivery methods, depends on the knowledge, skills and abilities that participants bring to the program (in part determined through selection processes), their job after completing the program and their ongoing leadership development opportunities.

Principal preparation programs that sit on a continuum of leadership development can tailor content and delivery to build on participants' prior experiences. Systems with less structured leadership development and talent management will benefit more from a rigorous selection process.

³³ The degree of experience required before undertaking Executive MBAs varies. For example, MIT's Sloan Executive MBA requires at least eight years of post-undergraduate work, whereas IMD's Executive MBA requires at least 15 years of experience.

Selection processes enable a better understanding of development needs of both individuals and systems. This allows for more targeted – and therefore more effective – program design. It also increases the effectiveness of courses as the quality of entrants, and their experiences, directly impacts the quality of peer-to-peer learning. A rigorous selection process ensures that all participants have the requisite skills, knowledge, prior experience and leadership disposition to undertake the course.

Selection processes from programs examined for this report – where participants opt-in to programs – assess applicants against system standards and competencies. The processes include written applications, face-to-face interviews, group interviews including problem solving, written and oral tasks, and feedback to participants.

5. Program purpose and desired outcomes

Key questions

What is the purpose of a principal preparation program? How does it help principals to deliver on the strategic objective of improving teaching and learning?

What are the desired outcomes of the program?

Principal preparation programs must help aspiring principals transition from being a teacher to being a leader and manager who can deliver on their education system's strategic objectives.

As a result, program design must consider the following questions.

- What are the strategic objectives of the education system? What is the system trying to achieve and how does the program help develop principals to deliver these objectives? How does it help teachers transition into the role of principal?
- What are the desired outcomes of the program? What does the education system want aspiring principals to know and be able to do stepping into the role? Will the program develop aspiring principals' pedagogical content knowledge to help improve instruction? Will it develop leadership behaviours?

These considerations are crucial to informing the design of any principal preparation program, including the program content, design and delivery methods, and how to evaluate the program, as demonstrated in Figure 3.

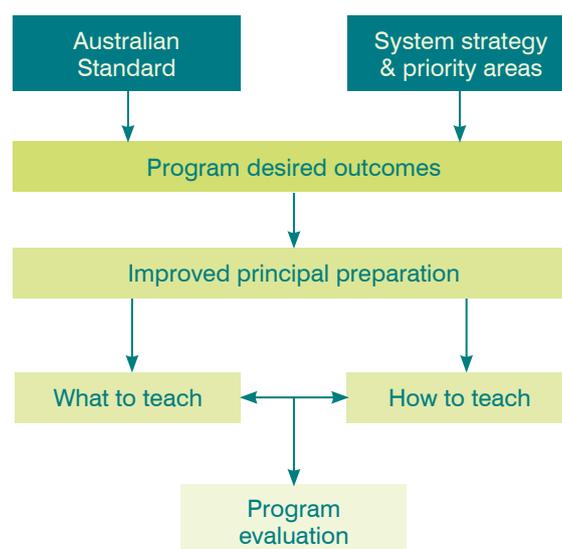


Figure 3: System strategy and desired outcomes impact program design

5.1 Purpose of principal preparation programs

Leaders across all industries need to be able to deliver on their organisation's strategic objectives. Therefore leadership development programs should align with an organisation's objectives.³⁴ It is important to explicitly articulate this fundamental yet simple point, as it underpins the design of principal preparation programs. The Standard, combined with education systems' objectives, detail the knowledge, skills and abilities that aspiring principals need to improve teaching and learning.³⁵

Leadership programs in many industries have not always been designed to effectively respond to the customer's purpose.³⁶ For example, programs have been built on what research says is effective leadership rather than developing leaders who can deliver an organisation's strategic objectives.

In education, we assume that for most systems, their strategic objective is to improve student outcomes in schools.³⁷ Therefore, principal preparation programs should develop aspiring principals with the skills to lead schools to improve teaching and learning.

5.1.1 Education systems' priorities and context

Principal preparation programs should also take into account particular policy priorities or other contextual factors at the local or system level.³⁸ For example, in the United States, the No Child Left Behind policy increased school accountability for improving outcomes for all students. The National Institute for School Leadership (NISL) Executive Development Program was developed in this context. It identified that, in order to improve outcomes for all students, principals needed to develop stronger instructional leadership, including standards-based instructional systems, leading professional learning, and data-driven strategy development. The NISL curriculum supports effective implementation of state standards and accountability systems.

Other programs in the United States have been specifically designed to develop leaders to run 'turnaround schools'. For example, the New Leaders Program prepares aspiring principals to lead culture change and improve teaching and learning in schools that historically have poor student outcomes.

In Singapore, the Ministry of Education invests heavily in identifying teachers with leadership potential at an early stage, and fast-tracking them into leadership training programs. Therefore, the Leaders in Education Program curriculum has a strong emphasis on the philosophy, culture and values of leadership, and includes contemporary strategic management strategies such as competitive advantage, branding and choice.

In Australia, the different policy priorities of jurisdictions and education sectors will inform local program content, or emphasise the need for particular skill development in different contexts. For example, the levels of principal autonomy over staffing and financial resources vary between states and territories. Where principals have greater flexibility, programs may focus on developing management skills, such as budgeting, and strategic resource allocation.

³⁴ McCauley (2008).

³⁵ This is clearly illustrated in several principal preparation programs around the world. For example, the United Kingdom's National Professional Qualification for Headship (NPQH) program explicitly links its standards and strategic objectives of improving teaching and learning with a core module of the program.

³⁶ Human resource leaders and senior management are finding they must better align organisational goals with leadership selection and development strategies, see Zenger, Ulrich and Smallwood (2000).

³⁷ Robinson, Lloyd and Rowe (2008).

³⁸ OECD (2007).

5.2 What are the desired outcomes of the program?

Once the purpose of a principal preparation program is clearly identified, it is easier to articulate the desired outcomes of a program. For example, is the intended outcome to improve:

- principals' *knowledge and skills* in particular areas such as knowledge of policy frameworks, skills in budgeting and finance or strategic planning processes
- *leadership behaviours* of the aspiring principals such as transformational or adaptive leadership
- specific aspects of school leadership such as leading 'turnaround schools' (to align to a system's strategic priorities)
- a mix of the above? If so, what are the priorities?

Box 4

Principal development programs: How contrasting purposes influence program content

A) First-time Principals Programme, New Zealand

The purpose of the program is to develop core, consistent skills for school-level leadership for all new principals. The content of the program reflects a broad base of personal and role development, contextual awareness, and dimensions of school leadership.

Core modules include: developing self; leading learning; leading change; future-focused schooling; and understanding the role of the principal.

(B) National Professional Qualification for Headship (NPQH), United Kingdom

The purpose of the program is to certify the competency and readiness of participants for headship. The program includes core modules with an emphasis on personal and school effectiveness and managing performance improvement.

Core modules include: leading and improving teaching; using data and evidence to improve performance; leading an effective school; and succeeding in headship.

Elective modules include: curriculum development; leading inclusion: achievement for all; closing the gap; leading change for improvement; school improvement through effective partnerships; leading staff and effective teams; freedoms and constraints; and relationships and reputation. Participants also undertake a placement in another school.

(C) New Leaders Program, United States

The purpose of the program is to prepare leaders to transform low-performing urban schools. The program content is structured around the

Urban Excellence Framework that defines leadership practices that drive dramatic gains in academic achievement. The Framework has a strong focus on personal impact on culture change and instilling achievement-focused values and goals.

Core teaching areas include: student achievement-based learning and teaching; achievement and belief-based school-wide culture; personal leadership; high-quality staff aligned to vision; operations and systems to help drive learning and school culture.

Source: New Zealand Ministry of Education (n.d.); Cheney et al. (2010); interviews with Maggie Farrer (30 August 2014) and Dr Jane Doughty (26 September 2014) both formerly of the United Kingdom's National College for Teaching and Leadership

Deciding between these outcomes depends on the assumptions that program designers make about the impact of each on teaching and learning. Many leadership courses have been developed on the assumption that improving the knowledge and skills of an individual will improve their ability to lead.³⁹ More recent developments in leadership training have focused on how to better develop leadership behaviours, requiring new content and delivery modes (see Chapters 6 and 7).

To assist principal preparation programs to target specific aspects of leadership development, it would be helpful to identify the leadership development needed across a system. A needs analysis would identify the gap between aspiring principals' current knowledge, skills and leadership abilities compared with those required by the Standard and system strategic objectives.

Such analysis could also be targeted toward specific groups of leaders. For example, aspiring principals are likely to be excellent teachers in their field. This may mean they have excellent pedagogical content knowledge in one area, but lack the necessary content knowledge in other areas in order to lead and develop others' teaching practices. As a result, a principal preparation program may need to build a combination of their pedagogical content knowledge and leadership skills in order to lead and develop teachers in other subject areas.

5.3 Summary

Principal preparation programs should align to the strategic objectives of the education system – to improve teaching and learning. They should also help teachers transition into the role of principal.

Programs should be clear about the desired outcomes. Program design should take into account what the education system requires aspiring principals to know and be able to do when they step into the role. Program outcomes may be at several levels – the program may need to develop aspiring principals' pedagogical content knowledge to help improve instruction, or develop particular leadership behaviours, or a mix of both.

³⁹ Collins and Holton (2004).

6. Program design: Program content

Once program priorities and outcomes are set, program designers can consider the fundamental question of what content to include. To address this question, this chapter is divided into key areas of leadership development that include:

- deeper subject matter knowledge and expertise
- new management and leadership skills
- higher-order leadership capacities
- developing a leader identity.

6.1 Developing deeper subject knowledge and expertise: Instructional leadership

All leadership programs develop sector specific knowledge to help people lead their organisation and improve the work of their staff. In executive education, programs develop participants' technical knowledge in finance, strategy, marketing and business operations. In the Australian military, leaders need to understand operational elements including command, logistics and technological requirements.⁴⁰ In health administration, medical experts need to have knowledge of health care systems, advanced patient care and the ability to assess clinical risks.⁴¹

In education, this knowledge is about teaching and learning. Increasingly, principal preparation programs emphasise leadership of instruction and school improvement, integrating instructional and transformational leadership.⁴²

Instructional leadership is a term frequently used, but the skills and behaviours it entails are often not clearly defined.⁴³ It can mean different things to different people, and how it is understood continues to develop over time.⁴⁴ This is important as principal preparation programs should help leaders to develop the instructional practices that have the highest impact on student achievement and progress.⁴⁵ One of the most clearly articulated definitions is by Hallinger, who describes instructional leadership as:

- defining the school's mission: framing and communicating goals
- managing the instructional program: supervising instruction, coordinating curriculum and monitoring student progress
- promoting a positive school learning climate: protecting instructional time, professional development, a visible presence, promoting high expectations and providing incentives for teachers and students.⁴⁶

40 Australian Defence College (2014).

41 The Royal Australasian College of Medical Administrators (2011).

42 Darling-Hammond et al. (2007); The Wallace Foundation (2008); Mitgang (2012); Dempster, Lovett and Flückiger (2011).

43 Portin et al. (2009); Prestine and Nelson (2005).

44 Hallinger (2005).

45 As well as developing high-impact practices, the discipline of thinking about the relative effects of different aspects of the teaching and learning context is an important attribute of leadership, as identified in the personal resources section of the Ontario Leadership Framework, Leithwood (2012).

46 Hallinger (2005). The OECD's Teaching and Learning International Survey (TALIS) assesses the frequency of leadership practices in improving teaching and learning. These include ensuring that teachers feel responsible for students' learning outcomes; taking action to ensure that teachers take responsibility for improving their teaching skills; collaborating with teachers to solve classroom discipline problems; providing parents or guardians with information on the school and student performance; taking action to support cooperation among teachers to develop new teaching practices, and observing instruction in the classroom; OECD (2014).

Reflecting these broad definitions, the five leadership dimensions that have the greatest direct impact on student outcomes are leading teacher learning and development; establishing goals and expectations; planning, coordinating and evaluating teaching and the curriculum; resourcing strategically; and ensuring an orderly and supportive environment.⁴⁷

The greatest impact is achieved through leading effective teacher learning and development. This requires principals to have skills in diagnosing problems and learning needs; selecting or designing appropriate development opportunities; modelling self-development; and leading learning within the school.⁴⁸ The skills and practices associated with these high-impact leadership dimensions are summarised in Appendix 4.

The features of instructional leadership identified above are strongly aligned with the *Leading teaching and learning practice* of the Standard.⁴⁹

Box 5

Australian Standard: Leading teaching and learning – How to lead, design and manage effective teaching and learning, and set high expectations for students' achievements

Necessary knowledge and understanding includes the values and expectations of the school community as well as the wider system and policy context, and how to prioritise these; how students learn and how to build student efficacy in learning; how to lead learning; how to assess the effectiveness of teaching and program resources; and how to use personal expertise, current research, and student feedback to help improve teaching practice and learning experiences.

Necessary skills and expertise includes curriculum planning; pedagogical practice; formative assessment practice and assessment literacy; monitoring and reporting progress; and how to establish systems to monitor, assess and improve student progress that are integrated into the planning and delivery of learning programs; processes to review and evaluate the effectiveness of learning programs and teaching practices.

Personal and social skills include the ability for self-reflection to understand personal values and philosophy on educational leadership, and to effectively communicate, justify and build commitment to the vision and strategic objectives of the school.

Note: These skills and competences are drawn from the literature and case studies examined in this report. They are proposed for consideration during the design of principal preparation programs.

Source: Key sources include, but are not limited to: Cheney et al. (2010); Darling-Hammond et al. (2007); Hallinger and Lu (2013); Leithwood (2012); Marzano, Waters and McNulty (2005); National College for Teaching and Leadership (2014); Robinson (2007); The Wallace Foundation (2008); Torres, Reeves and Love (2010)

⁴⁷ Robinson, Lloyd and Rowe (2008).

⁴⁸ These skills are reflected in the *Developing self and others* practice of the Standard, discussed later (see Section 6.3).

⁴⁹ A more comprehensive table of the Standard and required knowledge, skills and abilities is contained in Appendix 3.

Programs differ in how they translate the evidence on effective leadership practices into development courses. In the United States, the NISL Executive Development Program focuses on standards-based instructional systems. Modules include subject-specific content on leading highly effective literacy, numeracy and science programs. This improves principals' knowledge on what effective instruction looks like in different subject areas and how to build teams as an instructional leader. The program prepares leaders to:

- make good judgements about the quality of the teaching in a classroom, based on analysis of student work
- recognise good classroom instruction in each of the core subjects in the curriculum
- recognise the elements of sound, standards-based classroom organisation and practice
- determine the quality of instructional materials
- provide strong coaching to teachers on all of the foregoing
- evaluate whether the school's instructional systems are properly aligned.⁵⁰

The United Kingdom's NPQH program's 'Leading Teaching and Learning' core module helps aspiring principals to develop, improve and sustain high-quality teaching across a school. The module includes identifying effective teaching and the principal's role in leading and improving teaching. This includes:

- holding all staff to account for their performance
- setting high standards of behaviour
- identifying classroom management in relation to high-quality teaching and positive behaviour
- monitoring, evaluating and improving teaching
- conducting teacher appraisal, including how to improve teacher performance and address underperformance
- understanding how to work with pupils and parents to improve pupil attainment.⁵¹

These programs emphasise the development of greater content pedagogical knowledge. They do not assume principals need to be experts in every subject, but that they are able to recognise effective instruction in different subject areas.

6.2 Developing managerial and leadership skills

Managerial and leadership skills are all essential for school leaders and require specific training and development. The Standard includes a number of managerial skills such as finance and budgeting, human resource management and strategy that are important for effectively running a school.

Aspiring principals are unlikely to have developed this range of skills in their teaching roles. They are essential skills that need to be taught and learned in order to start work as a principal and can subsequently be further developed over time.

The managerial skills required align with the *Leading the management of the school* practice of the Standard.

⁵⁰ Interview with Jennifer Beck-Wilson, Director of Instruction, National Institute for School Leadership (18 September 2014).

⁵¹ National College for Teaching and Leadership (2014).

Box 6**Australian Standard: Leading the management of the school – Ensuring the school’s resources are efficiently organised and managed to provide an effective and safe learning environment**

Necessary knowledge and understanding includes the regulatory, policy and community requirements and expectations of the school, and the responsibilities of principals in meeting these; how to align resources to the strategic goals of the school; how to source human, financial and material resources; and how to best allocate these against priorities.

Necessary skills and expertise include budgeting and financial management; human resource processes such as recruitment, induction and performance management; managing safety and wellbeing; managing building and ICT infrastructure; disciplinary and behavioural management processes (students and staff).

Personal and social skills include effective distribution and delegation of management responsibilities with appropriate levels of support and accountability; modelling personal accountability, time management and efficient use of resources; and creating a culture of shared responsibility and inclusivity.

Note: These skills and competences are drawn from the literature and case studies examined in this report. They are proposed for consideration during the design of principal preparation programs.

Source: Key sources include, but are not limited to: Cheney et al. (2010); Darling-Hammond et al. (2007); Hallinger and Lu (2013); Leithwood (2012); Marzano, Waters and McNulty (2005); National College for Teaching and Leadership (2014); Robinson (2007); The Wallace Foundation (2008); Torres, Reeves and Love (2010)

Executive MBA programs deliver high quality and often intensive learning programs specifically targeted at many of these skills, particularly planning and analytical skills, at both the operational and strategic levels.

As summarised in Table 1 below, a number of leading MBA programs combine management skills (functional, technical, and business processes) and leadership skills (strategic perspective, influence and negotiation, and change leadership). They also have a strong focus on developing higher-order leadership capabilities (discussed below in Section 6.3).

Table 1: Management and leadership skills in Executive MBA programs

Provider	Chicago - Booth	MIT Sloan	Virginia - Darden	IMD	INSEAD
Management dimensions					
Operations/business essentials	X	X	X	X	X
Financial management	X	X	X		X
Marketing and pricing	X	X			X
Decision making/judgement	X		X		X
Analytical frameworks		X			
Risk management		X			
Delivery/execution				X	
Leadership dimensions					
Leading people and organisations/essentials	X	X	X	X	X
Strategy, strategic leadership	X		X		X
Corporate strategy/competitive advantage	X	X			X
Global strategy	X	X	X	X	
Business, economic and political environment	X			X	X
Power and influence, negotiation	X	X		X	
Entrepreneurship/innovation	X	X		X	X
Change leadership		X	X	X	
Ethics			X		

Note: The University of Chicago Booth School of Business, Massachusetts Institute of Technology (MIT) Sloan School of Management, and University of Virginia-Darden School of Business operate in the United States; the Institute for Management Development (IMD) operates in Switzerland; and the Institut Européen d'Administration des Affaires (INSEAD) operates in Paris and Singapore.

Source: *Learning First analysis of course curricula*

Box 7

Aspects of MBA leadership and management curricula that could inform principal preparation programs

Operations and Project Management: Much of the work of the principal is conducted via ‘projects’. Principals need to understand techniques to translate strategic plans into results. Project management courses develop skills in planning and execution that maximise the efficient resource usage and increase the likelihood of goal achievement.

Decision Making: Increase emphasis on the ‘use of information for decision making’: for example, how to think about and ask questions that then draw upon data in the school environment for making decisions (assessment data, surveys of teacher, student and parent perceptions, teacher evaluation data, enrolment trends, marketing data). This should also include how to incorporate data effectively into presentations to different stakeholder groups.

Strategic Management: Courses in this domain (for example, strategic management, strategic planning, and competitive strategy) are important for principals given increasing competition, including global competition, and the emphasis on future development and school improvement.

Customer Orientation: As school education becomes more market oriented and competitive, school leaders need to be adept at understanding and meeting the needs of their communities. Program content could help to develop a customer orientation and basic knowledge of marketing for schools.

Source: Hallinger and Lu (2013)

In health administration, the Royal Australasian College of Medical Administrators (RACMA) provides leadership development through its Fellowship Program. Medical practitioners can qualify as health administrators as a medical specialty. RACMA’s Medical Leadership and Management Curriculum Framework integrates clinical, management and strategic skills across seven role competencies of Medical Expert, Communicator, Advocate, Scholar, Professional, Collaborator and Manager.⁵²

The curriculum comprises a national training program of workshops, coaching and in-training assessment; three years supervised medical management experience; and a Master’s degree which contains the core subject matter required by RACMA.

The academic study requirements include core content on health law and ethics, economics, financial management, statistics, and two management units (e.g. human resources, clinical governance and risk management, management and organisation, quality and systems improvement). Core units are generally supplemented by elective units that may include leadership, organisation, human relations or industrial relations.

⁵² The Royal Australasian College of Medical Administrators (2011).

Box 8**Distributed leadership in schools**

Distributed, or shared, leadership is increasingly common in schools. The responsibilities of school principals are complex and they are increasingly recognised as responsibilities that should be shared with others, both inside and outside the school.

Distributed leadership includes principals giving staff, parents and students opportunities to actively participate in school decisions. Principals can delegate or assign to others particular school level responsibilities such as behaviour management, curriculum development and supporting teachers to improve instruction.

A school culture of improving instruction is critical for distributed leadership. In 23 OECD countries, principals report using higher levels of distributed leadership when working in a school with a positive school climate of mutual respect, openness and sharing among colleagues. Sharing decision making may be easier in this environment, or it may help develop a school climate like this.⁵³ Other evidence suggests that distributed leadership can contribute to improved student outcomes,⁵⁴ assist schools to deal with rapid leader succession,⁵⁵ and facilitate school improvement processes.⁵⁶

Principal preparation programs should help new principals to understand and develop effective delegation and coaching practices, including how to work with others to agree clear expectations, how to monitor delegated responsibilities, and how to use constructive feedback processes to develop the leadership capabilities of others.

Source: OECD (2014, pp. 62-65); Elmore (2000)

6.3 Developing higher-order leadership capacities

Effective leadership requires higher-order thinking, and personal and social skills. Individual leaders need to develop strategic thinking skills, self-awareness, emotional intelligence, and a deep understanding of their personal values and how these values impact their decisions as a leader.

This chapter focuses on the higher-order leadership capacities required:

- strategic thinking
- personal and interpersonal skills
- ability to lead change
- developing leadership identity.

53 OECD (2014).

54 Louis et al. (2010); Hallinger and Heck (2009).

55 Mascal and Leithwood (2010).

56 Mascal and Leithwood (2010).

6.3.1 Developing strategic thinking

Leadership requires strategic thinking; leaders provide direction for organisations through their vision and strategy. Leaders must then establish the organisation's environment, culture and structure to help achieve the vision. To create a vision, leaders need to understand the context and policy frameworks in which they operate and have the skills to analyse the current state of the organisation. Leaders also need to understand what drives good performance in different contexts and how they can use that knowledge to form effective strategies.

Developing strategic thinking is central to all leadership development programs. The military has a strong focus on developing strategic thinking - senior officers need to develop effective solutions to complex problems through critical thinking and analysis.⁵⁷ Indeed, NISL's Executive Development Program draws heavily upon the military's strategy work, adeptly applying it to the education context.⁵⁸ NISL has created its own strategic thinking framework.

In developing strategic thinking, leaders need to gain a broader perspective of their organisation and its environment and purpose. This is often reflected in MBA programs as an opportunity to explore international practices and case studies. Participants in military leadership programs undertake placements in international and multi-agency settings, as well as placements in business organisations (discussed further below in Section 7.4). Including these experiences in principal preparation programs may encourage school leaders to perceive the 'big picture' of leadership purposes, and to learn from the experiences and practices of educators in other societies.⁵⁹

Several principal preparation programs provide these experiences: the United Kingdom's NPQH curriculum includes effective leadership in high-performing international systems, while Singapore's Leaders in Education Program includes a placement in a large multi-national company.

6.3.2 Developing the personal attributes and interpersonal skills of leaders

Leaders' presence, actions, communication and style all contribute to their leadership and what they convey to others.⁶⁰ As a result, leaders need to develop their emotional intelligence, including self-awareness, self-management, social awareness and relationship management. Being aware of, and understanding, their own values and emotions impacts on the decisions they make, their own behaviour as a leader and the way they interact with others. To increase this understanding, leaders need to tap into their own knowledge and experience and understand "how ideas and patterns from your whole life might contribute to your work".⁶¹

57 Australian Defence College (2012). In the Defence and Strategic Studies Course (DSSC), the foundational 'blocks' of the program include frameworks for strategic leadership, the contemporary and future strategic setting and understanding the higher command and conduct of joint command operations to experience the strategic and operational interface.

58 Interview with Jennifer Beck-Wilson, Director of Instruction, National Institute for School Leadership (18 September 2014).

59 Leithwood (2012).

60 Hiller and Beauchesne (2014).

61 Horth and Buchner (2014).

Box 9

Trends in leadership development theory

There is a long history of research in leadership and leadership development theory. Between the 1800s and the 1940s, there was an assumption that leaders were born and not made. Therefore research focused on the personal traits and characteristics of effective leaders – commonly cited is the ‘Big Five Traits’ framework – all of which have been linked to leadership in some way. These include extraversion, conscientiousness, openness to experience, neuroticism and agreeableness. Self-monitoring has also been linked to leadership, as has resilience, adaptability, integrity and initiative. However, evidence suggests that while traits can play a role, they alone cannot account for leadership effectiveness.

The focus of research then shifted towards a behavioural approach of what an effective leader does. Research highlighted the leadership styles of democratic, autocratic and laissez-faire leadership, including the behaviours that underpinned these styles. This move enabled leadership development to focus on training people in leadership behaviours but lacked success in explaining and predicting leadership effectiveness.

More recent theories are based on the premise that personality, style or behaviour of effective leaders depends on the requirements of the situation that leaders find themselves in. This theory of leadership also implies that people can learn to become good leaders.

Source: Nahavandi (2012); Bono, Shen and Yoon (2014); Avolio and Walumbwa (2014); Day (2014)

The importance of personal leadership abilities is reflected in Ontario's Leadership Framework (see Appendix 5). The Framework requires principals to develop the capacity to perceive and manage emotions of themselves and others, as well as to act in emotionally appropriate ways.

Designing learning activities to help develop these capabilities is complex. However, programs can provide opportunities for participants to exercise these skills, to practise making judgement calls, and to reflect on their experience. Reflecting on how they make judgements helps participants learn about how their values and emotions impact their leadership practice.⁶²

Developing these skills is an ongoing process, but leadership development programs incorporate activities and pedagogical methods to help achieve this. These are discussed in Chapter 7.

These personal skills are reflected in the *Developing self and others* practice of the Standard.

62 Pant (2011).

Box 10**Australian Standard: Developing self and others – How to build a professional learning community that is focused on the continuous improvement of teaching and learning**

Necessary knowledge and understanding includes finding sources of appropriate professional and peer support; how to identify development needs (self and others) and provide support to the individual that will also help meet the goals of the school; how to select and evaluate effective teacher development; and how to establish constructive peer observation, reflection and challenge.

Necessary skills and expertise include practising self-reflection; using formal and informal feedback processes; diagnosing staff development needs using student progress data; and designing and leading professional learning that staff need to meet strategic goals.

Personal and social skills include self-awareness and management of own identity and priorities as a leader; the ability to build trust and support so that problems and conflict can be addressed quickly and positively; the capacity to lead and participate in learning with staff; and modelling positive conversations focused on learning and wellbeing outcomes.

Note: These skills and competences are drawn from the literature and case studies examined in this report. They are proposed for consideration during the design of principal preparation programs.

Source: Key sources include, but are not limited to: Cheney et al. (2010); Darling-Hammond et al. (2007); Hallinger and Lu (2013); Leithwood (2012); Marzano, Waters and McNulty (2005); National College for Teaching and Leadership (2014); Robinson (2007); The Wallace Foundation (2008); Torres, Reeves and Love (2010)

6.3.3 Developing the ability to lead in changing contexts

Achieving objectives by leading organisational change in ambiguous and unstable environments separates leaders from middle managers.

Discussion about school-level change leadership has in recent years focused on the notion of 'transformational leadership' – planning and implementing a successful strategy to improve student achievement results through practical and cultural changes within the school.

Effective leaders are able to recognise the need for change and identify causes of, and solutions to, problems. They carefully plan how to create a changed state, anticipate potential barriers, and find ways to minimise or work around them. They create the culture and conditions needed to be successful, and engage people in and around the organisation in their vision. This involves a complex synthesis of skills and attributes applied according to suit the context and timing.⁶³

63 Nahavandi (2012).

A number of programs in the United States have been created specifically to prepare leaders for challenging appointments in schools in need of ‘turnaround’. The curricula in these programs heavily emphasise problem diagnosis, strategic planning, and cultural change.

The Doctorate of Education in Urban Education Leadership at the University of Illinois develops principals and administrative educational leaders who transform low-performing urban schools, systems, and entire districts. The program’s own Urban Education Framework aligns with the Inter-State School Leaders Licensure Consortium, but is designed with a specific transformational agenda. The program includes extended coaching by former principals who have transformed urban schools, followed by in-field assessment aimed at producing candidates with proven ability as school change agents. The program curriculum emphasises three signature themes: (a) cycles of inquiry and data use for improvement, (b) leadership for social justice, and (c) leadership practice development and assessment. It has a strong emphasis on collection and analysis of data at the school level, which leads to a data-based capstone thesis that focuses on strategies of leadership practice.⁶⁴

Transformational leadership skills and practices are at the heart of *the Leading improvement, innovation and change* practice of the Standard.

Box 11

Australian Standard: Leading improvement, innovation and change – How to lead evidence-based improvement, development and strategic planning

Necessary knowledge and understanding includes change management theory and practice; understanding how to find, evaluate and apply contemporary research and learning from local, national and international best practices; how to set ambitious goals, and how to put systems and processes in place that monitor, review and re-calibrate goals and progress.

Necessary skills and expertise include how to collect, assimilate and interpret data about student progress and use it for evidence-based conversations about teaching practices and performance; and processes that ensure staff regularly review and discuss evidence of student progress as part of their team planning and development.

Personal and social skills include creating a compelling vision or narrative for change; using personal expertise, authority and influence to build commitment and progress change; identifying and managing supporters and resisters of change; creating and shaping a school culture that encourages new ideas, seeks feedback, celebrates successes and learns constructively from experiences.

Note: These skills and competences are drawn from the literature and case studies examined in this report. They are proposed for consideration during the design of principal preparation programs.

64 Cosner, Tozer and Smylie (2012); Davis and Darling-Hammond (2012); Cheney et al. (2010).

Source: Key sources include, but are not limited to: Cheney et al. (2010); Darling-Hammond et al. (2007); Hallinger and Lu (2013); Leithwood (2012); Marzano, Waters and McNulty (2005); National College for Teaching and Leadership (2014); Robinson (2007); The Wallace Foundation (2008); Torres, Reeves and Love (2010)

The traditional view of change leadership as planning and delivering change ‘events’ is evolving. The organisational environment is becoming more dynamic as technology speeds up access to information and to other people. It is becoming easier to measure, evaluate and receive feedback on the impact of decisions made and actions taken. Change is less frequently a managed process, and more a constant feature of the environment.

The concept of transformational leadership is giving way to adaptive leadership. Adaptive leadership requires the same strength of vision and the determination to succeed that change-leaders need. However, it is more reliant on flexibility, resilience and resourcefulness.

To help new principals become adaptive leaders, programs will develop qualities that help them to encourage and consider diverse views; share leadership responsibilities to suit specific situations; to have an outward, questioning perspective; and to constantly assess and re-align the organisation and its goals as the environment changes.⁶⁵

Leading change and staying closely in touch with the changing expectations of the school community requires principals to constantly engage with others, seeking and weighing-up input and making connections to the strategic directions of the school. This requires a broad range of social capabilities. These include personal, procedural and relational knowledge and skills,⁶⁶ practices for changing school culture,⁶⁷ effective communication within and beyond the school and building high expectations,⁶⁸ and developing cultural competencies in response to system needs.⁶⁹ These relate to the *Engaging and working with the community* practice of the Standard.

65 Torres, Reeves and Love (2010).

66 Dempster, Lovett and Flückiger (2011).

67 Mitgang (2012).

68 Mitgang (2012).

69 Augustine et al. (2009).

Box 12**Australian Standard: Engaging and working with the community – How to develop partnerships and engage the diversity and cultural resources in the school community**

Necessary knowledge and understanding includes research into student learning and development within and outside of school and how the home environment can support learning; what types of school partnership are effective in achieving particular strategic objectives; understanding the culture and diversity of the school community and how they impact on engagement and relationship-building; community functions that provide educational and social supports and how collaboration can improve engagement, learning and wellbeing outcomes; how to work with other education, training and employment agencies to help students transition comfortably into and beyond school.

Necessary skills and expertise include implementing strategies to make the school facilities and practices accessible and inclusive; promoting the school and its values and achievements within the community; creating feedback channels and managing expectations.

Personal and social skills include establishing strategic and personal relationships; recognising the values and potential contributions of the community; creating opportunities to access the capital and resources of families and community organisations; active listening, holding discerning and respectful conversations, and influencing or negotiating positive outcomes.

Note: These skills and competences are drawn from the literature and case studies examined in this report. They are proposed for consideration during the design of principal preparation programs.

Source: Key sources include, but are not limited to: Cheney et al. (2010); Darling-Hammond et al. (2007); Hallinger and Lu (2013); Leithwood (2012); Marzano, Waters and McNulty (2005); National College for Teaching and Leadership (2014); Robinson (2007); The Wallace Foundation (2008); Torres, Reeves and Love (2010)

6.3.4 Developing a leader identity

Developing a leader identity underpins leadership development. People who develop a strong leader identity can improve their leadership effectiveness. How principals or aspiring principals perceive themselves can impact on how they play out the role – the decisions and judgements they make and their interactions with others.⁷⁰ It can also impact the motivation and behaviour of people they lead.⁷¹ A principal who perceives themselves – or is perceived by the school community – as a leader will have confidence in their vision for the school, relate to staff, parents and teachers with greater ease, and create a positive culture and commitment towards the school's goals.

Box 13

Becoming a leader: The transition challenge in medicine

“The transition from practitioner to leader is experienced in many professions. Being an effective medical leader clearly requires a different set of skills from being a good clinician. It is therefore important that medical leaders are supported and equipped with the high-level skills required ... to influence [service] provision, develop a greater sense of self-awareness and confidence to initiate positive change, and promote better team alignment.”

Source: The Royal Australasian College of Medical Administrators (2011)

The transition to school principal normally requires aspiring principals to 'let go' some of their identity as a teacher and embrace a new identity as a leader of others.⁷²

Principal preparation programs can help individuals develop leadership identity through a range of experiences. Giving feedback on leadership behaviours through coaching and mentoring can help individuals develop their emotional intelligence to understand how their role, actions, values and beliefs impact their leadership decisions and interactions with others.⁷³ In addition, including real-world context for learning activities and encouraging participants to think through or make leadership decisions can help individuals gain confidence and belief in their abilities as a leader.⁷⁴

70 See research on affect and behaviour including Bono and Ilies (2006); Damen, van Knippenberg and van Knippenberg (2008).

71 Bono and Ilies (2006); Damen, van Knippenberg and van Knippenberg (2008); Ilies, Judge and Wagner (2006).

72 Ibarra et al. (2014).

73 Coaching and mentoring can help build leaders' emotional and self-awareness. See Strebel and Keys (2005, p. 62).

74 Participants that receive validation of their leadership skills can improve their self-confidence, which increases their motivation to lead. See Ibarra et al. (2014).

6.4 Summary

Once the strategic objectives and desired outcomes of the program are established, the optimal content of a program can be designed. Principal preparation programs need to prepare teachers to transition from classroom practitioners to school leaders.

Program content for aspiring principals includes a combination of:

- deeper subject matter knowledge and expertise
- new management and leadership skills
- higher-order leadership capacities
- developing a leader identity.

In education, deeper subject matter knowledge and expertise revolves around instructional leadership as this has the greatest impact on teacher learning and development. Programs examined in this report help principals to recognise good teaching practices, promote professional learning to improve teaching, monitor and assess teaching, as well as hold teachers to account for poor practice. A solid grounding in content pedagogical knowledge enables aspiring principals to do this.

Aspiring principals need to develop a combination of management and leadership skills that they have not necessarily developed through their classroom teaching experience. Program content needs to develop these skills including budgeting and finance, human resource processes, managing building and ICT infrastructure and behavioural processes – for both teachers and students. However, principals cannot effectively fulfil these responsibilities without appropriate leadership capabilities such as working with others to agree clear expectations, delegating responsibilities and using constructive feedback processes to develop the leadership capabilities of others.

Programs should aim to develop higher-order leadership capacities. This includes strategic thinking skills to develop and deliver a school's vision. Leading programs also help individuals develop both personal and interpersonal skills such as self-awareness, self-management, social awareness and relationship management. These skills, combined with developing the ability to manage change, make effective leaders.

The content – and delivery methods – of principal preparation programs can also help individuals perceive themselves as a school leader. Development of leadership identity will impact both their decisions and how others perceive them.

7. Program design: Delivery methods

Key questions

How should principal preparation programs be designed and taught?

What types of learning experiences and activities will help aspiring principals learn best?

7.1 Adult learning principles

Effective principal preparation programs are designed according to adult learning principles to best develop participants' leadership knowledge, skills and abilities. Adult learners are self-directed learners who bring a wealth of prior experience to education. They are ready to learn, are problem-centred in their learning and are best motivated by internal factors.⁷⁵ These principles should underpin the design of programs from sequencing of content through to the learning experiences included.

Leadership programs traditionally used readings and lectures to engage adults and transmit new knowledge. But the programs regularly failed to improve leadership practices as they didn't alter participants' behaviour. Programs are now changing to better reflect the principles of effective adult learning. These show that adults learn more effectively when these activities are combined with a cycle of collaborating with peers, applying their knowledge and receiving feedback on their behaviour and learning. Figure 4 illustrates that more adults will change their behaviour when learning incorporates collaboration, applied learning and feedback loops.⁷⁶

Per cent of people changing behaviour

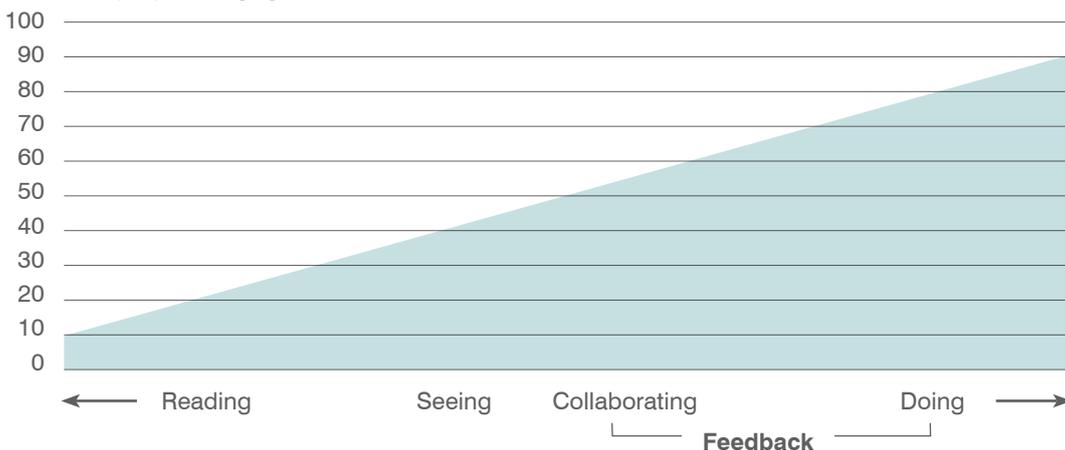


Figure 4: Learning and changing behaviour

Source: Adapted from Chi et al. (1989)

⁷⁵ Knowles (1980).

⁷⁶ Adults need to come back to new ideas continuously, often over months or years, to fully develop new mindsets based on this cycle of learning; see Timperley et al. (2008). This cycle of learning is consistent with Knowles' five assumptions of andragogy (or adult learning theory) that adults are self-directed learners, they bring a wealth of prior experience to education, they are ready to learn, are problem-centred in their learning and are best motivated by internal factors.

Programs frequently reinforce content over time through varied activities within this learning cycle.⁷⁷ This means not only listening to and understanding theory, but also seeing and doing. There is not one specific activity that is more effective than all others, but exposing individuals to demonstration, practice, feedback, and coaching tend to lead to the best learning outcomes.⁷⁸ Activities that increase feedback and participants' self-reflection within this cycle will help consolidate their learning.

Aspiring principals have significant knowledge and experience prior to undertaking a principal preparation program. This affects how they interpret new information and how likely they are to implement new skills.⁷⁹ Learning experiences must help them incorporate new information with their existing knowledge and experience.⁸⁰ This includes activities that facilitate discussion and collaboration between participants as it helps them challenge their existing understandings and process new concepts.⁸¹ If participants learn new content pedagogical knowledge or leadership theory solely through reading and attending a large seminar, they are likely to dismiss or not implement the new skills when they return to the classroom. By working in small groups to discuss theories and case studies, participants engage their prior knowledge. When peers provide useful feedback in a trusting and supportive environment, it enables risk taking and the adoption of new practices.⁸²

Participants' learning is further enhanced if they implement the theory and skills in their own school (or school in which they undertake a placement), reflect on their experience and receive feedback from a mentor or coach.⁸³ Applying their new knowledge in real-life contexts helps individuals to consolidate their learning.⁸⁴ It also helps participants track how they are learning against both individual goals and program objectives.⁸⁵

The following sections illustrate the variety – and value – of different learning experiences that reflect adult learning principles:

- collaborative learning through cohorts
- varied learning activities
- applied learning: placements and projects
- ongoing support.

77 Kolb (1984); Timperley et al. (2008).

78 Joyce and Showers (2002).

79 Committee on Developments in the Science of Learning (1999).

80 Referred to as dissonance.

81 Knowles (1980) notes that a cooperative learning environment helps adults learn best.

82 Timperley et al. (2008).

83 Mentors and experts can challenge the learners' assumptions, show new possibilities and give examples from their own backgrounds. This is consistent with Albert Bandura's social learning theory that people learn through observing others behaviour, attitudes and outcomes from those behaviours. See Bandura (1977); Timperley et al. (2008).

84 Where learning takes place in a classroom, there is often more abstract reasoning compared with more contextualised reasoning when applying knowledge. Therefore hearing examples of many implementation case studies, or visiting different school environments applying key concepts can help mitigate the risk that learning will not be transferred or applied in real life. See Committee on Developments in the Science of Learning (1999); Knowles (1980).

85 Adult learners need to set goals and be able to track their progress against them. See Knowles (1980).

7.2 Collaborative learning

Adults learn and improve when they challenge their existing assumptions, knowledge and frameworks of thinking. Where program participants are organised into cohorts, participants can discuss, negotiate and assimilate new information with their existing knowledge and frameworks.⁸⁶

Peer-to-peer learning and collaboration play an important part in leadership development programs. Where program participants learn together, they have opportunities to collaborate and undertake teamwork.⁸⁷ Participants can learn new ways of thinking and push their thinking further than what is possible individually.⁸⁸ This provides support for individuals within the group including acceptance, development of individuals' leader identities, social and emotional support, motivation and persistence.⁸⁹

Learning with cohorts can help participants model the type of team building that is used or encouraged in their workplace. While working in cohorts may help individual participants' learning, it may also help them enact team-building practices in their own workplace.⁹⁰

The breadth of experience and background of participants in a cohort exposes other participants to different ways of thinking.⁹¹ It also provides people with the opportunity to create a network of peers to provide feedback and act as sounding boards for new ideas, as well as personal friendships.⁹²

Box 14

Austria's Leadership Academy program and cohort collaboration

Austria established a Leadership Academy in 2004 to help develop the system's capacity to implement reform initiatives, as well as to help establish a new culture of 'proactive, entrepreneurial school leadership'.⁹³ The Leadership Academy program provides leadership development for principals, inspectors, government officials and staff from university education colleges.

Cohorts come together four times a year for three-day forums where activities include keynote presentations, group processing, learning partners, and collegiate team coaching. In addition, the program facilitates regional network meetings between forums for participants to share and test ideas and receive feedback from peers. Participants find the diversity of participants very beneficial as it provides them with many different perspectives to learn from.⁹⁴ This is important in promoting system leadership.

Source: Pont, Nusche and Moorman (2008)

86 This is consistent with Albert Bandura's social learning theory that adults learn best from people and the environment around them. See Bandura (1977).

87 Barnett et al. (2000).

88 Strebel and Keys (2005).

89 Davis et al. (2005).

90 Such as those used in distributed leadership.

91 Strebel and Keys (2005).

92 Strebel and Keys (2005); Pont, Nusche and Moorman (2008).

93 Stoll, Moorman and Rahm (2008). Note that the Leadership Academy program is in addition to compulsory management training which all new principals must complete within the first four years of their appointment to a principal role.

94 Stoll, Moorman and Rahm (2008).

In Executive MBA courses, participants from different corporations from around the world participate in cohort groups.⁹⁵ This provides individuals with the opportunity to learn from people from different organisations and cultures. Similarly in the education field, programs that bring aspiring principals together from different education contexts and systems provide opportunity for participants to broaden their perspectives. The NISL Executive Development Program operates across 16 states in the United States.⁹⁶ Given the variety of approaches to education across districts and states, program participants can learn more when their cohort includes people from other states and districts.⁹⁷

While cohort learning is important, the quality of and benefit from the experience depends on both the make-up of the cohort and a program's learning experiences that enable group discussion, reflection and feedback.

7.3 Varied learning experiences

A diversity of learning experiences over time is required for effective development and adult learning.⁹⁸ Different learning experiences, activities and processes help people learn different knowledge and skills.

Below, learning experiences are discussed in a sequence of establishing individual learning needs, developing new knowledge, and developing higher-order leadership capabilities.⁹⁹

Individual needs analysis and training plans

Individual needs analysis can help target professional learning.¹⁰⁰ Individual learning plans can be developed in conjunction with a coach or mentor to combine feedback with individual support. Consistent with adult learning principles, this process helps individuals to set goals, receive feedback and track their progress over time.¹⁰¹ Individual training plans can be part of a formal program, or part of ongoing support for development in the workplace.

95 Participants of five programs profiled include people from a range of organisations and countries.

96 The program operates statewide in several states, and in at least one district in a number of other states.

97 Interview with Felicia Smith, CEO of the National Institute for School Leadership (4 September 2014).

98 Allen and Hartman (2008) cited in Nahavandi (2012).

99 This reflects Knowles' observations about the influence of adult learning principals: sequential activities should be designed to achieve the program's learning objectives: See Knowles (1980).

100 Pont, Nusche and Moorman (2008).

101 Knowles (1980).

Box 15**Professional service organisations – ongoing and intensive feedback helps identify individual development needs**

At Boston Consulting Group, employees are frequently given detailed feedback on their performance. Mentors provide feedback on both management and leadership responsibilities and behaviours relevant to the particular role. This feedback is used to identify individual development needs and plan appropriate professional development activities to support staff.

Source: Interview with Larry Kamener, Boston Consulting Group (20 August 2014)

For example, in the University of Illinois' Doctorate of Education in Urban Educational Leadership participants work with the program fellow, mentor-principal and coach to review their individual learning plan and design learning goals and strategies for their residency year.¹⁰²

Similarly, the New York City Leadership Academy's Aspiring Principals Program includes creating individual learning plans (known as compacts) that document both the general expectations that all participants should complete during the program, as well as targeted practice areas that address individual growth areas.¹⁰³

Working and leadership style diagnostic tools

Different reflective diagnostic tools are used in many sectors and leadership programs, although 360-degree feedback is most common.¹⁰⁴ These tools can provide multiple sources of feedback on individuals' performance, working and communication styles. This enables participants to objectively assess their skills, helping them to reflect and build self-awareness.¹⁰⁵

Case study method

The case study method, originally developed at the Harvard Law School, was adapted for business education in the early 1920s.¹⁰⁶ Case studies are now used in many sectors to provide real-world examples of problems faced by those in similar positions. Participants can immerse themselves in the decision-making process, and extrapolate case issues to their personal experience and the challenges they face in their own workplace.¹⁰⁷ Typically individuals read and prepare answers to the cases themselves, but explore the issues raised in cohort discussions through open-ended questioning. This helps individuals reflect on and share their own experience.

102 Cosner, Tozer and Smylie (2012); Davis and Darling-Hammond (2012); Cheney et al. (2010).

103 Corcoran, Schwartz and Weinstein (2009), (2012); Cheney et al. (2010).

104 Other diagnostic tools used include the Myer-Briggs test and Enneagram amongst others.

105 Nahavandi (2012).

106 Garvin (2003).

107 Strebel and Keys (2005).

Case studies are now one of the dominant pedagogies in leadership development programs. Case studies have transferred from Executive MBA programs to most other sectors and programs.

E-learning modules

With developments in technology, many programs within and outside education combine face-to-face delivery with e-learning modules. These modules can be undertaken between face-to-face sessions. They provide opportunities for individuals to develop base-level knowledge and technical skills. For example, following a three-week residential session, participants in the Institute for Management Development (IMD) Global Executive MBA undertake five weeks of distance learning to further their skills in finance, strategy, leadership and marketing. Successful completion of exams is required for progression into the next stage of the degree, ensuring participants have the foundational knowledge required for the remainder of the program.¹⁰⁸ In the education sector, aspiring principals undertake e-learning modules in programs such as the United Kingdom's NPQH program and New Zealand's National Aspiring Principals Programme.¹⁰⁹

E-learning is also used as a delivery platform for lectures and case studies, as well as guiding individual study. For example, the Executive MBA at the University of Virginia's Darden School of Business delivers one-third of its program through distance learning which includes virtual team meetings, interacting with professors, working on team projects and sitting exams.¹¹⁰ In Australian medical administration, the Royal Australasian College of Medical Administrators (RACMA) use e-learning sets and webinars to bring participants together virtually between face-to-face sessions.¹¹¹

Mentoring and coaching

Mentoring and coaching provide individuals with constructive feedback on individual behaviour and performance. This assists them to evaluate their learning and the impact of new practices that integrate new knowledge, skills and abilities. While mentoring and coaching terms are often used interchangeably, coaching tends to provide feedback on specific tasks and situations, whereas mentoring tends to be a supportive, longer-term professional relationship that can be formal or informal.¹¹²

Mentoring is included in leadership development programs in multiple ways. Mentors may be assigned to individual participants as part of formal learning programs,¹¹³ for the duration of placements and internships,¹¹⁴ or for ongoing support once the formal program has concluded.¹¹⁵

108 Other Executive MBA programs include e-learning modules. See IMD (2014b).

109 New Zealand Ministry of Education (2014).

110 University of Virginia, Darden School of Business (n.d.).

111 The Royal Australasian College of Medical Administrators (2013).

112 Nahavandi (2012).

113 Particularly during Executive MBA programs.

114 Including across the education, health administration and legal professions (under the Bar Reader's course). The KIPP program has bi-weekly coaching sessions during the year-long program.

115 Including in principal preparation programs in the United States, ongoing mentoring is offered for one to two years following program completion. This takes place in New York City's Aspiring Principals' Program (mentoring for first year following the program, plus opportunities to access specialist coaches for help in conducting school-data analysis and budgeting) (Corcoran, Schwartz and Weinstein 2009, 2012). See Section 7.5 for a more detailed discussion.

In RACMA's Fellowship Program, participants undertake three years of supervised work placement, mentored by a senior staff member as well as a preceptor (an established fellow at the College assigned to support and guide candidates through the program).¹¹⁶

In many principal preparation programs, mentoring and coaching is combined with internships (discussed below). This allows aspiring principals to be mentored on the job by an outstanding leader, while being coached by another person to provide additional feedback. For example, in the New Leaders Program in the United States, aspiring principals undertake a year-long paid internship in a school. They are mentored by the school's established principal, and work alongside them as part of the management team. They are also assigned an individual coach who works with the participant to develop an individual development plan and document evidence of success and growth.¹¹⁷

Reflective journals and learning logs

A number of programs, both within and outside education, require participants to complete reflective journals. Consistent with adult learning principles, journals and logs encourage participants to reflect on their experiences and assimilate new knowledge with their existing mental frameworks of leadership. This helps cement learning and behaviour change.

Participants in New Zealand's National Aspiring Principals Programme complete an online reflective blog journal and must take part in the program's online community throughout the year.¹¹⁸ In Ontario's Principal Qualification Program, participants keep a log and reflective journal as part of a Leadership Practicum (see Box 19).

In health administration, RACMA's Fellowship Program requires candidates in their second year to complete two reflective journal pieces for evaluation. Candidates must write about specific events they were involved in, their response or reaction, their personal behaviour and thinking throughout the process.¹¹⁹

In executive education, IMD's Executive MBA program requires participants to write a personal inventory statement before starting the program. The statement includes their strengths and weaknesses, goals and failings. They must re-write the statement three times over six-months during the course, reflecting on both their personal and classroom experiences.¹²⁰

116 The Royal Australasian College of Medical Administrators (n.d.).

117 The individual learning plan is structured around the program's priority areas of learning and teaching; school culture; aligning staff; systems and operations; and personal leadership (Burkhauser et al. 2012).

118 Piggot-Irvine and Youngs (2011); New Zealand Ministry of Education (2014).

119 The Royal Australasian College of Medical Administrators (n.d.).

120 Strebel and Keys (2005).

Simulations, games and role plays

Simulations, games and role plays are activities that enable participants to apply their management and leadership skills within a formal course. These methods are increasingly being used in executive education programs; 'doing' is essential to adult learning principles, providing experience to reflect on and cementing new knowledge.

Role plays and games enable participants to explore new situations they haven't yet faced, and can bring elements of case studies to life. Simulations can be particularly effective for learning how to navigate complex real-life situations that require a range of skills and judgement. At IMD, participants apply their knowledge in a day-and-a-half-long simulation exercise to negotiate contracts within a market environment. Most of the learning from these situations occurs during debrief and reflection phases where participants are asked to assess the meaning of their individual and collective behaviours and decisions.¹²¹

Box 16

Behavioural consultants at INSEAD increase feedback to help develop higher-order leadership skills

INSEAD's Executive MBA program uses behavioural consultants as part of the program's leadership module. Experiential learning activities are central to the module and usually include an outdoor day. Participants work in small groups of 5-7 members, with each group assigned a behavioural consultant whose role is to facilitate learning via guided feedback, debriefing and reflection around each activity. The small groups provide a setting outside the formal workplace to explore interpersonal and group level dynamics, as well as how each individual behaves and enacts leadership within the group.

Behavioural consultants observe the exercises and work with small teams to explore the team dynamics, interactions and communication styles. Individuals develop self-awareness through feedback and reflection, helping them to identify, understand and influence what happens in small groups. Understanding the process of behavioural learning is more important than the outcome of the exercise. Participants hone skills in understanding the dynamics of their team and how they and others enact leadership in a group setting. Individuals' leadership strengths and weaknesses are exposed in a psychologically safe and constructive setting. The behavioural consultant supports individuals' learning through their experience of the group activities and provides one-to-one coaching toward the end of the program.

Note: The behaviour consultant approach at INSEAD was built upon the initial work at IMD.

Source: Strebel and Keys (2005, pp. 163-164)

121 Strebel and Keys (2005).

7.4 Applied learning – internships, placements and real-world projects

Applied learning is essential for adult learning. Internships, placements and projects are vital for leadership development as participants can practice their newly-acquired management and leadership skills in a real-life context. They are a key feature of many programs across sectors, and are a characteristic of exemplary principal preparation programs.¹²²

In programs examined in this report, internships range from two weeks to one year, often with salaries funded by the education department.¹²³ The prohibitive factor for internships is cost: in education, the greatest cost is the aspiring principal's salary, and the cost of back-filling their position.

The breadth of experience in an internship or placement is also important for leadership development; it needs to take participants outside of their comfort zone to apply their learning. This is evident in Executive MBA courses that provide an international field visit for students to work in small teams with a company to solve an issue. Working in an international setting (often with fellow students from different companies and cultures) challenges students to apply both their management and leadership skills in different cultures.

Professional service organisations consider how to provide leadership opportunities either within the work setting or through secondments to other organisations. One professional service organisation interviewed is investigating how to provide secondments or stretch assignments within their own organisation to challenge employees.¹²⁴ Another organisation provides opportunities for secondments into not-for-profit organisations in remote indigenous communities. These provide employees with leadership experience in project management and stakeholder engagement in a very different cultural environment.¹²⁵

In the education sector, the United Kingdom's NPQH, New York City's Aspiring Principals Program and Singapore's Leaders in Education Program place aspiring principals in schools that are different from their most recent school. In Singapore, this may be as different as a placement in a primary school when the aspiring principal has spent most time in a secondary school (see Box 20). In New York City's Aspiring Principals Program, a 10-month internship includes a six-week 'switch' placement to a school in another setting or context (see Box 17).

In addition, several programs provide internships in a different sector to broaden the leaders' experience. Singapore's Leaders in Education Program provides participants with a two-week placement in a professional service organisation (see Box 20).¹²⁶

Supervised work placements are an alternative used in the health administration field. Candidates undertaking the RACMA Fellowship Program act in health administration positions while undertaking the three-year qualification. Candidates are supervised in the workplace and guided through their development program by a preceptor (RACMA fellow).

122 Darling-Hammond et al. (2007). The Southern Regional Education Board (USA) emphasises the importance of partnerships between school systems and university providers to provide appropriate structure and support of learning experiences, and ensures quality guidance and supervision. See Mitgang (2012). Such partnership arrangements in the US increasingly involve highly contextualised programs run by faculty from both the university and the school district. The district may select the participants and underwrite their salaries. See Davis et al. (2005).

123 The placement required for the United Kingdom's NPQH program is usually two weeks. The cost was a consideration in designing this element of the program (interview with Maggie Farrer, 30 August 2014, formerly of the United Kingdom's National College for Teaching and Leadership).

124 Interview with Nicholas Conigrave, Hay Group (11 September 2014).

125 Interview with Larry Kamener, Boston Consulting Group (20 August 2014).

126 Interview with Pak Te Ng, National Institute of Education, Singapore (19 August 2014).

Box 17

New York City's Aspiring Principals Program – program structure and residency

The Aspiring Principals Program is 14 months long and includes three components: a six-week summer intensive to work on simulated school projects; a 10-month apprenticeship with an experienced principal; and a planning summer that allows participants an opportunity to transition to their school leadership position.

Participants are assigned to a school for their 10-month residency, which includes a six-week switch residency at another school so they can observe a different leadership style. The length of the residency means that candidates get to experience the new school year and observe the types of experiences and changes that happen over the course of the year. The participant serves as an apprentice to a practising mentor principal, observes teachers and attends bi-weekly leadership development seminars.

During the switch residency, participants may be strategically placed in a school that has a particular program that matches their likely placement after graduation.

Source: Corcoran, Schwartz and Weinstein (2009), (2012); Cheney et al. (2010)

Box 18

Military leadership program delivery - Defence and Strategic Studies Course (DSSC)

The DSSC is a one-year leadership program undertaken by officers looking to progress to the most senior ranks in the army. The course is governed by adult learning principles and is delivered using a combination of seminars, electives, fieldwork and practical applications.

Throughout the year, candidates undertake two field research placements aligned with modules ('blocks') within the north Asian region and South Pacific; experience planning exercises, including inter-agency exercises; and spend time in public and private sector management settings, as well as Parliament House.

Additional elective options allow candidates to tailor part of their experience to their specific contexts and interests. Candidates are assessed via a combination of written, verbal and practical activities, including a week-long culminating exercise where they must demonstrate the core skills developed during the course.

Source: Australian Defence College (2014); interview with Brigadier Peter Gates (10 September 2014)

Applied learning projects

Placements and internships often incorporate applied learning projects, enabling participants to apply their skills, knowledge and problem-solving strategies in real world settings.¹²⁷ Participants in principal preparation programs are typically mentored by the placement school's experienced principal who can model skills in action and guide participants through their project. Ideally, applied learning projects are tightly aligned to program content to provide curricular coherence.

Projects are incorporated into the United Kingdom, Ontario and Singapore programs, as well as some programs in the United States. The design of the projects varies: New Zealand and Ontario participants design their own research project, whereas Singapore participants are set a very specific task linked to the program content in developing a school vision, and designing and implementing a new curriculum, pedagogy or assessment program with current staff at the school (see Box 20).¹²⁸ Similarly, in the KIPP program in the United States, participants identified as successors to current principals must develop their vision for the school, a strategic plan for successful transition and change management strategy and plan to gain regional support.¹²⁹

Box 19

Ontario's individual teacher research proposals

Aspiring principals in Ontario must undertake a Principal Qualification Program before being appointed as a school principal.

Participants are allocated to a school for a placement of at least 60 hours, where they undertake their research. Up to 20 hours of the placement can be spent shadowing the existing principal who also acts as their mentor. The practicum provides participants with the opportunity to act as a member of the school administrative team, working with staff, students, parents and the community.

As part of their application to the program, participants must develop a research proposal that they will undertake as part of the practicum. The research is written up into a final report which includes findings, benefits to school, links to improving teaching and learning, results and recommendations.

As part of the practicum, participants also complete a log describing the leadership activities they have undertaken, including professional learning activities, and committee and meeting participation. In addition, participants keep a journal detailing their reflections on the experience.

They must successfully complete the practicum and research project following the first six modules of the program before being recommended to undertake Part Two of the program, which consists of a further six management and leadership modules.

Source: Ontario College of Teachers (2009)

127 Kolb and Boyatzis (1999).

128 New Zealand participants design their own learning inquiry, however it is focused on their own leadership of colleagues in raising the achievement of students in the school, focusing particularly on Maori and Pasifika students and students with special needs. See Piggot-Irvine and Youngs (2011).

129 Furgeson et al. (2014).

Executive MBA courses use applied learning through company-sponsored projects and international field-work. Company-sponsored projects allow participants to directly apply their new knowledge to their own company environment. This cements participants' knowledge in a context they are familiar with and provides direct benefit for the company. MIT Sloan's Executive MBA students undertake a semester-long company assignment, whereas IMD students complete six company-specific assignments on program areas including customers, finance, leadership, strategy and organisational design.¹³⁰

Box 20

Singapore's Leaders in Education Program

Singapore's Leaders in Education Program is a six-month full-time course that is undertaken by all aspiring principals immediately before stepping into their role.¹³¹ Typically participants are nominated to undertake this course while working as a vice-principal and then undertake interviews and situational tests.¹³²

The philosophy of the course is learning to lead in a complex and changing world. This underpins the design of the placement and capstone project (Creative Action Project). Participants are assigned to a school for the duration of the program. Usually the school is very different from the participants' former school including, for example, being placed in a primary school if they were previously in a secondary school. The existing principal mentors the participant who undertakes their Creative Action Project in the school.

The Creative Action Project requires participants to imagine their assigned school in 10-15 years' time, making them challenge their beliefs and assumptions about education and school leadership, and explore new concepts and practices that can transform the school system in the future. The participants describe the major areas of the school including location, curriculum, pedagogy and school structure. Then working with the school principal and mentor, they are required to implement a component of the future school that is currently feasible and desirable. This may be done as a prototype related to curriculum, pedagogy or assessment.

This requires participants to apply their knowledge gained through the course, but also exercise their leadership in "strategically and systematically addressing change management issues in an unfamiliar school..."¹³³ Importantly, they need to work with the current school leadership team and teaching staff, without official authority to implement a part of their vision for the school, requiring influencing skills to create buy-in of others.

Program participants report that the most beneficial experiences and skill development from undertaking the project are:

'Futuring' – the project forces participants to critically examine trends in education and look beyond the school's immediate vision. It also pushes aspiring principals to think outside of the daily school operations, and think strategically in times of complexity and uncertainty.

¹³⁰ IMD (2014a); MIT Sloan School of Management (2014).

¹³¹ The program normally accepts only 30-40 participants per year and the Ministry provides participants full salary and tuition fees.

¹³² Interviews are usually undertaken with Ministry of Education officials and the Director of Schools.

¹³³ Ng (2013).

Learning to contextualise theories to local situations including the need to implement a prototype that benefits a school in its particular stage of progress. It also requires aspiring principals to be sensitive to the needs of staff and make changes according to their work circumstances.

Learning to be adaptable and flexible – aspiring principals have to navigate a school environment and culture that they are unfamiliar with. They also learn to assess situations, decide when to act and when to let go, and manage their own expectations.

Learning to collaborate – aspiring principals learn to collaborate (and initiate collaboration) when they realise that a project conceptualisation and implementation is beyond one person. They learn from collaborating with colleagues, and also through gaining colleagues' buy-in to participate in their project.

Source: Ng (2013); interview with Pak Te Ng, National Institute of Education, Singapore (19 August 2014)

7.5 Ongoing support

In the first years on the job, principals need high-quality mentoring and professional development.¹³⁴ Education systems may already provide this through existing structures and processes such as induction or mentoring. However, principal preparation programs may need to build ongoing support into the program where it is not provided by the system, or to supplement what is available.

Ongoing mentoring and coaching support is provided in several programs.

New York City's Aspiring Principals Program participants are mentored in their first year, usually by a retired principal or principal supervisor. In addition, first-year principals can access specialist coaches for help in conducting school-data analysis and budgeting.¹³⁵

The New Leaders Program includes coaching for new principals in their first year. This includes support in diagnosing their school's needs and designing an action plan for improvement. In addition, the program introduces aspiring principals to district managers during the program. This relationship building helps them to identify an appropriate school placement at the end of the program, and sets the platform for ongoing support in the role.

New Zealand provides an optional First-time Principals Programme. The 18-month program includes mentoring from an experienced principal. Together mentors and mentees develop a professional learning plan, hold professional learning groups with other first-time principals and their mentors, and develop a portfolio which tracks the evidence of their progress against their learning plan.¹³⁶

¹³⁴ Mitgang (2012).

¹³⁵ Mitgang (2012), Corcoran, Schwartz and Weinstein (2009), (2012); Cheney et al. (2010).

¹³⁶ New Zealand Ministry of Education (n.d.).

7.6 Summary

Effective leadership development programs are designed using adult learning principles and provide a variety of learning experiences. These programs help engage aspiring principals' knowledge and experience to develop effective management and leadership skills.

Adults learn best through a combination of collaboration, peer-to-peer feedback, trying new practice and evaluating its impact. Programs that include a variety of learning experiences, grounded in real-world experience, will help participants cement their new content knowledge through this learning cycle. A mix of learning experiences can include individual needs analysis and leadership diagnostic tools – such as 360-degree feedback, case studies and e-learning modules. Activities that increase feedback and self-evaluation include mentoring and coaching, and reflective journals.

Applied learning is particularly important; more adults change their behaviour when they have the opportunity to apply their new knowledge and skills. Simulations, role-plays and games allow participants to apply their new skills in a safe environment.

Many leadership development and principal preparation programs also include applied learning projects. Programs require participants to either undertake projects within their own school, or in another school as part of a placement during the program.

Ongoing support for leadership development is also crucial. This includes mentoring and coaching for new principals in their first year. Principal preparation programs may consider including ongoing support for program graduates if these practices are not already built into the education system.

8. Program design: Measuring effectiveness

8.1 Why evaluate?

Evaluating principal training is hard. Among other challenges, evaluators have to deal with the long causal chain between leadership training and student learning, along with the fact that intermediate outcomes like ‘good leadership behaviours’ are difficult to define and measure. These challenges, along with some possible remedies, are discussed in Section 8.2.

Given the problematic nature of evaluation, it is useful to keep in mind *why* time and money are spent on evaluation, and the questions we’re trying to answer. The motivations include the following.¹³⁷

- **Accountability:** are funds being spent appropriately?
- **Judging merit:** was the training useful? Was it worth the money?
- **Informing future decisions:** should the program be continued, and for whom?
- **Improving future training:** how can the program be improved? (see Box 22)

Without being able to provide clear and rigorous answers to these questions, there is a risk that scarce funding will be spent on activities that don’t maximise student learning, and that this waste will persist. Similarly, there is a danger that the professionals who give up their time for development programs will continually get short-changed. Evaluation is therefore a prerequisite to significant investment and, over time, can make training more effective for aspiring principals and students alike.

8.2 Evaluating principal training: Challenges and possible remedies

This section outlines some of the challenges of evaluating leadership development programs, along with some potential or partial remedies. These issues are summarised in Table 2 below.

Table 2: Evaluation challenges and potential remedies

Challenges	Potential/partial remedies
Long causal chain	Focus on intermediate outputs (e.g. principal behaviours)
Defining what to measure	Create a clear and agreed-upon evaluative framework
Hard-to-measure outputs	Use mixed methods and multiple sources
Impact takes time	Longitudinal evaluation (and have patience)
Evaluations are under-used	Use checklist to help create feedback loop

¹³⁷ Adapted from Hoole and Martineau (2014).

Box 21

Evaluation and research: The need for slow-and-steady incrementalism

Relatively little is known about the impact of various leadership development programs. There is a need to build a broader base of evidence, which is difficult to achieve solely through the non-experimental evaluations discussed in this chapter (although, when well done, these evaluations add to the sum of knowledge about when and how principal training programs are effective).

In short, some training initiatives need to be ‘research orientated’, and involve:

- a control group (which, ideally, is specified through randomisation¹³⁸)
- a focus on quantitative measures, including both the performance of principals and students
- a long time horizon, to deal with the lags between training and measurable impact on student outcomes.

This approach has its own difficulties. First, even though leadership quality has been shown to have an effect on student outcomes, the impact of training is unlikely to be as dramatic or measurable as, for example, the impact of a drug on a sick patient.¹³⁹ This means that for a single study to provide clear and actionable results it needs to have a large sample (of say, 50-100 schools) which is often impractical. A workable alternative may be to conduct many smaller-scale trials and build evidence in increments.¹⁴⁰ This approach constantly evaluates how new evidence fits with existing knowledge, rather than trying to provide a confident answer with one trial.¹⁴¹

Another common concern is that in randomising attendance, some candidates will miss out on essential training. A partial remedy could be to select candidates, and then randomise attendance across different training courses.¹⁴² In this set-up, nobody misses out, but high-quality evidence is still gained about which courses have a greater impact on leadership qualities and student outcomes, helping to improve training for subsequent aspiring principals.

Clearly, not all evaluations should or could be ‘research orientated’, but given the potential impact of high-quality leadership, a better understanding is needed of whether and how it can be generated by training programs.

138 For an overview of Randomised Control Trials (RCTs) in education, see Chapters 1 and 2 of “A guide to running randomised controlled trials for educational researchers”, Hutchinson and Styles (2010).

139 Hutchinson and Styles (2010), Chapter 2.

140 This is the approach adopted by the Education Endowment Foundation. See Education Endowment Foundation (n.d.).

141 Ibid.

142 This will be more feasible in metropolitan areas where multiple courses are offered.

8.2.1 A long causal chain

The ultimate goal of principal education is, of course, to improve student outcomes. Yet the likely causal chain that links leadership training to student performance is long and can be influenced by many external factors (as illustrated in Figure 5). This is a general difficulty of evaluating leadership development programs. While the quality of leadership is a big lever, it tends to have an indirect impact on the outcomes we care about.

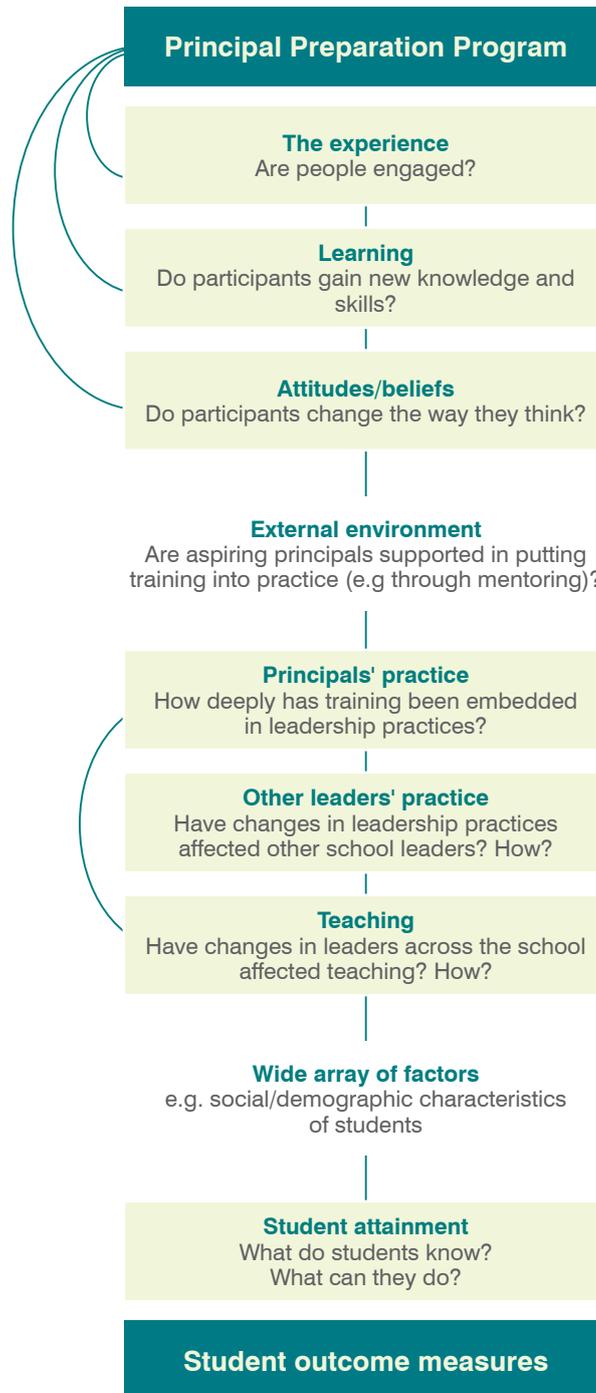


Figure 5: Likely linkage from principal preparation programs to student outcomes (simplified)

A partial remedy to this problem is to evaluate both student outcomes *and* intermediate outcomes such as principals' behaviours. The need to understand intermediate outcomes is important even in evaluating programs focused on developing classroom teachers, who have a more direct impact on student learning (i.e. a shorter causal chain).¹⁴³ Indeed, some research suggests that there are circumstances – most commonly when a program is new, or little is known about its impact – when it may be best to study teacher training initiatives solely in terms of their influence on teachers, rather than student outcomes.¹⁴⁴ In part, this is because valuable changes to teacher practice might not be quickly translated into clear improvements in generic student performance measures (such as NAPLAN tests). Similarly, a program might be successful at communicating a useful idea about teaching, but hampered by a school policy that makes implementation of the new technique difficult. In these circumstances, focusing too much attention on evaluating student outcomes may act as a barrier to understanding whether and how some forms of teacher development can be effective. This barrier to understanding is heightened when evaluation shifts further up the causal chain from teacher to principal training.

Of course, this isn't to say that student performance data should be ignored. But, at a minimum, it needs to be complemented with information on intermediate outcomes, particularly in the early stages of evaluation and research.

8.2.2 Defining what to measure

The second challenge follows immediately on from the first. If the remedy to a long causal chain and a weak evidence base is to measure both final and intermediate outcomes, then evaluators need a way to specify and define this list of outcomes. This is particularly tricky in the case of principal training, as 'good leadership' is hard to describe in terms that are concrete, detailed and universal. It may be easy to agree that the behaviours of leaders should be measured as an intermediate outcome. It is harder to find consensus about which precise behaviours are indicative of high-quality leadership, and how these might differ in different contexts.

There is no easy or right answer to the question 'what should be evaluated?'. But good answers tend to be structured around a detailed evaluation framework that incorporates two elements:

- the aims of the training program
- a theory about how the program will influence aspiring principals and their schools over time.

The purpose of the framework is to formalise ideas about what the training program can achieve, and how it will influence different outcomes over time. Once formalised, these ideas can be tested against the reality of implementation. It is best to establish the framework as early as possible, ideally while the training program is being designed.¹⁴⁵

There seems to be a growing sense among current providers of principal education in Australia that evaluations of their programs would benefit from such an evaluative framework.¹⁴⁶ The rest of this section presents a high-level and simplified example (summarised in Figure 6).

¹⁴³ Wayne et al. (2008); Opfer and Pedder (2011).

¹⁴⁴ This is especially true of early research into particular initiatives when less is known. See Wayne et al. (2008).

¹⁴⁵ Guskey (2002) citing Guskey (2001). Guskey calls this 'planning backwards'. See also Hoole and Martineau (2014).

¹⁴⁶ Watterston (2015).

In keeping with the above description, the example framework is based on two main inputs:

- ideas presented earlier in this report (mainly Chapter 5) about potential aims of a principal training program
- the hypothesised causal chain presented in Figure 5, i.e. a (simplified) theory about how a principal training program might influence student outcomes.¹⁴⁷

The top-level framework in Figure 6 (in dark green) acts as a skeleton, which is fleshed out with more detailed areas. In the case of ‘Principal practices’, for instance, sub-categories like ‘Leading teaching and learning’ and ‘Developing self and others’ are taken from the Standard. Clearly, other conceptions of leadership could be used, provided they are grounded in research linked to improved student outcomes.¹⁴⁸

The task is then to operationalise whatever sub-categories are chosen. What exactly needs to be measured or observed? For illustrative purposes, Figure 6 begins to do this for the ‘Leading teaching and learning’ sub-category, by describing some behaviours surveyed as part of the OECD’s Teaching and Learning International Survey (TALIS) project. Again, it is likely that there will be competing ideas about what exactly ought to be measured, and any suggestions grounded in research are valid contenders. Consensus may be hard to find, but if evaluators and program designers work their way through a framework, this at least provides an opportunity for competing views to be heard.

¹⁴⁷ This, in turn, was based on Fiona King’s review of frameworks used to evaluate teacher-development programs, see Bono, Shen and Yoon (2014). King’s framework draws on the foundational work of Kirkpatrick (1959) as well as Guskey (2002) and Bubb and Earley (2010).

¹⁴⁸ For example, see Robinson, Hohepa and Lloyd (2009).

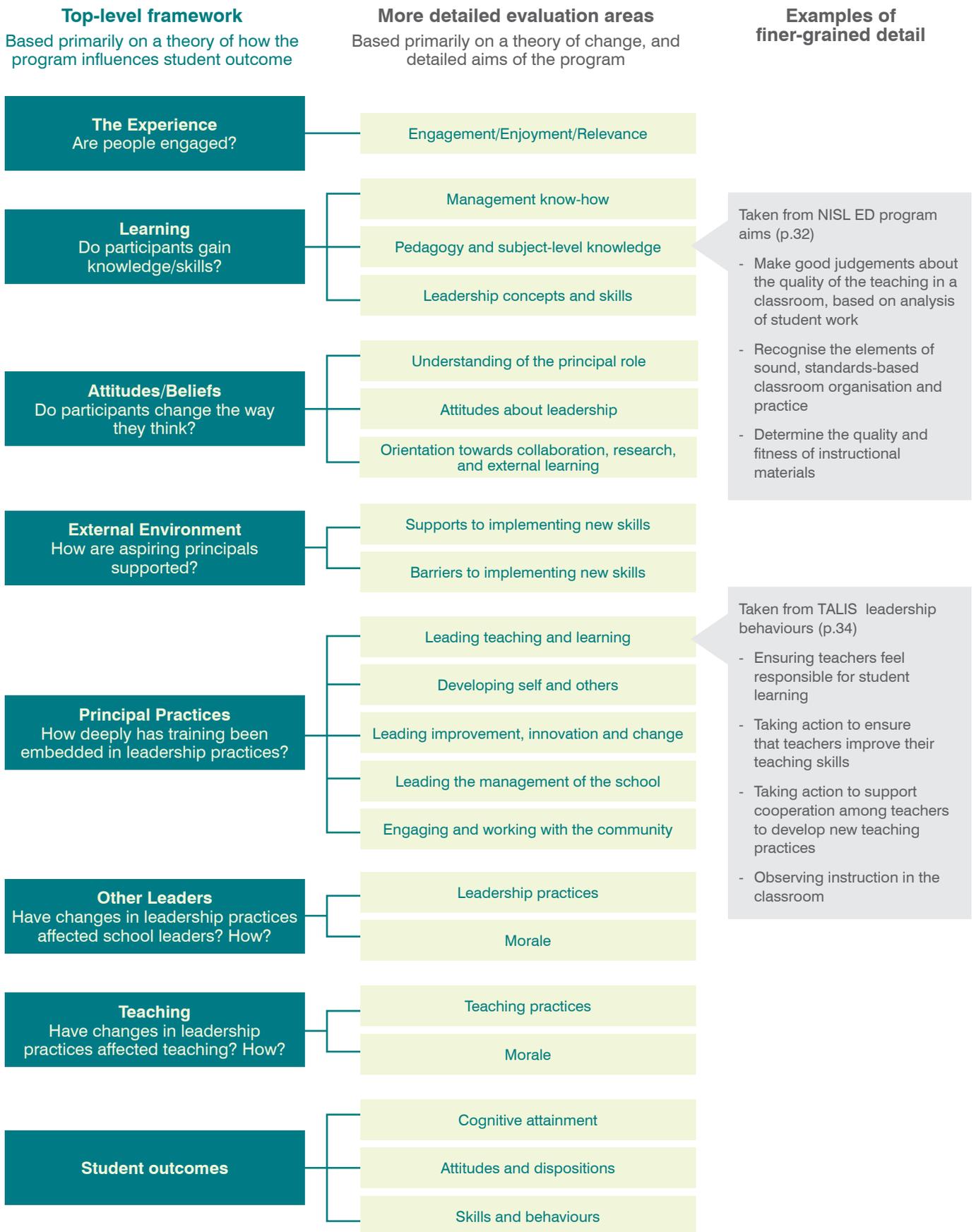


Figure 6: Example evaluative framework (with some detail added for illustrative purposes)

8.2.3 Diverse and hard-to-measure outputs

After deciding upon the range of outcomes that need to be measured, the challenge turns into a practical one: how can things like principal behaviours be assessed? The easiest and cheapest option is to rely on self-reports. However, principal self-reports in interviews and surveys are both subjective and fail to tell the full story of how principals actually lead their schools.¹⁴⁹ When examining outcomes like principal behaviours, it is therefore important to use multiple sources such as interviews with staff, independent observation, and documentary evidence of new policies and practices.

Using multiple sources also helps provide valuable nuance about the extent to which the skills and concepts taught during training have been incorporated into practice. Understanding how well concepts have been embedded into practice is emphasised in the teacher development literature as an important element of evaluation.¹⁵⁰ The same emphasis ought to apply to evaluating principal training. There is clearly a difference between a leader who applies a new practice regularly but in a superficial or mechanical way, and someone who has understood the principles of the new practice, committed to it, and modified it so that the innovation serves students and staff.¹⁵¹ This kind of distinction will be difficult to uncover through self-reports alone.

Looking at evaluations more broadly, as the example framework illustrates, principal training can have an impact on a diverse range of outcomes. No single research tool is best-suited to examine all these dimensions, and multiple methods need to be used.¹⁵² These will likely include: quantitative analysis of student performance outcomes; surveys, focus groups and interviews of participants, staff and students; document review (e.g. of school policies); observation of training and of principals' practice. Using multiple methods and multiple sources not only helps paint a fuller and more realistic picture of what happened, but it offers the possibility of triangulating findings and bolstering confidence in results.¹⁵³

8.2.4 Impact takes time

As the impact from leadership to student is indirect, there may be significant time lags between principal training and improvements in student outcomes. Moreover, many participants won't become principals until months or even years after their preparation course, if at all.¹⁵⁴ To get a full picture of how principal training affects participants and schools, evaluations must therefore be longitudinal.

The first task is to get a clear measurement of baseline performance. This is hampered in the case of initial principal training by the fact that most participants aren't yet principals, making it challenging to get baseline information on how they perform in the role. Nonetheless, measuring participants' skills and knowledge (of management know-how or leadership concepts, for example) is essential to assessing what impact that training has in the short term. Tests and surveys administered before training can also be useful in making sure that the curriculum is pitched at the right level.

149 Darling-Hammond et al. (2007).

150 King (2014).

151 This distinction is drawn from Hall and Hord's 'Levels of Use' framework. See Hall and Hord (1987).

152 See Hoole and Martineau (2014) for a detailed list.

153 King (2014).

154 Watterston (2014).

The training itself should then be evaluated to assess how engaging, enjoyable and relevant participants find the program. This element of evaluation is useful for improving training quality, and is already common in Australia. The *Stepping Up* program,¹⁵⁵ for example, carries out evaluation on each day of the program and at its end.¹⁵⁶

Soon after training has taken place, the tests given to participants before the training can be readministered to see if there have been changes in participants' knowledge, skills, beliefs and attitudes.

The next question asks how these changes translate into practice; how do participants actually perform as principals? Given the potential lag between training and promotion, evaluations ought to include a follow up at least 12 months after the course. Not only will this increase the chance that evaluators can document how participants are doing in the role of principal, but it can provide information on the rate at which participants actually become principals, which can help guide the way programs select candidates.

The final part of the evaluation focused on student performance should continue for a minimum of two to three years (as is the case, for example, in the evaluation of New York City's Aspiring Principals Program and the New Leaders Program in the United States).¹⁵⁷ In recognition of the need for a long-term view, one leadership development initiative in Austria involving ten schools set out a 15-year time horizon for evaluation.¹⁵⁸ Obviously not all evaluations of principal training need to span such a long period. But, some longitudinal element is essential, and patience is an important ingredient – particularly in terms of seeing clear improvement in student outcomes.

155 Run by the Brisbane Catholic Education Office.

156 Watterston (2015).

157 Corcoran, Schwartz and Weinstein (2009), (2012); Gates et al. (2014).

158 Rapporteur, Moorman and Rahm (2007).

8.2.5 Evaluations are under-used

Evaluations are often a squandered resource in that they aren't used to guide improvement. While it is difficult to guarantee that evaluations become part of an effective feedback loop, various actions can reduce the chances that evaluations are conducted and forgotten. These are summarised in Figure 7.

Using evaluation findings: A checklist for the system manager

- Ensure that evaluation is written up in a final report, and includes discussion of areas that can be improved
- Publish evaluation (if possible including a version that appears in a peer-reviewed journal)
- Publicise result (first and foremost among stakeholders like training providers and current principals, but also more widely)
- Gather and consult with stakeholders (training providers, future and current principals, policy makers, etc.)
- Explore how principal training fits with other leadership training; e.g. is there a need for follow-up training?
- Decide on what could be done better
- Develop a detailed plan about changing training provision
- Monitor the plan's implementation

Figure 7: Checklist to maximise benefit of evaluations¹⁵⁹

Using evaluations as a form of feedback is especially important for initial principal training. The research base here is relatively weak, and early assessments of programs are unlikely to provide a strong guide as to whether programs are cost effective. So, while we build our understanding, system managers should do as much as possible to ensure that, at a minimum, early evaluations are used to improve the quality of training that participants receive.

¹⁵⁹ Checklist idea adapted from Hannum and Martineau (2008).

Box 22

Evaluation of principal preparation programs – existing practice

The range of approaches taken to evaluate principal preparation programs reflects different program contexts and varied approaches and depth of analysis. Most program evaluations collect qualitative data from participants about the quality and usefulness of their experience. Feedback informs quality review and improvement of programs.

The Austrian Leadership Academy collects feedback from each cohort and from external experts in organisational and school development who attend elements of the program. The New Zealand National Aspiring Principals Pilot used questionnaires, interviews and observation to gather views on the effectiveness of the program from participants.

A Stanford University evaluation undertook in-depth case studies of exemplary programs across the United States to integrate self-reported data by participants with on-site observation of graduate principal practice and teacher survey data. These data identified perceptions of the features and quality of their programs, as well as their sense of preparedness, attitudes about and practices in principalship. The cases were also analysed in relation to the state context, in order to evaluate possible impacts of policy and other features of the state environment.

A number of programs in the United States have attempted to evaluate the impact of leadership programs on the achievement of students in the schools that participants lead.

A study of the NISL Executive Development Program (EDP) focused on the impact of the program on student achievement in Pennsylvania schools. Statistical analyses compared school-level performance of EDP-led schools with matched schools in the same district, using achievement data in English and mathematics. A similar approach was taken in a study of the impact of New York City's Aspiring Principals Program, which also compared the readiness, school-type and tenure of their principals with those advancing through other routes.

A RAND Corporation analysis of the New Leaders Program looked at student-level data including standardised test scores in mathematics and reading, non-achievement outcomes, and student demographic characteristics. The quantitative analysis was combined with surveys of principals and nested case studies of their practice to examine the extent to which principals were implementing the leadership practices of the program.

Source: Pont, Nusche and Moorman (2008); Piggot-Irvine and Youngs (2011); Darling-Hammond et al. (2007); Nunnery, Yen and Ross (2011); Burkhauser et al. (2012)

8.3 Conclusion: What systems can do to move beyond current best practice

As the existing practices above illustrate (see Box 22), evaluations of principal training are occurring both in Australia and overseas. They are also growing in sophistication, with an increasing recognition of the need for longitudinal data, multiple methods, and multiple sources. In this context, we conclude by noting that there are a number of things that systems can do to push the boundaries of current best practice:

- ensure that evaluators work with the people designing the programs
- recognise the value to the system of experimental approaches and incremental knowledge-building
- encourage long-term evaluations, and be patient with respect to observing impact in measured student performance
- promote the use of comprehensive frameworks, with a focus on intermediate outputs in the short and medium term
- provide resources and encouragement for evaluators to publish their reports in peer-reviewed journals.

8.4 Summary

Evaluating the effectiveness of principal preparation programs is difficult – there is a long causal chain between school principal training and student outcomes.

An evaluation framework is best developed in the design phase of a principal preparation program. Understanding the aims of the program and the theory of how the program will influence aspiring principals' behaviour and school outcomes over time will inform what data is collected – including baseline data.

Given the outcomes of principal preparation programs are diverse and difficult to measure, multiple methods can be used to gain feedback on the program's impact. This can include both student outcomes as well as more intermediate impacts such as aspiring principal behaviour. Ideally, evaluations will take a longitudinal perspective and include methods such as participant self-reports, interviews, independent observations and documentary evidence of policies and practices in schools. Importantly, program impact can take time, so the evaluation framework needs to take this into account.

9. Conclusion

This report draws on best-practice leadership development in education and other sectors to develop key considerations for the design of principal preparation programs. These are:

1. How does the program fit into broader leadership development? How does this impact the timing and design of the principal preparation program?

Principal preparation programs need to take into account how leaders are developed throughout their career. The design of programs depends on the knowledge, skills and abilities that participants bring to the program (in part determined through selection processes), their job after completing the program and ongoing leadership development opportunities.

Programs that sit on a continuum of leadership development can tailor content and delivery to build on participants' prior experiences. Systems with less-structured leadership development and talent management will benefit more from a rigorous selection process.

Selection processes enable a better understanding of development needs of both individuals and systems. This allows for more targeted – and therefore more effective – program design. It also increases the effectiveness of courses as the quality of entrants, and their experiences, directly impacts the quality of peer-to-peer learning. A rigorous selection process ensures that all participants have the requisite skills, knowledge, prior experience and leadership disposition to undertake the course.

Selection processes from programs examined in this report assess applicants against system standards and competencies. Processes can include a written application, face-to-face interviews, group interviews including problem solving, written and oral tasks and feedback to participants.

2. What is the purpose of the program? How does it align with the education system's strategic objectives to improve teaching and learning? What is the desired outcome of the program? Is it to develop knowledge or improve leadership behaviours (and what combination of the two is needed)? Does the education system expect improved student achievement as a result?

Principal preparation programs should align to the strategic objectives of the education system – to improve teaching and learning. They should also help teachers transition into the role of principal.

Programs should also be clear about the desired outcomes. Program design should take into account what the education system wants aspiring principals to know and be able to do when stepping into the role. The program outcomes may be at several levels – will the program develop aspiring principals' pedagogical content knowledge to help improve instruction? Or will it develop leadership behaviours? Or a mix of both?

3. What content should the program contain?

Principal preparation programs need to prepare teachers to transition from classroom practitioners to school leaders. Program content for aspiring principals includes a combination of:

- deeper subject matter knowledge and expertise
- new management and leadership skills
- higher-order leadership capacities
- developing leadership identity.

Programs that emphasise deeper subject matter knowledge and expertise revolve around instructional leadership as this has the greatest impact on teacher learning and development. Programs examined in this report emphasise the pedagogical content knowledge that principals need to improve other teachers' practice. Aspiring principals do not need to be experts in every subject. However, they need to be able to recognise good teaching practices, promote professional learning to improve teaching, monitor and assess teaching and hold teachers to account for poor practice.

Aspiring principals need to develop a combination of management and leadership skills not necessarily developed through classroom teaching. Program content needs to help aspiring principals develop their skills in budgeting and finance, human resource processes, managing building and ICT infrastructure and behavioural processes – for both teachers and students. However, principals need appropriate leadership capabilities to fulfil these responsibilities. These include working with others to agree clear expectations, delegate responsibilities and use constructive feedback processes to develop the leadership capabilities of others.

Programs should aim to develop higher-order leadership capacities. This includes strategic thinking skills to develop and deliver a school's vision. Leading programs also help individuals develop both personal and interpersonal skills such as self-awareness, self-management, social awareness and relationship management. These skills, combined with developing the ability to manage change, make effective leaders.

The content – and delivery methods – of principal preparation programs can also help individuals perceive themselves as a school leader. Development of leadership identity will impact both their decisions and how others perceive them.

4. How should the program be designed and delivered?

Effective leadership development programs are designed around adult learning principles and provide a variety of learning experiences. Adults learn best through a combination of collaboration, peer-to-peer feedback, implementing learning and reflection. Programs that include a variety of learning experiences, grounded in real-world experience, will help participants cement their new content knowledge through this learning cycle. A mix of learning experiences can include individual needs analysis and leadership diagnostic tools – such as 360-degree feedback, case studies and e-learning modules. Activities that increase feedback and reflection include mentoring and coaching and reflective journals.

Applied learning is particularly important; more adults change their behaviour when they have the opportunity to apply their new knowledge and skills. Simulations, role-plays and games allow participants to do this within a program. Many leadership and principal preparation programs also include applied learning projects, internships and placements to apply their new skills in the 'real world'. Combined with mentoring and coaching, participants can observe role-models in action and receive feedback on their practices.

Ongoing support for leadership development is also crucial. This includes mentoring and coaching for new principals in their first year. Principal preparation programs may consider including ongoing support for program graduates if these practices are not already built into the education system.

5. How should the program be evaluated?

Evaluating the effectiveness of principal preparation programs is difficult – there is a long causal chain between school principal training and student outcomes. Yet, evaluation is crucial to assess the value and worth to participants, schools and systems, and to guide ongoing program improvement.

An evaluation framework is best developed in the design phase of a principal preparation program. Understanding the aims of the program and the theory of how the program will influence aspiring principals' behaviour and school outcomes over time will inform what data is collected – including baseline data.

Given the outcomes of principal preparation programs are diverse and difficult to measure, multiple methods can be used to gain feedback on the program's impact. This can include student outcomes as well as more intermediate impacts such as aspiring principal behaviour. Ideally, evaluations will take a longitudinal perspective and include methods such as participant self-reports, interviews, independent observations and documentary evidence of policies and practices in schools. Importantly, program impact can take time, so the evaluation framework needs to take this into account.

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11. Notes on selected key references

Cheney, GR, Davis, J, Garrett, K and Holleran, J 2010, *A new approach to principal preparation: Innovative programs share their practices and lessons learned*, Rainwater Leadership Alliance, Fort Worth, TX.

<http://www.anewapproach.org>

The Rainwater Leadership Alliance is a coalition of innovative programs that share practices and distil lessons learned about improving principal effectiveness in the United States. The coalition members share data, provide exemplars, and promote and scale successful methods to develop and support school leaders. This paper is intended as a reference manual of examples and lessons from their experiences. It discusses a number of programs profiled in this report, including exemplars that use student achievement data as a key element of their program evaluation.

Darling-Hammond, L, LaPointe, M, Meyerson, D, Orr, MT and Cohen, C 2007, *Preparing school leaders for a changing world: Lessons from exemplary leadership development programs*, Stanford University, Stanford Education Leadership Institute, Stanford, CA.

This report profiles eight principal leadership development programs in the United States – both pre-service and in-service programs. The report identifies program content, design, costs and financing of programs. The researchers take a multi-method, longitudinal approach to assessing the programs. The report identifies seven features of exemplary pre-service programs, and discusses the implications for program design and policy makers.

DeRue, DS, and Myers, C and Day, D 2014, *Leadership development: A review and agenda for future research*, *The Oxford handbook of leadership and organizations*, Oxford University Press, NY.

The authors discuss the evidence on leadership development and propose a framework that can inform the development of principal preparation programs. The authors highlight the importance of ongoing leadership development throughout someone's career and how that impacts the design of leadership programs. The authors' framework details considerations in designing leadership development programs including: defining the purpose of the program and the intended outcomes, the types of learning experiences – both formal and informal, creating positive feedback loops for development and engaging people to learn from their experiences.

Elmore, R 2000, *Building a new structure for school leadership*, Albert Shanker Institute Washington, DC.

Elmore's work details instructional leadership – a concept often discussed but not defined. The work discusses the importance of distributed leadership in improving teaching and learning and the leadership functions of people at different levels of the education system.

Guskey, T 2002, Does it make a difference? Evaluating professional development, *Educational Leadership*, March 2002, 59, (6), pp. 45–51.

<http://www.ascd.org/publications/educational-leadership/mar02/vol59/num06/Does-It-Make-a-Difference-Evaluating-Professional-Development.aspx>

This short reading provides an overview of why effective evaluation is essential to guide professional development planning, and outlines a seminal framework for undertaking the evaluation of development programs. The framework also supports the planning stage of effective professional development activities, by starting with the desired student learning outcomes, and working back through a series of considerations to determine what set of learning experiences the program participants need.

Hallinger, P and Lu, J 2013, Preparing principals: what can we learn from MBA and MPA programmes? *Educational Management Administration & Leadership*, 41, (4), 435–452.

This paper reports the results of a recent project by the National College for Teaching and Leadership in the UK to understand current trends in graduate management education in the business and public administration sectors in various parts of the world, and to identify innovations in these domains that could potentially add value to current educational approaches employed in the preparation of educational leaders. The study identifies patterns in the program structure, curriculum content and learning methods employed and identifies features that could add potential value to programs aimed at principal preparation.

Hoole, E and Martineau, J 2014, Evaluation methods, in *The Oxford handbook of leadership and organizations*, Oxford University Press, NY.

Hoole and Martineau discuss the challenges of evaluating the impact of leadership development. This is a challenge for all leadership development, not just school principal development. The authors review the existing evidence, propose a new evaluation framework and discuss multiple evaluation methods.

Ibarra, H, Wittman, S, Petriglieri, G and Day, D 2014, Leadership and identity: An examination of three theories and new research directions, in *The Oxford handbook of leadership and organizations*, Oxford University Press, NY.

Developing a leader identity is important for teachers transitioning from the classroom to the school principal role. The authors discuss the literature and theories of leadership identity and how this effects the emergence, effectiveness and development of leaders.

Leithwood, K 2012, *The Ontario Leadership Framework*, The Institute for Education Leadership.

http://iel.immix.ca/storage/6/1345688978/Final_Research_Report_-_EN.pdf

The revised Ontario Leadership Framework is an evidence-based description of successful individual and small group practices for both school and system level leaders, as well as effective organisational practices at both school and system levels. Both sets of individual and small group practices are intended to be useful, in particular, for purposes of leadership development. The Framework includes a section entitled Personal Leadership Resources. This section distils evidence about leadership traits and dispositions most likely to influence the effectiveness with which leadership practices are enacted. These resources are intended to be especially relevant for purposes of leadership recruitment and selection.

Ng, PT 2013, Developing Singapore school leaders to handle complexity in times of uncertainty. *Asia Pacific Education Review*, 14, (1), 67–73.

Ng details the Leaders in Education Program run by the National Institute of Education in Singapore. This six-month full-time executive leadership program utilises a range of learning experiences including knowledge triggers: courses, talks, readings, international and industrial visits, knowledge generators, journaling, course assignments and the creative action project. The author details the creative action project which requires teachers to learn to handle the complexities within conceptualisation and implementation of a project. Participants must build a strategic plan for their placement school in 10-15 years' time and use their new leadership skills to implement – or pilot – an element of the plan relating to curriculum, pedagogy or assessment.

Pont, B, Nusche, D and Moorman, H 2008, *Improving school leadership volume 1: Policy and practice*, Directorate for Education, OECD.

This OECD report contains both a synthesis of evidence about the importance of school leadership and case-studies from OECD member countries. It includes discussions on the role of school leadership in autonomous systems, distributed leadership, skill development required for effective school leadership and making school leadership an attractive profession. Volume 2 provides detailed case-studies of leadership programs in five education systems.

Robinson, V, Hohepa, M and Lloyd, C 2009, *School leadership and student outcomes: Identifying what works and why, best evidence synthesis iteration [BES]*, University of Auckland.

This report is a synthesis of 134 international research studies or reviews that identifies leadership behaviours and practices that have a positive impact on student learning. The paper explains the theory behind the evidence, supported by vignettes and case studies to enable leaders to adapt and use the findings in their own contexts. The paper is core reading material for the Aspiring Principals Programme in New Zealand.

12. Appendices

Appendix 1: Leadership and principal preparation programs examined in detail

The following sectors and programs were examined in detail for this report. Education principal development programs were highly regarded in international research. Programs were selected to illustrate principal preparation in a range of geographical areas and education system structure and policy contexts, as well as showing various program structures and delivery methods.

Programs in other sectors were selected due to their international standing (for example, international rankings of Executive MBA programs) and/or because the programs prepared leaders to undertake a similar level of responsibility to that of a school principal.

Sector	Program
Education	England: National Professional Qualification for Headship
	Canada: Ontario's Principal Qualification Program
	Singapore: Leaders in Education Program
	New Zealand: National Aspiring Principals Programme and First-time Principals Programme
	Austria: Leadership Academy
	United States: New York City Aspiring Principals Program Knowledge is Power Program (KIPP) – School Leadership Program National Institute for School Leadership New Leaders Program (formerly New Leaders for New Schools) University of Illinois Ed.D Urban Education Leadership Program
Executive Education	University of Chicago Booth School of Education, Executive MBA
	Institut Européen d'Administration des Affaires (INSEAD) Executive MBA
	Institute for Management Development (IMD) Executive MBA
	Harvard Business School Advanced Management Program
	Massachusetts Institute of Technology (MIT) Sloan School of Executive Education – Executive MBA
	University of Virginia – Executive MBA
Australian Military	Australian Command and Staff Course (Joint)
	Centre for Defence and Strategic Studies Course
Health Administration	Royal Australasian College of Medical Administrators Fellowship Program
	Australian College of Health Service Management
Professional Service Organisations	Boston Consulting Group
	Hay Group

Appendix 2: Comparison of program core content and the Standard*

Australian Standard Professional Practices	Leaders in Education Program (Singapore)	Principal Qualification Program (Ontario)	National Institute for School Leadership (USA)	National Professional Qualification for Headship (UK)	National Aspiring Principals Programme (New Zealand)
Leading teaching and learning	Evaluation and assessment	Leading the instructional program	<p>Elements of standards-based instructional systems</p> <p>Foundations of effective learning</p> <p>Leadership for excellence in literacy, numeracy and science (separate modules)</p> <p>The Principal as Instructional Leader and Team Builder <i>(also maps to developing others)</i></p>	<p>Leading and improving teaching</p> <p>Using data and evidence to improve performance</p> <p>Curriculum development <i>(elective)</i></p> <p>Leading inclusion: achievement for All <i>(elective)</i></p>	Leading Learning Outcomes
Developing self and others	School leadership, vision and culture <i>(also maps to leading improvement)</i>	Building relationships and developing people <i>(also maps to engaging community)</i>	<p>Promoting Professional Learning</p> <p>The Principal as Ethical Leader <i>(also maps to leading management and engaging community)</i></p>	Leading staff and effective teams <i>(elective)</i>	Developing Self Outcomes
Leading improvement, innovation and change	<p>Design thinking: innovation and values</p> <p>Educational leadership through complexity lenses</p>	Developing the organisation	<p>World-Class Schooling: Vision and Goals <i>(also maps to engaging community)</i></p> <p>The Principal as Strategic Thinker</p> <p>The Principal as Driver of Change</p> <p>Leading for Results</p>	<p>Closing the gap <i>(elective)</i></p> <p>Leading change for improvement <i>(elective)</i></p> <p>School improvement through effective partnerships <i>(elective) (also maps to engaging community)</i></p>	<p>Leading Change Outcomes</p> <p>Future-focused Schooling Outcomes</p>
Leading the management of the school	Contemporary strategic management	Securing accountability		<p>Leading an effective school</p> <p>Succeeding in headship</p> <p>Freedoms and constraints <i>(elective)</i></p>	Role of the Principal Outcomes
Engaging and working with the community		Building relationships and developing people <i>(also maps to developing self and others)</i>		<p>Relationships and reputation <i>(elective)</i></p> <p>School improvement through effective partnerships <i>(elective) (also maps to leading improvement)</i></p>	

*Note that each program's content aligns with jurisdiction's principal standard and/or leadership framework.

Appendix 3: Knowledge, skills and abilities required to meet the Standard

The following table maps out the knowledge, skills and abilities that principals may require to meet the Standard. The skills and competencies are drawn from the literature and case studies examined in this report. They are proposed for consideration during the design of principal preparation programs. Key sources include Cheney et al. (2010); Darling-Hammond et al. (2007); Hallinger and Lu (2013); Leithwood (2012); Marzano, Waters and McNulty (2005); National College for Teaching and Leadership (2014); Robinson (2007); The Wallace Foundation (2008); Torres, Reeves and Love (2010).

Australian Standard	Vision and values	Knowledge and understanding	Personal, social and interpersonal
Leading teaching and learning	<ul style="list-style-type: none"> • Setting a strategic vision and objectives to improve learning and teaching • Developing a school culture which promotes shared knowledge and shared responsibility for outcomes • Promoting the importance of professional practice being informed by data, evidence and research • Creating a culture of personalising learning • Leading inclusive learning practices, reflecting principles of diversity, access, equity and advocacy 	<ul style="list-style-type: none"> • Current research and thinking in educational leadership • How students learn, how to build student efficacy in learning, and relationship to contemporary learning theories • Curriculum development, implementation and review processes and requirements • Supporting differentiated instruction and learning, including use of Individual Learning Plans, and developing programs for students with additional learning needs • Using technology to support teaching and learning • Understanding student assessment and evaluation policies and procedures (including local, national and international assessment programs) • Formative assessment practice, and collecting and analysing data to improve student achievement • Collecting and analysing data to inform decision making (student, cohort and school levels) • How to assess the effectiveness of teaching programs and resources • Reporting practices that make learning and progress visible and engaging, including policy requirements, and student and school community expectations • Creating school plans to improve student learning and achievement, based upon school and individual student assessment results • Distributed leadership processes and practices that engage teachers, parents and students 	<ul style="list-style-type: none"> • Keeping up to date and communicating contemporary knowledge • Setting expectations that all school activities should improve outcomes - winning hearts and minds, and inspiring 'followership' • Leading effective and reflective teams • Influencing and motivating staff • Critiquing plans to improve student learning based on school and individual student assessment results • Using personal expertise and feedback to improve teaching practices

Australian Standard	Vision and values	Knowledge and understanding	Personal, social and interpersonal
Developing self and others	<ul style="list-style-type: none"> • Reflecting on personal leadership philosophy (values, ethical standards, morality) • Modelling self-development and improvement • Aligning individual development with professional standards and strategic objectives • Creating individual ownership of performance and professional learning plans • Valuing awareness and management of wellbeing (self and others) • Demonstrating ethical behaviour • Ensuring equity of access to opportunity and achievement for all staff and students 	<ul style="list-style-type: none"> • Theories of leadership styles and practices, and their application to the changing contexts/role of the principal • Distributed leadership and effective delegation and empowerment • Communication skills (speaking and presentation skills, strategies for conducting effective meetings and holding difficult conversations) • Practices to create and enhance professional relationships and promote capacity building • Components of staff supervision, and how to use the performance appraisal process to foster professional growth • Identifying and responding to practice that fails to meet, or significantly exceeds, required standards • Coaching and mentoring culture and practice • Giving and receiving feedback using data and evidence • Conflict management and mediation • Strategies to promote ongoing professional learning, and individual and team development, including professional learning teams • Identify learning needs; select appropriate support/professional learning and evaluate for impact on learning and teaching 	<ul style="list-style-type: none"> • Developing leader identity • Practising self-reflection; ability to know oneself • Developing optimism, self-efficacy and resilience • Perceiving and managing emotions, and acting in appropriate ways • Active listening, giving, receiving and reflecting on feedback to challenge and improve leadership practice • Networking for peer reflection, support and personal/staff development • Managing time, energy and interactions • Promoting wellness and balance for self and staff • Finding sources of support
Leading improvement, innovation and change	<ul style="list-style-type: none"> • Promoting the importance of innovation in education and creating a culture of continuous improvement • Building, communicating and implementing a shared vision • Creating a compelling vision for the future to engage the whole school community, that reflects school, community and system-level priorities • Inspiring others and creating a positive, dynamic learning culture 	<ul style="list-style-type: none"> • School review planning, processes and outcomes, and other external assessments for school improvement • Identifying, analysing and responding to factors that influence school improvement, including environmental scanning for opportunities and ideas (local, national and global) • Understanding current and emerging best practice; identifying patterns and trends • Use of change strategies (timing, engaging champions and managing resistance, use of technology and innovations) • Stakeholder mapping and analysis; anticipating and managing reactions to change proposals • Systems thinking and analysis; understanding the levers for, and impacts of, change within the school • Understanding the context of system-level policies, priorities and initiatives and implications for school improvement planning 	<ul style="list-style-type: none"> • Flexibility and openness to new ideas and different perspectives • Identifying problems and solutions, and setting goals • Creating consensus for change; influencing and inspiring others and strengthening commitment to school improvement • Creating a collaborative and consultative environment; distributing leadership • Managing support and resistance • Fostering networks and networking (self and staff) for system improvement, piloting and sharing ideas • Identifying and sharing improvements within and between schools, networks and the wider education community

Australian Standard	Vision and values	Knowledge and understanding	Personal, social and interpersonal
Leading the management of the school	<ul style="list-style-type: none"> Fostering an open, fair and equitable school culture Creating clarity of roles, responsibilities and expectations Modelling personal responsibility and accountability 	<ul style="list-style-type: none"> Understanding system objectives, priorities and accountabilities Setting goals that are relevant, realistic and measurable Strategic, operational and implementation planning and processes that focus planning and resource management on improving student learning Duties, roles and responsibilities of school leaders, including legal and policy requirements (e.g. education, safe schools, duty of care, equity, health and wellbeing, critical incidents, personal data and confidentiality) School governance, the role and responsibilities of school councils; strategies for working effectively with school councils and other volunteers Performance monitoring processes including data collection and analysis to understand and assess the needs of the school Human resource management processes (recruitment, selection, induction, staff assignments and timetabling, development, recognition and reward, exit processes) Labour relations and collective agreements, the role of the union and school union representative(s), and disciplinary and grievance procedures Current funding models and financial resources; budget planning and monitoring processes Infrastructure management and planning (buildings, ICT) Project management and implementation of strategic and operational plans, including risk management Strategies to present clear and accessible accounts of the school's performance to a range of audiences 	<ul style="list-style-type: none"> Exercising autonomy and initiative, effective decision making and problem-solving Situational leadership: adapting approaches and exercising judgement based on context and application of prior knowledge and experience

Australian Standard	Vision and values	Knowledge and understanding	Personal, social and interpersonal
Engaging and working with the community	<ul style="list-style-type: none"> Understanding the context of the school, including culture, diversity and inclusivity, and where/how this is important for improving learning and teaching Strategic planning and processes that engage the diversity, values, and experiences of the school community Deliberate engagement of the school community in supporting the strategic objectives of the school Establish expectations of shared responsibility for learning between students, families and the school 	<ul style="list-style-type: none"> Approaches to getting all children engaged in learning which are supported inside and outside the school Models of effective partnerships and networks Accessing community support, resources and social capital, including working with industry, community services and other providers (family social services, police and the judicial system, Aboriginal organisations, higher and further education providers) Managing transitions between stages and settings of learning (into, through and beyond school) How to use communication strategies to address barriers and engage marginalised members of the community 	<ul style="list-style-type: none"> Developing relationships with students, parents, community, business, social services Positively portraying the school in the community Providing ways for the community to engage with and support school activities Using appropriate communication strategies for different stakeholder groups (for example, parents, guardians, community groups and the media) Supporting social and emotional wellbeing and development of students and staff Networking to access and share resources

Appendix 4: Knowledge, skills and dispositions associated with effective leadership of teaching and learning

The following table summarises school leadership dimensions and behaviours with the greatest impact on student outcomes. The table includes the knowledge, skills and dispositions that are implied by, and embedded in, these leadership dimensions. This is the result of a meta-analysis conducted by Robinson, Hohepa and Lloyd (2009).¹⁶⁰

Leading teacher learning and development (effect size 0.84)	
Knowledge of effective professional development How to foster collective responsibility and accountability	<ul style="list-style-type: none"> • Use evidence to design/evaluate professional development opportunities. • Participate in learning with staff, and create expectations that staff groups will promote learning about how to improve student outcomes. • Model conversations and challenge culture to foster a focus on the relationship between teaching and student achievement.
Use of data	<ul style="list-style-type: none"> • Establish systems to monitor, report, and improve student progress. • Ensure teachers develop skills needed to interpret data.
Pedagogical content knowledge	<ul style="list-style-type: none"> • Use own knowledge of teaching and learning to help staff solve teaching problems.
Establishing goals and expectations (effect size 0.42)	
How to set goals	<ul style="list-style-type: none"> • Understand why goal setting is important, conditions for success, and how to overcome potential pitfalls. • Make decisions that balance system and community expectations. • Envisage challenging goals, including knowing how to sequence learning outcomes.
How to gain goal commitment	<ul style="list-style-type: none"> • Show how challenging outcomes are attainable, and how barriers can be overcome. • Explain, agree and clearly communicate goals, and lead any teacher learning required.
Planning, coordinating, and evaluating teaching and the curriculum (effect size 0.42)	
Self-management	<ul style="list-style-type: none"> • Prioritise own time to ensure oversight of teaching and learning.
Knowledge of how students learn	<ul style="list-style-type: none"> • Have a research-based understanding of how students learn.
Knowledge of effective teaching	<ul style="list-style-type: none"> • Understand effective teaching, and situated inquiry into the relationship between what is taught and what is learned. • Make administrative decisions (e.g. teacher development, student grouping, reporting) based on student impacts.
Knowledge of how to improve and evaluate teaching effectiveness	<ul style="list-style-type: none"> • Observe and discuss teaching and learning with staff. • Use pedagogical knowledge to help staff to improve their teaching. • Ensure staff regularly use evidence to review students' progress. • Use student data to diagnose and resolve teaching problems.
Resourcing strategically; obtaining and allocating resources aligned to pedagogical goals (effect size 0.31)	
Understand effective alignment of staffing and teaching resources	<ul style="list-style-type: none"> • Use the principle of strategic alignment to prioritise/rationalise procurement and allocation of resources. • Determine and recruit the expertise required to achieve goals, with transparency and clarity. • Develop networks that widen the available expertise. • Evaluate the effectiveness of alternative teaching resources in terms of learning outcomes. • Develop the school timetable to reflect pedagogical priorities. • Recruit and induct staff into school-wide assessment and pedagogical procedures.
Ensuring an orderly and supportive environment (effect size 0.27)	
Recognise and resolve issues that may impact on student wellbeing	<ul style="list-style-type: none"> • Identify and address competence issues and conflict early. • Seek and act on student feedback to improve engagement in learning.

¹⁶⁰ See Robinson, Hohepa and Lloyd (2009), Appendix 8.1.

Appendix 5: Ontario's Leadership Framework personal resources

Ontario's Leadership Framework details the personal leadership resources of cognitive resources, social resources and psychological resources.

Cognitive resources

'Expert' problem-solving capacities and the domain-specific knowledge on which they depend can be significantly improved through planned opportunities.

1. Problem-solving expertise (problem interpretation, goal setting and planning).
2. Knowledge about school conditions with direct effects on student learning (the impact of technical, emotional, organisational and family conditions).

Social resources

These encompass the leader's ability to understand feelings, thoughts and behaviours in interpersonal situations and to act appropriately on that understanding.

1. Perceiving emotions (self and others).
2. Managing emotions (self and others).
3. Acting in emotionally appropriate ways.

Psychological resources

These resources contribute significantly to leader initiative, creativity and responsible risk-taking behaviour, particularly when they act in synergy.

1. Optimism (taking initiative with positive expectations).
2. Self-efficacy (belief in one's ability encourages persistence and trying different approaches to achieve goals).
3. Resilience (ability to thrive in challenging circumstances).

Source: Leithwood (2012, pp. 114-124)

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