AITSL is funded by the Australian Government

Australian Institute
for Teaching and
School Leadership
Limited

Evaluating your Principal Preparation Programs: A Practical Guide

November 2016

The Australian Institute for Teaching and School Leadership (AITSL) was formed to provide national leadership for the Commonwealth, state and territory governments in promoting excellence in the profession of teaching and school leadership with funding provided by the Australian Government.

ISBN 978-1-925192-46-9

© 2016 Australian Institute for Teaching and School Leadership (AITSL).

AITSL owns the copyright in this publication. This publication or any part of it may be used freely only for non-profit education purposes provided the source is clearly acknowledged. The publication may not be sold or used for any other commercial purpose. Other than permitted above or by the Copyright ACT 1968 (Commonwealth), no part of this publication may be reproduced, stored, published, performed, communicated or adapted, regardless of the form or means (electronic or otherwise), without prior written permission of the copyright owner.

Address inquiries regarding copyright to: AITSL, PO Box 299, Collins Street West, VIC 8007, Australia.

This project was funded by the Australian Institute for Teaching and School Leadership Limited (AITSL) with funding provided by the Australian Government.

Evaluation framework with focus areas and key evaluative questions

Components	Focus areas	Key evaluative questions
	What is the program trying to achieve?	
1. Review of program objectives and goals	What are the program's objectives and goals?	What problem is the program trying to address? What are the identified leadership development needs of individual participants? How does the program help aspiring principals to progress towards the *Australian Professional Standard for Principals*? How does the program address the needs of schools and education systems (where applicable)? What are the short, medium and long-term goals and expected impacts of the program?
	How does the program design contribute to achieving the program objectives and goals?	What external factors (e.g., policy environment, workforce planning) may impact the program's ability to achieve its objectives? How is the program designed and structured to ensure it achieves its objectives? Is the program design systematic, evidence-based, coherent and standards-based? What are the assumptions behind how and why the identified strategies will work?
	Who should participate in the program?	
2. Evaluation of selection processes	What are the desired program participant attributes?	What existing personal attributes, motivations, qualifications and experience should participants have? What existing skills should participants have, given the program's objectives?
	Do the attraction and selection processes deliver the desired program participants?	Do the program attraction and selection processes result in participants who have the desired attributes, motivations, skills, qualifications and experience?
	How effectively is the program designed and delivered?	
3. Evaluation of program content, design and delivery	Is the program content coherent and relevant?	Does the content and structure of the program deliver on the objectives of the program? Does the program integrate theory and practice linked to the *Australian Professional Standard for Principals*?
	Is the program design and delivery high quality and based on evidence of what works?	Does the program provide a learning development process that takes into account the needs, career stage, prior learning and context of individual participants? Is the content and curricular design coherent and grounded in evidence-based research? Is the structure and delivery of the program based on best practice including opportunities for practice, feedback and reflection? Does the program provide significant opportunities to learn from experts and practitioners? Are there opportunities for practical experience and applied learning? Are there processes to support the ongoing development of program graduates?
	Are there effective assessment practices and measures of participant growth?	Does the program make good use of formative assessment and feedback processes? Does the program use baseline measures and ongoing monitoring of program participants' growth?
	Do program graduates feel the program was worthwhile, and that they developed new skills?	What were program participants' experiences of the program? What are the program retention and completion rates? Were program participants engaged? Did participants learn new skills and gain knowledge? Do participants feel more prepared to lead?
	How will we know if the program has been successful?	
4. Evaluation of participant performance and outcomes	Did program graduates change their behaviour during and after the program?	Did participants change the way they think and their leadership behaviour during and after the program? How have program graduates implemented specific learnings from the program in their leadership practice – including knowledge, skills, behaviours, attitudes and perceptions? Are program graduates working towards the *Australian Professional Standard for Principals*?
	Did program graduates change leadership and teaching at their school?	Have changes in leadership practices improved the school climate? Have changes in leadership practices positively affected other school leaders? Have changes in leadership practices improved teaching practices?
	What are the impacts of program graduates on student outcomes?	Are there changes in what students know and can do?
	Has the program met its goals and had an impact on the education system?	Are program graduates having an impact on the system? Are program graduates applying for, and appointed to, principal positions? Did the program meet its short, medium and long-term goals defined in Component 1?

Australian Institute for Teaching and School Leadership Limited

Evaluating your Principal Preparation Programs: A Practical Guide

November 2016

Contents

Go to contents page

A/ Introduction

This guide is a summary of a substantial AITSL research project on the evaluation of principal preparation programs. The project report was published as: *Insights. Evaluating your Principal Preparation Programs: Research Report.*[1] Commissioned by AITSL, the report was developed by Learning First, a social enterprise using research and consulting to help improve education systems in Australia and around the world. The original report is available on the AITSL website.

The role of school principal is broad, complex and increasingly challenging. There is a growing body of evidence illustrating the skills, knowledge and capabilities that principals need, as well as what constitutes effective leadership development programs. The *Australian Professional Standard for Principals* (the Standard) *and the Leadership Profiles*[2] define effective school leadership, setting out an evidence-based set of Leadership Requirements and Professional Practices that are expected of all school leaders. Aspiring principals can use the Standard and Leadership Profiles as resources to identify the skills, knowledge and capabilities they need to develop as they progress towards becoming principals.

Aligning with the Standard and Leadership Profiles, research reveals there are three key areas of skills, knowledge and capabilities that aspiring principals and leaders need to develop:[3]

1. Instructional leadership including the skills to:
   - define, frame and communicate a school's mission
   - manage a school's instructional program including supervising instruction, coordinating curriculum and monitoring student progress
   - promote a positive school learning climate including protecting instructional time, professional development and promoting high expectations for teachers and students.
2. New management and leadership skills to effectively run a school including finance and budgeting, human resources and strategy
3. Higher-order leadership capabilities including strategic thinking, the ability to lead change, and personal and interpersonal skills such as emotional intelligence, self-awareness, self-management and relationship management.

Throughout their careers, teachers and school leaders need to continually develop their leadership skills, knowledge and capabilities. But there is no single, defined and common pathway to becoming a principal. Leaders develop in part through individual, on-the-job development activities such as mentoring and coaching, taking on additional responsibilities or shadowing and observing a principal in a school.

Most leaders also develop through formal principal preparation programs. In recent times education systems in Australia have invested significant resources in developing and delivering principal preparation programs. A recent scan found a total of ten dedicated principal preparation programs and significant numbers of other programs that supported leadership development.[4] Yet, generally speaking, there is a lack of a coordinated and strategic approach to effectively preparing Australia's school leaders.[5]

Despite the importance of the role, little is known about the effectiveness of current professional learning programs that aim to prepare aspiring principals for the responsibilities of the job. Forty-five per cent of Australian principals report receiving average or weak leadership training.[6] Nor is there established practice in the rigorous evaluation of program outcomes. Significant resources are continually invested in principal preparation programs, with limited evidence of impact.

Differences between effective principals and those who are under-prepared can be large.[7] Therefore, it is crucial that investments in principal preparation are effective. We cannot begin to assess these investments and the effectiveness of the programs themselves without a commitment to evaluating them. In short, we need to know what is and what is not working.

Go to contents page

A.1 Principal preparation programs

The framework outlined in this guide concerns principal preparation programs that are specific leadership courses or modules delivered by a provider. They seek to help aspiring principals develop certain leadership skills, knowledge and capabilities in line with the *Australian Professional Standard for Principals*. A program may not necessarily cover all skills or requirements that leaders are expected to develop, and may be quite targeted and specific in focus. This guide concerns evaluation of these formal principal preparation programs. The guide might also be helpful in the evaluation of other programs (e.g., those for teachers or current school leaders, or coursework required by education jurisdictions and authorities) but is not designed to address these programs.

One basis for more effective evaluation of such principal preparation programs already exists: there is research that has identified the characteristics of effective programs:

1. Programs need to select participants who have the requisite skills, knowledge and experience to benefit from the training offered.
2. Program objectives are linked to the education system's strategic priorities of improving teaching and learning. Programs also need to be explicit about their intended purpose and outcomes.
3. Content of programs focuses on developing participants' deeper subject matter expertise, new management and leadership skills, and higher-order leadership capabilities.
4. Program delivery includes a range of different learning experiences that encourage collaboration, feedback and the opportunity for individuals to practise new skills in a real world context.
5. Rigorous program evaluations are conducted to assess the value and worth to participants, schools and systems, and to guide ongoing program improvement. Evaluation of outcomes should take into account both intermediate outcomes, such as a change in participant behaviour, as well as longer-term outcomes such as improved student performance.[8]

A.2 Overview of this guide

This guide introduces an evaluation framework that program providers and education systems and sectors in Australia can use to assess and improve their principal preparation programs. This section of the guide offers an overview of the framework and some practical considerations affecting its use. The framework is then described in much greater detail in Section B.

The framework is a practical guide for providers of professional learning programs to work through to review their program's goals, processes and outcomes. The framework builds on what is known about high-quality principal preparation programs. The elements of the framework are designed to assist providers to measure the effectiveness of their programs against what research evidence shows to be the characteristics of an effective program.

Program providers can adapt and customise the evaluation framework described here. There is no uniform approach to evaluating principal preparation programs. There is a wide array of programs with diverse goals, serving participants from different backgrounds and educational contexts. The framework provides a guiding process to help program providers create their own tailored approach to evaluation, specific to their unique program goals and focus.

Go to contents page

The framework has four evaluation components. These address in turn:

- the goals and objectives of the program: an effective program will have a clearly defined idea of what it aims to achieve in the form of specific, achievable goals
- whether the program is attracting and selecting the appropriate participants: an effective program will identify and select talented aspiring principals who are at an appropriate stage of development to benefit from the program
- the effectiveness of the program's content and delivery: effective programs are designed so that participants learn and develop new skills that enhance their leadership ability
- the outcomes for participants, schools, school systems and students: effective programs lead to changes in participant leadership behaviour, consistent with the *Australian Professional Standard for Principals*, that in turn shift teaching and learning in the school, and lead to improved student outcomes. While there is a long causal chain between a principal preparation program and better student outcomes, evaluation can help to confirm that better leadership leads to better learning.

The four components are set out in Table 1 below. The table also shows that each evaluation component includes two or more focus areas. Providers choose the focus areas for evaluation that are most relevant to their needs.

Table 1: Evaluation framework with focus areas

Evaluation components	Focus areas
Component 1 **Review of program objectives and goals** What is the program trying to achieve?	• What are the program's objectives and goals? • How does the program design contribute to achieving the program objectives and goals?
Component 2 **Evaluation of selection processes** Who should participate in the program?	• What are the desired program participant attributes? • Do the attraction and selection procedures deliver the desired program participants?
Component 3 **Evaluation of program content, design and delivery** How effectively is the program designed and delivered?	• Is the program content coherent and relevant? • Is the program design and delivery high quality and based on evidence of what works? • Are there effective assessment practices and measures of participant growth? • Do program graduates feel the program was worthwhile, and that they developed new skills?
Component 4 **Evaluation of participant performance and outcomes** How will we know if the program has been successful?	• Did program graduates change their behaviour during and after the program? • Did program graduates change leadership and teaching at their school? • What are the impacts of program graduates on student outcomes? • Has the program met its goals and had an impact on the education system?

Go to contents page

In each of the focus areas, the framework proposes more detailed evaluative questions providers can use to help clarify and sharpen what the evaluation will concentrate on. Providers then collect data to help answer these questions. The data will help answer the detailed evaluative questions in each focus area, and so help measure the effectiveness of the program.

The guide includes a range of commonly used tools that can assist in data collection. Providers can select or modify these tools or create their own to assist in collecting data about their programs. The framework itself does not specify which tools should be used for each question because each principal preparation program is unique. The program provider chooses the tools that are most appropriate and relevant to their program's objectives and intended outcomes, and adapts them to their context.

Table 2 below lists some tools that are commonly used in the evaluation of principal preparation programs.

Table 2: Tools commonly used in the evaluation of principal preparation programs

Tool type	Specific tools and other resources
Document reviews	Review of school policies, procedures and information can provide useful information as to whether program participants have acted on new knowledge gained throughout the programs. They can also be used to evaluate selection and program delivery phases.
Performance appraisals/ observations	Participants' performance appraisals are a source of data about both performance and change in behaviours and practices over time. Performance appraisals of individuals before they start the program can act as a baseline, with subsequent annual appraisals providing data points in a longitudinal evaluation.
Review of best practices	As part of the evaluation process, program providers may wish to analyse the evidence base on a particular aspect of the program, for example reviewing how highly-regarded programs recruit and select participants. This could take the form of a literature review.
Rubrics	Rubrics can be used to help programs assess the quality of processes and outcomes across a range of issues. Rubrics are usually informed by evidence and reviews of best practice, thus making it easier for program providers and evaluators to engage with the evidence base.
Secondary data analysis	Analysis of secondary data sources such as workforce data, or program graduate retention and promotion rates, can be used to identify trends or make predictions about future outcomes.
Self-reports	Self-reports are often used in evaluating learning needs and principal performance outcomes. They are generally cheap, easy to administer, and provide one way of determining differences between program participants.
Semi-structured interviews	Semi-structured interviews are a valuable source of qualitative data. Typically these interviews are used to gain participants' points of view.
Strategic review	Strategic review tools encompass a range of tools that can be used in assessing and clarifying program goals; results can also be used for future planning. The Standard and Leadership Profiles, which describe the leadership actions of principals as they progress to higher levels of proficiency, may provide a starting point for a strategic review of program aims.
Student outcomes analysis	Student data can be used to help develop an understanding of the impact a leader's participation in a program had on student outcomes such as wellbeing, learning, growth and achievement (the final item as measured by test scores).
Survey instruments	Surveys can be used to collect a range of quantitative data through scaled responses or qualitative data using open-ended questions. They can also be used to triangulate other evaluative data from interviews or observations. They can serve as formative self-assessment opportunities for participants.

Go to contents page

There is a wide range of considerations for program providers in assessing which tools and measures to use in evaluation, how to manage data collection and the timing of evaluation processes. Advice on these and other implementation issues is provided in Section C.

The use of the framework to conduct high-quality evaluation will assist to:

- assess program effectiveness by evaluating whether a program improves individual participants' skills, knowledge and capabilities
- improve program content, delivery and operation by providing feedback to program providers
- encourage alignment between programs and the needs of schools and education systems
- provide accountability as to whether professional learning funds are being invested wisely
- inform decisions about potential program participants and program funders.

A.3 Relationship to earlier AITSL work

The framework described here is consistent with work undertaken by AITSL to determine what kind of evaluative approach is appropriate for principal preparation programs. That work identified the need for an evaluative approach that includes multi-source, longitudinal measures of program quality and impact.[9] It also noted that program providers should be able to demonstrate:

- that their programs are readying aspiring principals for their first principal job
- that once in principal roles these individuals have a positive impact
- that overall, the program provider is contributing to the number of well-prepared aspirants available to take up future vacancies.[10]

The framework described in this guide allows for program providers to evaluate their performance in each of these areas.

The process is also consistent with other elements of the AITSL report *Preparing Future Leaders: Effective preparation for aspiring school principals*, which reviews the Australian principal preparation landscape. The major recommendations from this work include (bracketed notes after each recommendation indicate which components in the evaluation framework respond to the recommendation):

- Take a systematic, standards-based and coherent approach. This recommendation clearly aligns with the first component of the evaluation framework, defining program goals in the context of the needs of the education system and the *Australian Professional Standard for Principals*. It is also an important element of the framework's third component: evaluating course content, design and delivery. (Components 1 and 3)
- Identify and nurture talent. AITSL has identified that in the strongest approaches to leadership preparation, people are identified early and supported to develop over their careers. The identification, recruitment and selection of potential leaders are important parts of the framework. (Component 2)
- Match learning to an individual's capabilities, career stage and context. Program design and learning opportunity matched to individual needs and evidence-based course content are critical elements of the evaluation framework. (Components 2 and 3)
- Use evidence-based adult learning techniques. Highly effective programs reflect an understanding of adult learning principles including learning opportunities to apply new skills and knowledge, learning from experts and practitioners, collaborating, receiving feedback and receiving ongoing support. (Component 3)
- Evaluate programs for impact. The final recommendation on principal preparation programs is to measure the impact of the programs. This framework outlines a range of tools for evaluation at the participant, school, student and system level. (Component 4)[11]

Go to contents page

A.4 Leadership improvement and student outcomes

In education, the ultimate objective of developing the leadership capacity of aspiring principals is to improve student outcomes. However, the relationship between leadership and student learning outcomes is indirect. Changes in leadership practices affect teaching, and changes in teaching in turn affect student outcomes. There are many other intermediate factors that influence this chain of events, such as time lags between participation in a program and taking up a principal position and subsequently implementing changes in schools.

It is essential that program designers and providers explicitly articulate the program's objectives and intended outcomes, as well as the underlying assumptions and hypotheses that might explain the 'how, when and why of the process of change'.[12] This helps program providers to work out how and to what extent different parts of the program contribute to achieving the intended outcomes. It also helps to link potential individual participant outcomes to system level outcomes.[13] Evaluators can then test the assumptions that underlie the program and assess its outcomes. This approach to evaluation of leadership development programs is used in other sectors as well as education.[14]

In summary, the simplified causal chain leading from principal preparation programs to improved student outcomes includes the following steps:

- Specific, achievable program goals are articulated.
- Talented aspiring principals are selected into the program.
- The program improves participants' leadership ability.
- Program graduates improve their leadership, teacher quality and overall school climate.
- As a result of these improvements, student outcomes improve.

At each of these steps, there are factors influencing the outcome from outside the process. These factors can interrupt the causal chain and affect the longer-term benefits.

A.5 Resources used to develop the framework

In creating the evaluation framework, a number of other evaluation frameworks and guides were reviewed. Key models of influence include the Wallace Foundation's *Quality Measures: Principal Preparation Program Self-Assessment Toolkit*,[15] the Center for the Evaluation of Educational Leadership Preparation and Practice's *Evaluation Planning Guide*, and the tools contained in the Rainwater Leadership Alliance's *Continuum of Principal Preparation*.[16]

It also draws on various other evaluation tools for leadership development, including the Kirkpatrick and Guskey models of professional development evaluation and the work of the Kellogg Foundation.[17]

The framework described here draws on key concepts and design features from these models, but does not follow any model directly. It is a unique design that takes program providers through a cyclical review process that encourages them to determine their own goals (based on system needs, context and the Standard), and provides a range of example tools that can be adapted to collect data for specific needs from multiple sources.

More specifically, this framework draws on the following:

- The Wallace Foundation and Education Development Center's rubric, based on extensive research about the components of an effective principal preparation program. However, unlike the framework presented in this guide, it does not support program providers to review their own goals and is based on a rating system.
- The Rainwater Leadership Alliance framework, which creates a logical evaluation process and the opportunity to define program goals. However, it differs from the framework presented in this guide in that it does not include outcome measures as part of the evaluative process.

Go to contents page

- The guide produced by the Center for the Evaluation of Educational Leadership Preparation and Practice (and adapted by New Leaders).[18] It contains a similar framework to the one in this guide, but without the same emphasis on defining program objectives and goals and articulating the strategies to achieve these.
- Guskey provides a five-step evaluation model that focuses on participants' reactions, participants' learning, organisation support and change, participants' use of new knowledge and skills, and student learning outcomes. This aligns closely to Components 3 and 4 of the evaluation framework in this guide, but does not have key elements such as system and participants' needs, or selection of participants (Components 1 and 2).

Go to contents page

B/ An in-depth guide to using the evaluation framework

This section is a practical guide for program providers to evaluate their program using the framework. It includes:

- the four components that provide the structure of the evaluation process. Each component is discussed separately
- the focus areas within each component. Program providers should consider which focus areas are relevant to their own program evaluation, and then choose the appropriate evaluation tools that will help them collect the information they need
- the key evaluative questions that will guide the evaluation process for each focus area along with discussion of the intention of each question and further information concerning how the question can be addressed
- for each of the framework's four components, an overview of potential evaluation tools and how providers could use them. A range of different techniques and tools may be used to answer the evaluative questions within each component. One of the benefits of using evaluation tools is the discussion they prompt among the program providers who are analysing the data.

The following section (Section C) provides further information on evaluation planning and considerations for using tools to collect data.

Go to contents page

Component 1:
Review of program objectives and goals

What is the program trying to achieve?

Focus areas	Key evaluative questions
What are the program's objectives and goals?	• What problem is the program trying to address? • What are the identified leadership development needs of individual participants? • How does the program help aspiring principals to progress towards fullfilling the *Australian Professional Standard for Principals*? • How does the program address the needs of schools and education systems (where applicable)? • What are the short, medium and long-term goals and expected impacts of the program?
How does the program design contribute to achieving the program objectives and goals?	• What external factors (e.g., policy environment, workforce planning) may impact the program's ability to achieve its objectives? • How is the program designed and structured to ensure it achieves its objectives? Is the program design systematic, evidence-based, coherent and standards-based? • What are the assumptions behind how and why the identified strategies will work?

Go to contents page

To begin to develop their own program evaluation, program providers will first articulate the program's objectives and goals, the intended outcomes and the strategies that the program will use to achieve these. Program goals are likely to include preparing leaders with the skills to effectively meet the Standard, as well as the needs of the school or education system.[19]

The key evaluative questions contained in Component 1 will ensure program providers clearly state what change is expected to occur through the program and how it will be achieved.

The completion of Component 1 is a crucial first step in the evaluation process: it provides the basis for adapting and customising the framework. Answers to Component 1 questions will help ensure that the whole evaluation focuses on what the program is trying to achieve. It informs Components 2 to 4 of the program.

Focus area
What are the program's objectives and goals?

The following key evaluative questions help providers to articulate their program's objectives and goals.

Q: *What problem is the program trying to address?*

Every program is trying to address a specific problem that should be explicit from the outset. The remainder of Component 1 of the framework will be built upon this problem identification, so it is important to clearly identify and articulate it.[20] It will also inform the function of the program and the expected results and outcomes.

Some programs address the overall need for aspiring principals to develop a range of skills, knowledge and capabilities required by the Standard. The identified problem may be that aspiring principals do not receive adequate development opportunities and experience to prepare them to successfully step into the principal role.

Other programs address a specific identified problem. The problem may be that assistant principals applying for principal roles are not appointed owing to their perceived lack of management skills and experience in budget and financing, as well as in leading organisational improvement and change processes.

Q: *What are the identified leadership development needs of individual participants?*

Are there particular skills that all aspiring principals need to develop related to the problem that the program is trying to address? For programs that serve aspiring principals within an education system, has the system conducted a skills or needs analysis? Does the education system want to ensure all aspiring principals have developed particular skills? Have aspiring principals from independent schools identified specific leadership development needs?

The more specific the data included the better. Documenting these needs now will provide baseline indicators to use in Components 2, 3 and 4 of the framework.

Q: *How does the program help aspiring principals to progress towards the* Australian Professional Standard for Principals?

All school principal preparation programs should help aspiring principals meet the requirements of the *Australian Professional Standard for Principals*. The Standard is comprised of three Leadership Requirements and five Professional Practices, which have been documented in detail by AITSL.[21] These are further described in the Leadership Profiles, which show the developmental pathway of increasing proficiency that can help providers identify what they wish their program to achieve.[22]

Go to contents page

Some programs may narrow their focus to a particular element within the Standard to address a specific identified problem, individual development needs or existing capabilities of aspiring principals. The Leadership Profiles can assist in articulating desired proficiency levels, and inform how the program intends to foster this development.

Q: *How does the program address the needs of schools and education systems (where applicable)?*

Program providers should understand the kinds of leaders required in the schools in which their graduates will work. It is important at this early stage in the process that principal preparation programs link their objectives and goals to those of schools and the education system where applicable.[23] For example, the Queensland Department of Education and Training runs the *Take the Lead* program, which was designed as part of a strategy to recruit principals in small schools, while the Catholic Education Office Melbourne's *Women in Leadership* program is designed to address the shortage of female principals.[24]

The evaluation process can assist program providers, schools and system leaders to work together to ensure programs are supporting aspiring principals to develop the skills, knowledge and capabilities to be successful in their new role.

Some of the questions program providers, schools and education systems may discuss include:

- Strategic priorities: what are the education system's strategic priorities? Do program participants need to develop particular skills to help them deliver on these priorities?
- Talent management and identification processes: what talent management and identification systems exist and how can the program provider link with and reinforce these processes? Does the program target groups of people who are not currently accessing leadership development programs but could benefit from them?
- Supply and demand issues: what is the future demand for school leaders with different types of skills? Does this vary across geographical areas? How will the program meet the workforce supply and demand needs of the school sector including areas of current and future workforce and skills shortages?
- School and system support for the program: what type of funding or time release is available from the school or system in order for aspiring principals to undertake the program (which may impact on the types of learning activities that are included in the program)?

Q: *What are the short, medium and long-term goals and expected impacts of the program?*

The answers to the earlier questions in this section will assist program providers to clearly define their program goals and expected outcomes. These should address the identified problem and align with individual, school and education system needs.

These goals might include a mix of short-term goals (such as recruiting a certain proportion of program participants from low socio-economic status schools), medium-term goals (having a certain proportion of program graduates in leadership roles) and long-term goals (demonstrating improved teaching and student outcomes in program graduates' schools).

The intended results identified at this point effectively become the program outputs and outcomes which the evaluation will measure throughout Components 2 to 4.

Go to contents page

Focus area
How does the program design contribute to achieving the program objectives and goals?

The key evaluative questions below help providers state clearly how the program design will achieve its goals.

Q: *What external factors (e.g., policy environment, workforce planning) may impact the program's ability to achieve its objectives?*

Are there external factors that can influence the success of the program? These may relate to the policy environment, talent identification and management processes, and program funding.

For example:

- Are program participants given time-release to attend program sessions?
- Are applicants for principal positions required or expected to complete the aspiring principal program?
- Do school and system level talent identification processes help identify potential program participants with the desired attributes, motivation, qualifications and experience?
- Can ideal program participants financially afford the program? Is the program funded by schools or the education system?

Q: *How is the program designed and structured to ensure it achieves its objectives? Is the program design systematic, evidence-based, coherent and standards-based?*

These questions ask providers to identify how the program will bring about change. Different providers have their own theories about how their programs will help achieve objectives and address the needs of aspiring principals, schools and the education system. This may be implicit or explicit. The questions bring together analysis of how the program will prepare leaders to meet the Standard, the specific goals of the program and the needs of the education system.

At this stage, program providers should assess whether program activities are aligned to the articulated program goals identified in the previous focus area. Program providers should also assess their capacity to deliver this program effectively.

Clearly defining program goals helps ensure more relevant and valuable course content and leadership development experiences that address the specific needs of the participants. Reviewing whether program goals and activities are internally coherent is important for program clarity but also helps in establishing effective monitoring and evaluation processes to capture anticipated program impact.

Q: *What are the assumptions behind how and why the identified strategies will work?*

This question requires program providers to consider why they believe the program will be effective. How is the program content, design and delivery informed by best practice? Is this best practice in addressing the identified program objectives and needs of individual participants and the needs of schools and education systems?

Go to contents page

Evaluation tools for Component 1

A range of tools and useful materials that may assist program providers in undertaking Component 1 is outlined below in Table 3. This section also provides resources that are recommended to use in addressing the Component 1 evaluative questions.

Table 3: Overview of tools for Component 1: Review of program objectives and goals

Tool type	Examples of how tool could be used	Specific tools and other resources
Strategic review	Providers need to determine the purpose of their program and how it should prepare principals in line with the Standard.	The resource in Table 4 is based on the Kellogg Foundation's Logic Model Development Guide.[25] This resource is a useful tool that provides additional guidance and support to program evaluators in answering the questions contained in the resource. Other examples of program logic tools are provided in the following resources: Program-Based Review and Assessment: Tools and Techniques for Program Improvement provides a range of review tools for a general program review within a university setting.[26] Particular tools assist in defining program goals and objectives. However, the tools are not specific to leadership development, so program providers would need to adapt the tools to fit their needs. The tools have a narrower focus than the Kellogg Foundation's Logic Model as they focus specifically on assessing student learning outcomes from a program. Developing a Logic Model: Teaching and Training Guide from University of Wisconsin provides a question checklist to evaluate the logic model of teaching courses for university students. It could be used to assess program goals and test the logic behind the theory of change.[27]
Survey instruments	Surveying previous participants and other stakeholders could aid an analysis of the strengths and weaknesses of previous programs, and inform program goals.	The Centre for Creative Leadership performed an evaluation of one of their leadership programs for American superintendents.[28] Survey responses could be used to determine whether program goals were met or inform the development of new goals.
Secondary data analysis	Programs could conduct workforce demand forecasting, assess areas of workforce need, and review the outcomes data of similar programs (such as hiring and retention data of program graduates).	Conducting High-Value Secondary Dataset Analysis: An Introductory Guide and Resources offers general information on planning, conducting and performing secondary data analysis.[29]

Resources for using a strategic review tool

The resource at Table 4 has been adapted from the Kellogg Foundation's Logic Model Development Guide. This resource is a useful tool that provides additional guidance and support to program evaluators in answering the questions for Component 1. The resource links to the evaluative questions and shows the purpose of each question and the relationship between them. The checklist at Table 5 is for use by providers to ensure that the resource has been applied effectively.

Go to contents page

Table 4: A logic model applied to Component 1 evaluative questions[30]

1. Problem statement

- What problem is the program trying to address?

2. Needs analysis

- What are the identified leadership development needs of individual participants?
- How does the program help aspiring principals to progress towards the *Australian Professional Standard for Principals*?
- How does the program address the needs of schools and education systems (where applicable)?

3. Desired results (outputs and outcomes)

- What are the short, medium and long-term goals and expected impacts of the program? Include measures of how to identify when these goals are met.

4. Influential factors

- What external factors (e.g., policy environment, workforce planning) may impact the program's ability to achieve its objectives?

5. Strategies

- How is the program designed and structured to ensure it achieves its objectives? Is the program design systematic, evidence-based, coherent and standards-based?

6. Assumptions

- What are the assumptions behind how and why the identified strategies will work?

Table 5: Checklist for applying a logic model to Component 1 evaluative questions[31]

Item	Yes/No	Comments and revisions
The problems to be solved or issues to be addressed by the planned program are clearly stated.		
The breadth of prospective participant and education system needs has been identified by expert/practitioner wisdom, a needs assessment and/or asset mapping process.		
The desired results/changes expected as a result of the program are specific.		
Influential factors have been identified and cited from expert/practitioner wisdom and/or a literature review.		
Change strategies are identified and cited from expert/practitioner wisdom and/or literature review.		
The connection among known influential factors and broad change strategies has been identified.		
The assumptions about how and why identified change strategies should work in the community are clearly stated.		
There is consensus among stakeholders that the model accurately describes the proposed program and its intended results.		

Go to contents page

Component 2:
Evaluation of selection processes

Who should participate in the program?

Focus areas	Key evaluative questions
What are the desired program participant attributes?	• What existing personal attributes, motivations, qualifications and experience should participants have? • What existing skills should participants have, given the program's objectives?
Do the attraction and selection processes deliver the desired program participants?	• Do the program attraction and selection processes result in participants who have the desired attributes, motivations, skills, qualifications and experience?

Go to contents page

Not everyone will benefit equally from participating in a leadership development program. There are two major areas to evaluate within this component: reviewing the types of people who should be undertaking the program, and assessing whether the recruitment process successfully selects these people to complete the program.[32]

In undertaking Component 2 of the framework, program providers should refer back to their responses to the key evaluative questions in Component 1. The program's objectives and goals, individual learning needs and how the program will support progress towards the Standard should all inform the definition of ideal program participants.

Program providers should identify their 'ideal' participants: who is most likely to benefit from completing the program? Leadership development is an incremental process, so program participants who have skills, experience and qualifications relevant to the program's objectives will benefit most from the program. In addition, participants who are highly motivated and willing to develop leadership skills are likely to benefit more than others. Leadership development programs are more likely to be successful when participants can apply their new knowledge, skills and capabilities shortly after completing the program.[33]

Program content should reflect the learning needs of program participants depending on their previous experience, skills and attributes, as well as the kind of principal they aspire to be. For this reason, AITSL recommends program providers use "discriminating application and selection processes matched to the learning opportunity".[34] Component 2 therefore asks program providers to assess whether their application and selection processes result in the program selecting their 'ideal' participants.[35]

Self-nomination is one way of applying for courses, but it has several shortcomings. For instance, some people may not be comfortable putting themselves forward unless encouraged by their school.

There is a need to invest in the development of talent identification strategies, which can identify people with high potential, and to develop selection criteria that identify the people most likely to benefit from the program and who will go on to leadership roles.[36]

Focus area
What are the desired program participant attributes?

The following key evaluative questions help providers determine who should undertake the program.

Q: *What existing personal attributes, motivations, qualifications and experience should participants have?*

It is important to select participants with the attributes and motivations to become a principal as this will allow them to gain the most from the program.[37] Participants with the appropriate leadership experiences will be able to contextualise their learning during the program, which is a key principle of adult learning.

Program providers should take into account the stage of participants' development when they enter the program. Participants should have the experience and qualifications (where appropriate) that will allow them to gain maximum benefit from the program. This also allows course content and activities to be appropriately targeted to the skills and experiences of the aspiring principal.

The timing of the program is also important for individual participants and can be built into selection criteria. 'Ideal' participants will need to undertake the program shortly before stepping into a principal position: does the aspiring principal intend to apply for a principal position within the next 12 months? Participants who are likely to be appointed as a principal either immediately following or shortly after completing the program will benefit more because they can apply their new knowledge, skills and abilities. The impact of the program will diminish when participants do not have a timely opportunity to apply their new skills.

Go to contents page

The program can then also be designed to take into account the future roles the participant will hold before moving into the principalship, and the skills they will develop during that time.

Q: *What existing skills should participants have, given the program's objectives?*

Program providers will have clearly articulated the program objectives and development needs of aspiring principals in Component 1. Providers should now be clear about the base level of particular skills that individuals need to have in order to benefit from the content and development available through the program.

In addition, selecting a cohort of participants with appropriate existing skills and knowledge is important for cohort-based learning. The quality of the cohort will impact collaborative and peer-to-peer learning during a program.[38]

Focus area
Do the attraction and selection processes deliver the desired program participants?

The following key evaluative questions help providers determine whether they are selecting ideal participants.

Q: *Do the program attraction and selection processes result in participants who have the desired attributes, motivations, skills, qualifications and experience?*

Providers who select candidates (rather than those relying solely on the candidate self-selecting) are able to determine the most appropriate individuals for their programs. Strong selection processes are most worthwhile when there is sufficient demand to enter a program. Accordingly, programs need attraction processes that generate a strong candidate pool.[39]

It is important to ensure that the selection criteria match the overall program goals. Having the most appropriate candidates entering the program will mean it is more likely that it will produce the types of leaders it aspires to develop.

Program providers should compare the ideal program participant (articulated through the Focus area above) with data on program participants who are actually selected.[40] If there is a discrepancy between the ideal participants for the program and those selected, program providers may find it helpful to consider the following questions:

- How valid and effective are the processes used to select program participants? Do the selection processes ineffectively or unreliably assess the motivations, skills and attributes of program applicants? Program providers may need to evaluate the tools they use during selection processes by cross-validating them and reviewing the underpinning assumptions of the tools.
- Does the selection process unintentionally privilege candidates of certain backgrounds? An evaluation of selection processes should consider the implications for equity and diversity. By using rigorous selection methods, providers are able to limit any subjective biases that exist and select the best candidates possible.

Aspiring Principals[41] (a report prepared in 2010 by a consortium including Hay Group, for Teaching Australia) suggests using three critical selection criteria to select participants into programs:

- Leading learning and teaching: aspiring school principals should demonstrate they are effective teachers.
- Demonstrated leadership ability: applicants should have already shown leadership within the school or in another role, for instance, as a lead teacher.
- Capacity for personal growth: applicants should be willing to learn. Four key growth factors have been identified including eagerness to learn, the ability to understand multiple perspectives, understanding of other people, and personal maturity and ability to maintain emotional balance in difficult situations.

Go to contents page

The *Aspiring Principals* report also recommends a five-step selection process:

Step 1: The potential participant completes an online self-assessment tool to assess their readiness to attend the program, i.e., their performance against the three critical selection criteria.

Step 2: Based on the results of the self-assessment tool the potential participant decides whether or not to apply for the program.

Step 3: The potential participant completes an application form that will include providing relevant examples of how they meet the criteria.

Step 4: The sponsor endorses the application and completes an online assessment of the candidate against the selection criteria.

Step 5: The applicant's line manager (if different from the sponsor) endorses the application.

Program providers may wish to adapt the above process to their own needs. The program could, for example, use the AITSL School Leader Self-Assessment Tool or a tool that measures a specific attribute that the program deems important.

Evaluation tools for Component 2

A range of tools and useful materials that may assist program providers in undertaking Component 2 is outlined in Table 6 below along with examples of how the tools could be used. It is followed by an example of the use of a rubric tool.

Table 6: Overview of tools for Component 2: Evaluation of selection processes

Tool type	Examples of how tool could be used	Specific tools and other resources
Self-reports	Self-report tools enable aspiring principals to accurately assess their own skills and attributes. This can help providers assess if participants have the desired attributes, as well as helping program designers to deliver individualised or targeted content to selected leaders.	Program providers can utilise the AITSL School Leader Self-Assessment Tool. The tool asks individuals to self-assess their skills and activities directly mapped to the Standard. If program providers require participants to undertake the self-assessment process at the start of the program, providers can access group level, de-identified data which will help them assess the success of their selection processes. The Self-Assessment of Leadership of Teaching and Learning (SALTAL) tool could be modified to collect information on prospective participants and review whether the profiles match the program's desired candidate profiles.[42]

Go to contents page

Survey instruments	Surveys could be used to determine whether: ▪ participants believe the course was appropriately targeted to them ▪ participants felt there was sufficient information for them to assess if the course would be right for them ▪ people who did not take the program differ in any way from those who did, and therefore whether the selection processes were effective ▪ the application process has effective outreach; for instance, how applicants heard about the program and why they chose to apply.	The Aspen Institute's Impact of Entrepreneurship Database Program Process Guide offers a service for surveying people who were, and were not, selected into a business development entrepreneur program. It surveys the entire applicant pool and compares the changes in program participants to changes in those who did not complete the program. This information could be used to evaluate selection processes (also particular capabilities as well as program design).
Review of best practices	Examining best practices in participant selection can help providers understand the effectiveness of their own processes.	The Leadership Screening Fact Sheet outlines the process undertaken to select individuals for the Gwinnett County Public Schools Quality-Plus Leader Academy.[43] The process consists of four levels: a credential review, a written exercise, a structured interview and applicant approval. The New Approach to Principal Preparation selection criteria include selection competencies, which allow evaluators to better link outcomes to inputs (including skills, knowledge and dispositions).[44] Innovative principal preparation programs: What works and how we know highlights design elements aligned with seven key features of effective leadership preparation programs including their selection process.[45] Preparing School Leaders for a Changing World: Lessons from Exemplary Leadership Development Programs examines eight exemplary principal development programs and identifies a series of factors that contributed to the programs' effectiveness, of which selection is one.[46] Aspiring Principal Preparation (AITSL) draws on best-practice leadership development in education and other sectors to develop key considerations for the design of principal preparation programs, of which selection is one.[47]
Rubrics	Rubrics can be used for various aspects of Component 2, for example to evaluate the desired attributes of program participants, as well as whether attraction and selection processes are high quality and aligned with evidence.	The Knowledge is Power Program (KIPP) School Leadership Framework and Competency Model is an empirically derived and evidence-based model that outlines the key behaviours exhibited by effective KIPP Leaders. The Rainwater Leadership Alliance has adapted the model to create a rubric for selecting school leaders.[48] The Wallace Foundation Principal Preparation Self-Assessment Toolkit is a rubric that outlines the indicators of high-quality principal preparation programs. It is designed to be used in assessing an existing program, or guiding the development of a new program.[49] It is intended to provide stimulus for discussions between course providers and education systems, focusing on the quality of programs and their continuous improvement. Rubrics are provided to help assess course content and pedagogy, supervised clinical practice, candidate recruitment and selection, and graduate performance outcomes.[50]

Go to contents page

Using the Wallace Foundation Toolkit rubrics

The Wallace Foundation's Quality Measures: Principal Preparation Program Self-Assessment Toolkit contains rubrics to assess quality across a variety of evaluation areas. While these are developed for a US audience, they can be adapted for the Australian context. The rubrics were developed through an extensive literature review of key features of effective school principal preparation programs.[51]

The rubric for evaluating candidate recruitment and selection consists of four 'quality indicators', as shown in Table 7. A handbook accompanying the rubric provides advice on the process program providers can use to evaluate against the quality indicators, with suggested meeting agendas and roles for evaluators and program staff.

The handbook provides templates for data collection, which can be reviewed by others (such as external evaluators). The rubric also provides a guide for evaluators to gather and review evidence that supports the assessment of each quality indicator.

For each of the quality indicators, the rubric directs evaluators to select if few, some, most, or all program processes are as described. These correspond with an assessment for that indicator as *beginning, emerging, developed* or *well developed*.

Table 7: Wallace Foundation candidate recruitment and selection rubric[52]

Quality indicator	Description
I. Rigorous program admission standards	Program admission standards include criteria for: 1) nominating candidates 2) screening applications 3) conducting and evaluating candidate interviews; and are aligned with school district, state, and national performance expectations for school leaders.
II. Multi-dimensional approach to outreach and communication	Criteria and processes are designed to recruit high-potential candidates and are broadly communicated in multiple venues at the local, state, and national level to give the program high visibility.
III. Valid measures for assessing candidate potential	Measures for assessing applicant potential are valid, reliable, aligned with principal performance expectations and consistently used to make admission decisions.
IV. Competitive recruitment incentives	Incentives used to attract and retain highly-qualified applicants are budgeted, responsive to applicant needs, and equitably distributed across the applicant pool.

Go to contents page

Component 3:
Evaluation of program content, design and delivery

How effectively is the program designed and delivered?

Focus areas	Key evaluative questions
Is the program content coherent and relevant?	• Does the content and structure of the program deliver on the objectives of the program? • Does the program integrate theory and practice linked to the *Australian Professional Standard for Principals*?
Is the program design and delivery high quality and based on evidence of what works?	• Does the program provide a learning development process that takes into account the needs, career stage, prior learning and context of individual participants? • Is the content and curricular design coherent and grounded in evidence-based research? • Is the structure and delivery of the program based on best practice including opportunities for practice, feedback and reflection? • Does the program provide significant opportunities to learn from experts and practitioners? • Are there opportunities for practical experience and applied learning? • Are there processes to support the ongoing development of program graduates?
Are there effective assessment practices and measures of participant growth?	• Does the program make good use of formative assessment and feedback processes? • Does the program use baseline measures and ongoing monitoring of program participants' growth?
Do program graduates feel the program was worthwhile and that they developed new skills?	• What were program participants' experiences of the program? • What are the program retention and completion rates? • Were program participants engaged? • Did participants learn new skills and gain knowledge? • Do participants feel more prepared to lead?

Go to contents page

Providers must sort through a wide range of potential content to establish the priority program coursework most relevant to their program goals, and the needs of participants defined through Component 1 of the framework.

Program content should align with program objectives and goals, and be based on evidence and best practice. For example, research illustrates that aspiring principals need to develop a combination of instructional leadership skills, management and leadership skills and higher order leadership capabilities discussed in Section A of this guide. Programs might prioritise content on instructional leadership, or develop courses that focus on specific management and leadership skills such as giving feedback and developing shared goals.

High-quality course content on its own is not enough. Course design and delivery (the types of learning activities, sequencing of them, and the extent to which learners are actively engaged) is crucial. Design features most positively reviewed in the literature include experiences tailored to individuals' learning needs and career stage, practice-centred learning, and opportunities for practical experiences and peer learning.[53]

Focus area
Is the program content coherent and relevant?

Q: *Does the content and structure of the program deliver on the objectives of the program? Does the program integrate theory and practice linked to the* Australian Professional Standard for Principals*?*

Program content should be clearly related to the objectives and goals of the program, the needs of the participants, and the effective professional practices outlined in the Standard, all of which were defined through Component 1 of the framework. Programs should be explicitly designed to integrate theory and practice linked to the Standard, and provide well-structured learning activities to encourage and support program participants.[54]

When responding to these key evaluative questions, program providers should also refer back to the strategies they articulated during Component 1, including how the program is designed and structured to achieve its objectives.

Focus area
Is the program design and delivery high quality and based on evidence of what works?

Q: *Does the program provide a learning development process that takes into account the needs, career stage, prior learning and context of individual participants? Is the content and curricular design coherent and grounded in evidence-based research?*

A priority for Australian program providers, noted in a recent review of programs, is the creation of a coherent content and curricular design.[55] The following questions may help providers evaluate their program:

- Does the course content build on participants' existing skills, knowledge and capabilities?
- Are the program content and learning activities logically sequenced so participants can progressively build their skills?
- Do the program's learning activities support the content being delivered? For example, are there applied learning projects that are aligned to program content and participants' skill development?

Go to contents page

- Are the course content, structure and delivery based on evidence of what works?
- Do experts in the field deliver the program content?

Q: *Is the structure and delivery of the program based on best practice including opportunities for practice, feedback and reflection?*

Evidence suggests that effective leadership development programs are based on adult learning principles and provide opportunities to apply new skills and knowledge, collaborate, gain feedback and receive ongoing support. These principles apply to all types of programs: short and intensive programs, as well as programs offered over an extended period of time.

For longer programs, research suggests that a phased or spaced delivery approach helps participants to develop the skills they need in a cumulative manner.[56] Also, longer-term programs can make effective use of blended learning that involves delivering content through a mix of learning experiences, which encourage feedback and reflection. The mix of learning experiences can include mentoring and coaching, learning from case studies, individual needs analysis and leadership diagnostic tools.[57]

Q: *Does the program provide significant opportunities to learn from experts and practitioners?*

Aspiring principals need to learn about the practical realities of the job. Observing the daily activities of current principals through, for example, opportunities for shadowing and school visits, helps demystify the role and assist participants to understand how to apply theory to practice. Expert practitioners can provide guidance and significant modelling to demonstrate good practice and engage in deep dialogue about principal practice. Observation and demonstration are key activities for effective professional learning.

Q: *Are there opportunities for practical experience and applied learning?*

Research emphasises it is important to provide opportunities for practical, applied learning in coherent contexts, particularly when participants have the opportunity to learn from experts, then apply their learning. Adults learn best when able to apply what they have learned, so participants should be given opportunities to utilise new skills and knowledge in practical situations.

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 so that participants can apply and reflect on their new knowledge, qualities and skills.

Opportunities for practical experience and applied learning activities will vary between programs depending on the objectives of the program, the skills being developed and mode of program delivery.

Q: *Are there processes to support the ongoing development of program graduates?*

Ongoing support for leadership development is a key element of successful programs. 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, as it may be two to three years before participants successfully secure a principal's position.

Collaboration between the program and schools has also been noted as an important determinant of quality support.[58] The learning process doesn't end when people exit the preparation program. Ongoing support is important to assist participants to apply and continue their leadership learning. Processes that reiterate key lessons learned by participants and that facilitate communications with their program cohort will ensure each individual's learning is consolidated in the future.

Go to contents page

Focus area
Are there effective assessment practices and measures of participant growth?

Q: *Does the program make good use of formative assessment and feedback processes?*

Formative assessment and feedback are powerful learning tools that can drive improvement in both individuals and programs. Individuals can increase their awareness of their progress and ascertain areas for further leadership development. Providers can use formative assessment data to determine the effectiveness of components of their program, and make necessary adjustments to ensure that their program is constantly improving and meeting the set goals.

Assessment and feedback processes are an important part of helping program participants learn.[59] Providers should review the evidence about effective feedback techniques, consistent with adult learning principles, as part of evaluating this item.

Q: *Does the program use baseline measures and ongoing monitoring of program participants' growth?*

To determine a program participant's growth during the program, collecting baseline data is essential. It allows providers to determine and then address a candidate's learning needs, and through further data collection, it gives the provider the ability to track a candidate's development through the program.

Program providers should establish their own measures, relevant to the program objectives and desired impacts defined in Component 1 of the framework. For further discussion on designing outcome and impact measures, see Component 4 of the framework.

Focus area
Do program graduates feel the program was worthwhile and that they developed new skills?

Q: *What were program participants' experiences of the program? What are the program retention and completion rates? Were program participants engaged?*

Collecting qualitative data on participant engagement and experience of the program can help assess how worthwhile they found the course. While changes in behaviour may be a more meaningful measure of a program's impact, participants are more likely to learn in an environment in which they feel engaged.

Program retention and completion data can, in part, reflect the value that participants attach to the program. Participants who do not experience the program in a positive light may choose not to complete the program, although there may be a range of other reasons. Ideally, this data will be considered in conjunction with program outcome data. If the program retention and completion rate is low, evaluators may need to consider why, and whether this supports the results from program outcome measures.

Q: *Did participants learn new skills and gain knowledge? Do participants feel more prepared to lead?*

Collecting data specifically related to participants' leadership skills, knowledge and experiences, especially in relation to the Standard, can provide valuable opportunities to personalise the learning and improve the methodology of the program.

Go to contents page

Evaluation tools for Component 3

A range of tools and materials is outlined in Table 8, along with examples of how each tool could be used. It is possible to use a range of tools to answer the evaluative questions within Component 3. The table is followed by an example of a combined self-report and observation tool.

Table 8: Overview of tools for Component 3: Evaluation of program content, design and delivery

Tool type	Examples of how tool could be used	Specific tools and other resources
Self-reports	Can be used to evaluate the effectiveness of the content and the delivery by collecting data on the growth in participants' skills, knowledge and ability relevant to the Standard.	The AITSL School Leader Self-Assessment Tool could be used to collect information on prospective participants' experience and growth in the program. Programs that request participants to undertake the assessment prior to, and on completion of, the program can assess participants' self-reported growth directly related to the Standard. Where participants undertake the AITSL 360° Reflection Tool as part of the program, program providers can encourage participants to share their results with the provider, which can contribute important data to the evaluation.[60] This could be used to assess whether content was being effectively delivered and contributing to participant growth.
Survey instruments	Can be used to collect data about participant satisfaction and reflections on the program's added value.	The Centre for Creative Leadership performed an evaluation of one of their leadership programs for American superintendents.[61] It includes the questions asked of participants at the conclusion of the program.
Document reviews	Can be used to analyse how course design and delivery is aligned to program goals. This may be benchmarked against other providers.	The Wallace Foundation Principal Preparation Self-Assessment Toolkit includes indicators and rubrics that could be used to review program documentation (e.g., prospectus, syllabus, delivery model) against the objectives and goals of the program, as a central part of a focused program evaluation and improvement process.

Go to contents page

Tool type	Examples of how tool could be used	Specific tools and other resources
Review of best practices	There are extensive guides on effective course design and course improvement processes that could be used as part of the evaluation of a course's quality.	The Course Improvement Flowchart is a tool that is designed to describe how university courses can collect feedback on course quality, and then use this information for course improvement.[62] Other key reviews of effective practices in course content, design and delivery include: National College for Teaching and Leadership's Content Development Handbook: Leadership Curriculum is a guide to creating curriculum for school leadership programs, which may be useful in reviewing and improving content, design and delivery.[63] The Aspiring Principals report outlines a specific plan for a national professional learning program. It provides research on program content, program delivery and selection.[64] Innovative principal preparation programs: What works and how we know provides an overview of the key features of five innovative principal preparation programs.[65] Preparing School Leaders for a Changing World: Lessons from Exemplary Leadership Development Programs examines eight exemplary principal development programs and identifies a series of factors that contributed to the programs' effectiveness.[66] Aspiring Principal Preparation draws on best-practice leadership development in education and other sectors to develop key considerations for the design of principal preparation programs.[67] Environmental Scan: Principal Preparation Programs (AITSL) identifies key elements fundamental to the success of principal preparation programs around Australia. It also identifies common weaknesses in programs and suggests ways forward that will lead to improvement.[68]
Rubrics	There are several rubrics that relate to course design and delivery in leadership development programs, often drawing on evidence of effective practices.	The Wallace Foundation Principal Preparation Self-Assessment Toolkit is a rubric that outlines the indicators of high-quality principal preparation programs.[69] It is designed for assessing an existing program, or guiding the development of a new program. It is intended to provide stimulus for discussions between course providers and education systems, focusing on the quality of programs and their continuous improvement. Rubrics are provided to help assess course content and pedagogy, supervised clinical practice, candidate recruitment and selection, and graduate performance outcomes.

Go to contents page

Using the School Leader Self-Assessment Tool and 360° Reflection Tool

Self-report tools can provide an important measure of participant growth. Participants self-assessing their skills, motivations and beliefs at the beginning and then at the end of the program can see and reflect on what they have learned. Self-assessment also allows program providers to gain an understanding of the subjective experiences of program participants. There are many tools that are available for self-assessment that could be used to collect information on participant growth in a wide range of areas.

Self-assessment can be combined with observations to create a more complete picture of the actual behaviours of program participants (and program graduates). However, individual self-reports can be biased, as people may see themselves in a more favourable or harsher light than do those around them.[70]

Knowledge of how their performance is actually perceived by others can help identify strengths and development needs of participants, where a simple self-report might not. Observations and performance appraisals can be used to collect feedback from peers, school leaders, or independent raters trained in the use of a specific tool.

School Leader Self-Assessment Tool – How it works

The AITSL School Leader Self-Assessment Tool could be used to collect information on prospective participants' experience and growth in the program. Asking participants to undertake the assessment before and after the program can help assess participants' self-reported growth directly related to the *Australian Professional Standard for Principals*.

Individual results are sent directly to the participant, but program providers can access a group report function. This provides de-identified group data on the program cohort. Providers can use this data to assess whether program cohorts (a) have the desired skills, attributes, and experience at the commencement of the program and (b) how the cohort rates their performance in relation to the Standard at the completion of the project.

Sample questions from the Self-Assessment Tool are contained in Figure 1.

Figure 1: Extract from the AITSL School Leader Self-Assessment Tool

Choose the option that best reflects you

In the last term I have contributed to professional learning at a state, national or global level.

Very true	True	Somewhat true	Somewhat untrue	Untrue	Not applicable

At least annually, I adjust roles and responsibilities within my school so that talented staff have the opportunity to develop.

Very true	True	Somewhat true	Somewhat untrue	Untrue	Not applicable

In the past term, I have had individual discussions with at least three staff on how their daily work supports the school vision.

Very true	True	Somewhat true	Somewhat untrue	Untrue	Not applicable

Go to contents page

360° Reflection Tool – How it works

AITSL's 360° Reflection Tool combines self-report and observation.[71] The tool is designed to help aspiring and current school leaders gather formative feedback on their leadership, aligned to the *Australian Professional Standard for Principals*. The tool includes feedback from a number of raters (chosen by the person using the tool) and the collection of other information. The tool reviews the quality of leadership through the frequency with which specific types of behaviour occur. The responsibilities of users of the tool are described in Table 9 below.

Table 9: AITSL 360° Reflection Tool steps

Who uses the tool	What they do
Aspiring school leaders	Complete demographics information section
	Complete the survey: reflection on frequency of own behaviours in relation to the Standard
	Optional completion of reflective comments section: provide additional commentary on own strengths and areas for development
Raters (selected by the aspiring school leader)	Complete the survey: rate the frequency of behaviours exhibited by the aspiring leader in relation to the Standard
	Optional completion of reflective comments section: provide additional commentary on the aspiring leader's strengths and areas for development

Individual results, including feedback and commentary on leadership capacity from the raters, are confidential and are sent directly to the individual. Results can help users develop a 'leadership action plan' to guide their ongoing development. Program providers can register a group of program participants and:

- receive de-identified results for a program cohort; and/or
- encourage individuals to share their results with the program, which could be done in a variety of ways. Individuals could share their results as part of program activities such as mentoring, discuss their results as part of an interview at the conclusion of the program, or share their results directly with the program provider.

Figure 2 shows some examples of the questions in the tool.

Go to contents page

Figure 2: Extract from the AITSL 360° Reflection Tool self-report component

Creates a student centred learning environment *Leadership Requirement: Vision and values. Professional Practice: Leading teaching and learning*						
How often do you exhibit the following behaviour?						
	Never/ rarely	Some-times	Often	Very often	Always	Don't know / Not applicable
▪ Sets clear expectations that all activities in the school will contribute toward improving learning outcomes						
▪ Encourages active engagement of all students in their learning						
▪ Makes important decisions considering the impact on students' learning						
▪ Provides a consistent school-wide focus on individual student achievement						

Programs could use the 360° Reflection Tool to evaluate and improve several aspects of program delivery and participant experience.[72] Table 10 below shows how the tool could assist in responding to some of the Component 3 evaluative questions.

Table 10: How the 360° Reflection Tool can assist in Component 3 evaluation

Evaluative question	How the tool could assist
Does the program provide a learning development process that takes into account the needs, career stage, prior learning and context of individual participants?	Data collected from use of the tool could be used to review the program's appropriateness in relation to the needs of individual participants and the cohort overall.
Does the program use baseline measures and ongoing monitoring of program participants' growth?	Use of the tool could be paired with other measures of participant growth such as pre- and post-program self-assessments to create a fuller picture of learning during the program.
Did participants learn new skills and gain knowledge?	Use of the tool at the start and end of the program could serve as one way that participants' growth is measured. Participants would also be able to review their progress over time.

Go to contents page

Go to contents page

Component 4:
Evaluation of participant performance and outcomes

How will we know if the program has been successful?

Focus areas	Key evaluative questions
Did program graduates change their behaviour during and after the program?	• Did participants change the way they think and their leadership behaviour during and after the program? • How have program graduates implemented specific learnings from the program in their leadership practice – including knowledge, skills, behaviours, attitudes and perceptions? • Are program graduates working towards the *Australian Professional Standard for Principals*?
Did program graduates change leadership and teaching at their school?	• Have changes in leadership practices improved the school climate? • Have changes in leadership practices positively affected other school leaders? • Have changes in leadership practices improved teaching practices?
What are the impacts of program graduates on student outcomes?	• Are there changes in what students know and can do?
Has the program met its goals and had an impact on the education system?	• Are program graduates having an impact on the system? • Are program graduates applying for, and appointed to, principal positions? • Did the program meet its short, medium and long-term goals defined in Component 1?

Go to contents page

Measuring outcomes against the goals identified in Component 1 is the ultimate test of a program. Research on leadership preparation programs, however, provides little evidence of how participants perform as principals or how the program has shaped their behaviours, knowledge and attitudes.[73]

Depending on the program's goals defined in Component 1 of the framework, evaluators may wish to focus on different outcomes. Evaluation of program outcomes can take place on several different levels.[74]

- At the individual level: outcomes include changes in behaviour as a result of completing the program. This is a necessary step in effecting change at the other levels.
- At the school level: outcomes include the impact the program graduates subsequently had on teaching, school climate and relationships with the community.
- At the level of the students: outcome measures would include an analysis of student achievement and other learning outcomes.
- At the system level: outcomes include how the program met workforce and education system needs such as the supply and appointment of suitably prepared principals. System level outcomes also include the overall impact of program graduates in schools on student outcomes, teaching practices and leadership practices of other staff.

Generally, the long causal chain between participation in a principal preparation program and changes in student outcomes makes it more difficult to quantify the longer-term impacts of principal preparation programs. A partial remedy to this problem is to evaluate both student outcomes and 'intermediate' outcomes such as changes in program graduate behaviours.

In some situations, particularly when a program is new or untested, evaluating outcomes at the participant level may be more valuable because it allows for a more immediate understanding of how a program is working (which can be used to refine the program).[75]

When selecting tools for principal preparation program evaluation, evaluators should consider the program's objectives, goals and the intended short, medium and long-term impacts defined in Component 1 of the framework. This will assist program providers to identify the level at which they should gather outcome data and the tools that may assist them to gather the required data.

Focus area
Did program graduates change their behaviour during and after the program?

Q: *Did participants change the way they think and their leadership behaviour during and after the program? How have program graduates implemented specific learnings from the program in their leadership practice – including knowledge, skills, behaviours, attitudes and perceptions? Are program graduates working towards the* Australian Professional Standard for Principals?

Evaluating the changes in knowledge and professional practice after participation in a program is an important way to test the logic behind the program's objectives, goals and strategies defined in Component 1 of the framework.

Changes in knowledge and professional practice can be considered intermediary measures and are particularly useful as an evaluative threshold. If participants did not gain new skills and knowledge through participation in the program, the program is unlikely to have prepared them to help lift student outcomes through their leadership.[76]

As well as collecting information about behavioural change, evaluations may be able to consider how deeply the program was embedded in leadership practice. For instance, the program may have emphasised distributed leadership. To find out whether this was effective, an evaluation might focus on reviewing the specific changes to practice that occurred after participation in the program, and whether these align with the objectives of the program.

Go to contents page

Lastly, a program should be able to evaluate how participants' learning prepares them for their prospective responsibilities as school principals in line with the Standard. One way to do this is through tracking participant growth within the Leadership Profiles in each of the Professional Practices of the Standard. One set of the Leadership Profiles, for *Leading teaching and learning*, is shown in Figure 3.

Figure 3: Leadership Profile: Leading teaching and learning[77]

Developmental pathway: a principal's increasing proficiency

Principals ensure the school values underpin and support high-quality inclusive practices and set expectations that all activities are focused on improving student learning outcomes. They keep up-to-date with and share current developments in pedagogy and student engagement with all staff. They lead staff and students in identifying and planning high-quality teaching and learning.	Principals prioritise creating and sustaining a student-centred learning environment. They motivate staff to keep their teaching practice current through use of research and new technologies. They develop a robust approach to reviewing the curriculum and pedagogy to ensure a consistently high-quality environment for learning. They develop a coaching culture that encourages honest feedback to and from students and teachers based on evidence.	Principals lead a school-wide focus on individual student achievement, implementing strategies that secure educational provision for all. They ensure that reflective practices, structured feedback, peer review and use of the *Australian Professional Standards for Teachers* lead to personal improvement of both students and staff. They systematically monitor and report on student progress and have interventions in place to reduce gaps in attainment. They communicate high aspirations and expectations for all, celebrate success and challenge underperformance.	Principals lead high aspirations in learning and inspire the same in students, staff and parents. They establish systematic methods for collecting and interpreting evidence to identify excellent teaching and learning, and share successful strategies with the school community. They encourage staff to contribute to education networks, supporting the learning of others and development of pedagogy. They model collaborative leadership and engage with other schools and organisations to share and improve practice and encourage innovation in the education system.

Focus area
Did program graduates change leadership and teaching at their school?

Q: *Have changes in leadership practices improved the school climate? Have changes in leadership practices positively affected other school leaders? Have changes in leadership practices improved teaching practices?*

Assessing the impact of program graduates on their schools can involve analysing whether participants had a positive impact on school climate, other leaders, and the quality of teaching at the school.[78] These changes are the ones most likely to impact student outcomes. Therefore, they should be an important part of the evaluation. Multiple methods (such as surveys of staff, observations, and self-reflection) can be used to gain a fuller picture of the impact of program graduates. Evaluations may also consider some of the school-level factors that affect the way program graduates may be able to lead.

Focus area
What are the impacts of program graduates on student outcomes?

Q: *Are there changes in what students know and can do?*

Changes in student outcomes are the end goal of efforts to improve the leadership skills of school leaders. Given the long causal chain between participation in a program and improvements in student learning, it can be difficult to evaluate this outcome in quantitative terms (such as impact on test scores).

Go to contents page

Measures of student gain (such as the difference in learning year-on-year) are easier to collect than 'value-added' estimates which seek to isolate the value added specifically by the program. However, value-added estimates can be made in well-designed, comprehensive evaluations. This outcome can also be measured through student surveys and other qualitative indicators.

Focus area
Has the program met its goals and had an impact on the education system?

Q: *Are program graduates having an impact on the system? Are program graduates applying for, and appointed to, principal positions?*

At the final stage of the evaluation, a program's overall impact can be assessed. Each program may use different measures of impact on the system, depending on the program provider's analysis of school and system needs in Component 1 of the framework. A range of methods can be used to determine whether program graduates are having an impact on the system. This may include interviews, observations, surveys and self-report data from program graduates at regular intervals following program completion.

If the education system faced a shortage of prepared aspiring principals, the program evaluation may measure outcomes such as retention of participants in the program, whether the number of applicants for principal positions has increased over time, and the number of program graduates appointed to principal roles within 12 months of completing the program.

Q: *Did the program meet its short, medium and long-term goals defined in Component 1?*

As the final stage in an evaluation, the initial goals of the program should be reviewed to see whether they were met, and what happened to bring about changes. Program providers should refer back to the objectives and goals of the program, articulated through Component 1 of the framework.

If goals were not met, further analysis should investigate why this was the case. Corrective action may be taken and/or the goals reviewed. Ideally, the conclusion of an evaluation should be linked to an improvement process whereby the results are used to drive further improvement.

Evaluation tools for Component 4

Table 11 below suggests a range of tool types and shows how they can be used. It is followed by an example of the use of a survey tool, the School Climate Assessment Inventory.

Table 11: Overview of tools for Component 4: Evaluating participant performance and outcomes

Tool type	Examples of how tool could be used	Specific tools and other resources
Self-reports	Can be used to evaluate progression over time, tailoring program content to individual learning needs, and as a means of collecting data on participants' growth.	The AITSL School Leader Self-Assessment Tool (see Component 3 discussion of the use of this tool) allows school leaders to assess their performance against the Standard and Leadership Profiles. The tool also provides comparative reports between individuals' self-assessments over time.[79] Program providers can access group reports, providing cohort level de-identified data, which may be used to assess the impact of the program on the program cohort.

Go to contents page

Tool type	Examples of how tool could be used	Specific tools and other resources
Semi-structured interviews	Interviews of program graduates and their leadership teams could be used to gain a deeper qualitative understanding of the way a program impacted on participants.	The following resources may assist with planning, conducting and analysing interviews: Handbook of Practical Program Evaluation includes a chapter on the use of semi-structured interviews.[80] Better Evaluation provides guidance on using interviews in quantitative and qualitative evaluation.[81] RAND Corporation's guidance on Data Collection Methods: Semi-Structured Interviews and Focus Groups.[82] University of Wisconsin Extension's Program Development and Evaluation provides guidance on conducting interviews.[83]
Survey instruments	Surveys can be used to gather staff, student and community feedback on a school leader's performance across a variety of areas.	The Comprehensive Assessment of Leadership for Learning (CALL) survey measures leadership practices across five domains: focus on learning, monitoring teaching and learning, building nested learning communities, acquiring and allocating resources, and maintaining a safe and effective learning environment. View sample surveys by visiting the website. The SEED Evaluation Survey Question Bank provides a selection of questions that can be used to assess teacher views on school leader performance.[84] The Colorado Education Initiative has produced a Teacher Perception Survey Toolkit and a Student Perception Survey Toolkit that can be used by programs to gain feedback from teachers or students on school climate and principal performance.[85] The Social-Emotional Wellbeing (SEW) Survey is an Australian, anonymous strength-based survey for students aged 3-18 years, which provides an holistic view of students' wellbeing.[86] The Principal Instructional Management Rating Scale is a well-known questionnaire designed to gain insight into a principal's instructional leadership.[87] More information on the tool and how it is used can be found on the website. The 'Five A' Assessment Tool of Educational Leadership and Professional Development is a survey (charge involved) that measures the impact of professional and leadership development on participants and their schools. It has been developed in the Australian context and further information can be obtained from Synergistiq.
Observations	Peer or independent observations of school leader practice can provide impartial information about a leader's daily behaviours and how these align with program goals.	The Principal Practice Observation Tool is used to gather evidence for principal performance reviews, but could be modified to gather evidence on program graduates' leadership practice.[88]
Student outcomes analysis	Analysis of the impact of leadership programs on student data can be undertaken using more sophisticated statistical approaches. Analysis of school level data, such as student absenteeism rates or behavioural indicators, could also be measured along with instruments testing teacher-student relationships.	One of the first major studies of the impact of a principal preparation program was undertaken by the RAND Corporation for the New York Aspiring Principals Program. The methodology used could inform further analysis.[89]

Go to contents page

Tool type	Examples of how tool could be used	Specific tools and other resources
Secondary data analysis	Can be used to measure the impact of program graduates on the education system, for instance through hiring and retention data.	The New Leaders Principal Program Evaluation report contains tips for how programs can track the placements of their graduates.[90]
Rubrics	Several rubrics of effective principal practice exist that could be used to track outcomes.	The Australian Professional Standard for Principals and the Leadership Profiles can act as a rubric for reviewing the practice of principals post-program.[91] Examples of rubrics used in other jurisdictions include: The New York State Education Department has a number of Approved Principal Practice Rubrics that can be used to assess leadership practice.[92] The Wallace Foundation created a rubric for identifying areas where principals need greater support and coaching. It contains 40 core leadership behaviours that a principal must master to improve learning and instruction and could be altered to evaluate principal performance post-program.[93] The New Leaders Program created a rubric for evaluating principal performance. It includes examples of evidence that can be collected in order to help accurately evaluate the principal.[94] Dr Robert Marzano developed an extensive rubric for evaluating school leaders' performance based on his research of leadership practices associated with student achievement.[95]

Additional examples can also be explored through the Center on Great Teachers and Leaders online portal. The portal provides an extensive, searchable list of evaluation tools that can be used to measure principal performance and outcomes.[96]

Using the School Climate Assessment Inventory

Collecting survey data from staff, parents and students is one way to assess the impact of program participants once they are in leadership roles. There is a very large number of existing surveys available on various measures of principal performance that program evaluators could use or adapt for their own needs.

School climate is one area where principals and other school leaders exert substantial influence. While leadership practices indirectly impact student outcomes by influencing teaching, some aspects of school climate are more directly under the influence of leaders of schools.[97] Through their leadership, principals may be able to improve aspects of school climate such as staff morale and relationships between teachers and students, and the community and the school.

Substantial work has been conducted, particularly in the US, in developing survey tools to analyse the impact of principals on school climate. A major report recently identified 13 valid and reliable, recently developed and publicly available survey instruments that could be used to evaluate principal performance on the indicator of school climate, by surveying staff, parents and/or students. The report noted that these tools can be used for summative and formative principal evaluation purposes.[98]

One of the tools reviewed in the report is the Alliance for the Study of School Climate – School Climate Assessment Inventory. The survey assesses a range of elements that contribute to school climate, including faculty (staff) relations, attitude and culture, leadership and decisions, student interactions, learning and assessment, and the physical condition of the school.

Surveys are for staff, parents and students, and can be administered individually or in a group setting.

Go to contents page

A modified extract from the survey is presented in Table 12 below.[99] Programs could use a similar survey in their evaluations of program graduates' impact on school climate.

Table 12: Extract from the School Climate Assessment Inventory survey for staff

High	Middle	Low
Staff frequently collaborate on teaching matters	Most staff are congenial to one another and occasionally collaborate	Typically, staff members view one another competitively
Staff approach problems as a team/ collective	Staff attend to problems if related to their own interests	Staff expect someone else to solve problems
Staff are constructive when speaking of each other and/or administrators	Staff wait for safe opportunities to share complaints about other teachers and/or administrators	Staff negatively discuss other teachers/ administrators

Go to contents page

C/ Conducting the evaluation

This section provides advice on some practical issues concerning implementing and conducting a program of evaluation based on the framework. While the framework provides a basis for high-quality evaluation, there are also operational matters that impact the effectiveness of the evaluation process. The material addresses issues such as planning the process, collecting and using data, evaluation timing and the use of tools to support the evaluation. It will be most useful to those planning implementation of an evaluation program and seeking detailed practical advice about the process.

C.1 Planning

Planning is an essential first step for performing any evaluation. Evaluators should consider what information they want to collect and why. It is important to be clear about what data are useful to collect and to confine data collection to what is likely to be most valuable. Evaluations can become burdensome if data are over-collected, leaving less time and resources for valuable analysis. This leaves evaluators 'data-rich' but 'information-poor'.

In order to do this effectively, evaluators should consider what data are most useful for providing them with the information they desire and then evaluate the strengths and weaknesses of the data collection tools available to them.

Once evaluators have decided how to collect the data, someone should be responsible for its collection and the timing of the collection should be clearly understood. Evaluators should know at the planning stage what analysis method they wish to perform on the data to ensure that they collect exactly what they need. Figure 4 is a useful tool to ensure that none of the planning steps are forgotten or skipped.

Figure 4: Evaluation planning table[100]

Evaluative questions What do we want to know about this program?
Link to program objectives, goals and intended outcomes How does evaluating this topic help understand whether the program is working as intended?
Indicator(s) What is one possible measurable approximation of the outcome?
Data collection method(s) and tools What data collection method will be used to measure the indicator? e.g., survey, focus group, interview, document review, etc.
Respondent(s) Who will provide the information needed? e.g., teachers, program staff, mentors, program graduates
Person(s) responsible for data collection Who is responsible for ensuring the data are collected?
Timing and use of data collection When will the data be collected? How will the information be analysed and used?

Planning for the evaluation should be done well in advance. Evaluators should develop strategies to maintain contact with program graduates as they are the main source of useful information. Expectations should be set in writing with participants at the start of the program, ensuring that they provide data on their placements. Considerations should be made for the possibility that data are unavailable or incomplete and therefore precautions taken.

C.2 Collecting data

A consistent process for collecting and organising data is very important. Depending on the method of collection, data should be collected at the same or a similar time. If time series data are being collected, this should be done at the same time every period. Procedures for collection should remain as similar as possible over time.

Program participants should know what data are being collected about them, and how the data will be used, stored and disposed of. Consent to collect information should be obtained through a signed statement from participants.

Evaluators should try to ensure as large a response rate as possible as this will add reliability and validity to the data allowing more significant conclusions to be drawn. It is always worthwhile to pilot proposed methods of data collection to ensure they work as intended.

When developing specific tools to measure the knowledge, skills or dispositions of participants, it is important to:[101]

- ask questions and offer scoring options (or rubrics) that maximise the variability of responses. This allows for the greatest differentiation between participants and hence offers the most meaningful data
- test the reliability and validity of survey data before generating it on a large scale
- invest in data systems that allow for advanced tracking over time and linkages between different participant responses in order to gather more meaningful data
- ensure consistency across raters (regarding observational tools). Raters should be trained thoroughly and given norming sessions and scoring guides. Rubrics should use standards and consistent and clear language linking the evidence demonstrated by the participant with particular rubric scores.

Interpreting and using evaluation data

Once data have been collected, evaluators need to analyse it to identify key patterns. This analysis can include:

- comparing differences over time
- identifying key themes
- identifying particular recurrent issues.

It is important not to generalise about data across situations or to claim definitive causal effects. Other factors may have been responsible, such as changes in school demographics, staffing, providers, or education policy factors, and these should also be considered.

Using the results of the evaluation

Evaluations are often a squandered resource because they are not then 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 Table 13, which shows how some common challenges can be mitigated through evaluation design.

Go to contents page

Table 13: Evaluation challenges and potential remedies[102]

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 evaluation framework
Hard-to-measure outputs	Use mixed methods and multiple sources
Impact takes time	Longitudinal evaluation
Evaluations are under-used	Use checklist to help create feedback loop

Evaluations are useful from a provider's perspective to document changes over time. If new elements are introduced to a program or new goals established then providers can use the results of their evaluation to assess whether these changes were effective. Providers should also try to determine which parts of the existing program are more or less effective.

Use of the data relies heavily on a thorough planning stage. At the planning stage, evaluators should decide on the particular questions they want answered in the evaluation. Then the data collected is likely to be useful in generating high-quality, desirable information at the final stage.

Allowing for different program goals

Principal preparation programs may have a different impact on certain outcomes, depending on the program's main goal. For instance, a program designed to give principals stronger skills in financial and human resource management may have a less direct impact on student outcomes than a program targeting instructional leadership, though all these skills are crucial to the effectiveness of principals in their broad roles. When comparing different programs and assessing their impact, it is therefore important to compare those with similar goals and to be specific about expected impact.

Considering both the processes and outcomes in the evaluation

Evaluation can involve an examination of processes, outputs and/or outcomes. Many frequently used measures of program success, such as whether participants enjoyed the program, are forms of output measure that do not give adequate information about impact when used alone.

While enjoyment of a program may indicate that individuals felt they were learning and gaining new experience, it does not provide information on changes to their behaviour, impact on teachers in their school, or on improvement in student learning outcomes (the ultimate objective).

The measuring of outcomes is difficult but it is essential for robust evaluation. Outcome measures, such as the impact the program had on participants' behaviour, and the impact graduates have had on student learning outcomes, constitute the evidence of whether a program is achieving individual, program and system goals.

Using multiple sources of information

Evaluations that draw on information from multiple sources and use multiple methods (for instance, analysing changes in professional practice through peer reviews throughout the program, 360° feedback reviews in schools, and self-assessment) will provide a more complete picture of changes taking place as a result of the program.[103]

Allowing adequate timelines for evaluating program impact

To get a full picture of how principal preparation affects participants and schools, evaluations will need to be longitudinal and include follow-up evaluations at least 12 months after program completion. These post-program evaluations can assess the impact of program graduates in their roles over the long term.

Go to contents page

Evaluators should take a baseline measurement of participants' skills and knowledge to assess what impact the program has in the short term. Pre-assessments and surveys administered as part of selection processes or early in the program can also be useful in making sure the curriculum is meeting the needs of participants.

These approaches are already used in some Australian programs. For instance, the Stepping Up program (run by the Brisbane Catholic Education Office) assesses participants before the program and again at the end to determine whether there have been changes in participants' knowledge, skills, beliefs and attitudes.[104]

Given leadership development is a continuous process and the impact on student outcomes may take some time to materialise, evaluations would ideally continue for a minimum of 2-3 years (as is the case, for example, in the evaluation of the New York City's Aspiring Principals Program and the New Leaders program in the US).[105] In recognition of the need for a long-term view, one leadership development initiative in Austria involving 10 schools sets out a 15-year time horizon for evaluation.[106]

C.3 When to use the evaluation framework

The framework is designed to be used throughout the principal preparation process. A timeline for evaluation is proposed in Figure 5.

Figure 5: Suggested evaluation timetable

	Components	Why evaluate at this time?
Before program	**1. Review of program objectives and goals**	Reviewing program objectives, goals, intended outcomes and strategies to achieve them helps ensure the program selection processes and content are aligned with the program's mission. Articulating the objectives and goals also drives the evaluation process to ensure programs measure what they are trying to achieve.
Before and after program	**2. Evaluation of selection processes**	Program providers should have a theory of who will benefit from the program before the program commences. On conclusion, they can review whether this was the case, and revise content or selection procedures accordingly.
Before, during and after program	**3. Evaluation of program content, design and delivery**	Evaluating the content, design and delivery of a program can happen before (to ensure alignment with program goals), during (to review whether delivery is effective and to adjust the program) and after (to analyse how appropriate and effective these aspects were).
During and after program, and ongoing	**4. Evaluation of participant performance and outcomes**	Analysing the impact of program graduates should happen during the program (to make improvements), after (to analyse the overall impact) and ongoing (to track the performance of graduates and their development as leaders over time).

It is recommended that evaluators create a timeline for evaluating the components of the framework. Different tools will also generate data across different timeframes and this should be considered.

For instance, a self-report tool is fairly immediate, but other tools such as observations of leadership practice may require more time to organise and may need to be spaced over time to generate longitudinal data.

Go to contents page

C.4 Considerations for using tools

It is intended that program providers review which focus areas and potential evaluative questions are most relevant to their needs, and then select, modify or create tools that generate answers to these questions.

Choosing the right indicators, tools and measures to use in evaluation will depend on the program's goals and how the program is designed to achieve these. An appropriate tool in one setting may not reveal the information needed in a different context. It is recommended program providers review tools (such as surveys and self-reports) prior to use to ensure they are measuring the appropriate outputs and outcomes relevant to the program.

A number of methodological issues should be considered when choosing tools to use in evaluation:

Validity and reliability: Validity refers to the tool's accuracy in measuring what it is meant to measure.[107] For example, evaluators may want to use student enrolment data to determine whether the principal is performing effectively. This may be an invalid measure as greater enrolments at a school could be due to a number of factors unrelated to the excellence of the school itself (e.g., increases in the population of an area).

Reliability refers to how consistently a measure predicts certain outcomes.[108] For example, teacher observations, if performed infrequently and under varied conditions (i.e., whether or not the teacher knows in advance they will be observed), can produce unreliable, vastly fluctuating results.

Every tool has its own strengths and limitations, and it is important to understand how instrument design shapes the kind of analysis that is possible. Many of the tools discussed in this guide were created in different contexts (e.g., for private leadership training providers in the US) and this is reflected in their design. However, altering tools may change their reliability and validity. Care should be taken to test the tool (preferably in conjunction with another method) before relying on it.

Response incentives and bias: People's honesty when answering questions about their own performance (or the performance of others) may be affected by embarrassment or fear of retribution or other penalties.[109] For instance, a teacher may not wish to give a negative performance review to a poorly performing principal unless they are confident it is anonymous and will not adversely affect their own career.

Alternatively, people often over-rate their own performance or knowledge when they are not aware of what they don't know. While response bias will almost always exist, taking precautions to minimise this (e.g., offering anonymity on surveys) is always advised.

Complexity of the tool: Long surveys and complicated tests often have a high attrition or non-response rate. Tools should collect the data they need but not be overly burdensome. Instructions should be clear with simple question structure, logical response options, and the context and use of the data collection clearly explained to ensure that participants are engaged and to decrease unreliability or invalidity of responses.[110]

Developmental issues: Program providers may wish to design evaluation that benefits program participants at the same time as it gathers information. For instance, self-assessment tools and course feedback could be used to improve the program, but these tools may also be integrated into ongoing support for program participants once they have graduated.

Formative and summative assessments throughout the course also offer additional information for both the program provider and the participants on how well the course is working as a result of the participants' performance. By evaluating participant performance throughout, participants receive feedback on whether they are improving and where they need help, while the program provider simultaneously receives information on which parts of the program are working well and which parts are not functioning as well.

Go to contents page

Ethical and privacy issues: Evaluation should consider the ethical and legal implications of collecting data. For instance, some types of tools may collect information that could identify or potentially compromise the respondents. Such data should be collected with caution and respondents must be made aware of how the information will be used and be given a choice about whether they consent or not.

The use of mixed methods and multiple sources: Most types of evaluation tools generate either quantitative or qualitative data. Quantitative data can be particularly useful in monitoring changes over time in outcome variables. Quantitative approaches include data analysis of changes in student outcomes, employment data or retention rates in a program.

Qualitative data often reveal information about perceptions, experiences and behaviour. Qualitative research tools include open-ended interviews, observations, and self-assessment tools that include opportunities for written responses. Use of multi-method evaluations, collecting data from different points in time, and gaining perspectives from different groups can all enhance the usefulness, reliability and validity of a program evaluation.

Which tools for which evaluative questions?

The evaluative questions posed in the framework can be answered in many ways. Because each program is unique, evaluation tools need to be developed fit for purpose. We do not suggest specific tools for each evaluative question in the framework for several reasons.

1. The choice of evaluation tools should follow from program aims to ensure the tool will capture data required.[111] For example, the approach and tools used to evaluate a selection process (Component 2) will depend on the profile of the programs' preferred participants. Program providers will need to carefully consider the best type of tool, and tailor specific content within it, to generate the data they require to improve their selection process.
2. There are only a handful of evaluation tools that have been developed and tested in an Australian context. Tools provided by AITSL (such as the 360° Reflection Tool and the School Leader Self-Assessment Tool) have been created in line with the Standard, and validated in the context of the professional practice of Australian school principals. While the differences between tools created in Australia and overseas may appear superficial, the task of determining their validity would often require testing and further analysis, beyond the scope of this guide.
3. There is limited literature on which specific tools are the best to use when evaluating certain aspects of principal preparation programs. In some cases, certain types of tools appear likely to generate the required data. For instance, in assessing a participant's impact on school climate (within Component 4), using a survey tool would be appropriate in finding out how program graduates are perceived by staff, students and the school community. Yet in many cases, other tools could also be used and there is no empirical reason why a survey may be more desirable than a rubric, for example. The choice of tool, once again, should be informed by program aims and the aims of the evaluation.
4. As every methodological approach has strengths and weaknesses, it is recommended that providers of principal preparation programs use a mixed method approach in their evaluations.[112] Therefore, prescribing a specific tool may be too simplistic for most evaluations. Triangulation – the process of using multiple measures, methods or sources of data to assess an outcome – is particularly relevant in evaluating leadership development programs because of the different levels of impact the program may have.[113] Similarly, to ensure validity and reliability in their evaluations, providers may wish to incorporate the perspectives of multiple observers or raters of program quality alongside participant surveys and semi-structured qualitative interviews. Similarly, they may also wish to triangulate the quantitative data they collect on program graduate outcomes with some in-depth interviews or through self-assessment tool data generated during the program.

Go to contents page

C.5 Hypothetical use of the framework

The following short series of examples illustrates how some of the tools suggested in the document could be used by a hypothetical provider of professional learning for aspiring principals, the Indigo School Leaders Australia program. The hypothetical program is a one-year school principal preparation program, offered by a provider that also offers a range of other leadership development courses. Indigo School Leaders is accredited through a university and provides credit towards a Masters in Educational Administration. The examples illustrate how the tools can be used to support evaluation. Some of the tools might need to be modified in use to meet the *Australian Professional Standard for Principals* and Australian or local circumstances. Headings indicate which of the four evaluation components the scenario concerns.

Component 1: Review of program objectives and goals

Hypothetical A – Using the Component 1 resource (see Table 4, p. 14)
To illustrate the use of the Component 1 resource.

The provider established Indigo School Leaders after demographic/workforce analysis found there was a looming shortage of highly-qualified applicants for school principal roles. In particular, applicants with skills in connection to the Standard's Professional Practices, *Leading improvement, innovation and change*, and *Engaging and working with the community*, would be in short supply.

Indigo School Leaders is particularly interested in the leadership development of aspiring principals who want to transform difficult professional culture in their schools and orient staff to support student learning. The Indigo School Leaders program uses the evaluation framework to plan its evaluation. A review of program goals is done using the Component 1 resource.

1. Problem statement	4. Influential factors
Many principals retiring, leading to a shortage of leaders who can lead change processes in schools, work productively with the community and improve school climate/professional culture	Policy environment Workforce shortages

2. Needs analysis	5. Strategies
Prospective program participants need proven techniques to help them develop the skills to lead schools in challenging circumstances Education system needs 200 prepared principals over the next three years	Prospective participants should go through a rigorous selection process to ensure they are motivated to go on to principal roles and to identify learning needs Including a strong component of mentoring and coaching in program design helps to develop different perspectives on conflict resolution

3. Desired results (outputs and outcomes)	6. Assumptions
Short-term: ensure the majority of prospective participants complete a quality selection process including referral from schools Medium-term: develop proven, high-quality course content that is fully aligned to best practices in leadership development and adult learning Long-term: program graduates demonstrate they can positively transform school climate	Prospective candidates and mentors will make time for mentoring processes despite no additional funding available A new program selection process includes a referral component. This assumes that schools' existing leadership teams are able to identify talented potential leaders and promote the program as a development opportunity

Go to contents page

Component 2: Evaluation of selection processes

Hypothetical B – Two program providers use different tools to evaluate how they select participants

The boxed section below illustrates the approaches of two principal preparation programs with different goals and processes for selection, reflective of their different program objectives. Program 1 seeks to target a small, elite cohort of young teachers who are up-and-coming leadership talent. To be selected into the program, participants must have a letter of recommendation from their school principal, verifying their leadership potential. Program 2 seeks to recruit aspiring principals who need to develop skills in budget management (specifically). Program 2 does not filter participants but allows them to self-identify on whether the course is relevant to their needs.

To evaluate the effectiveness of their unique selection processes, each program provider makes a decision about which evaluation tools are most relevant to their program, outlined below. While the two programs use different evaluation tools, each is appropriate to meet the specific program purposes.

Both programs use the data generated through their choice of tools to compare the characteristics of the participants selected, with their profile of 'ideal participants' defined through Component 1 of the framework. This provides a way to assess whether their selection processes result in selecting their 'ideal participants'.

Program 1: The evaluation tools used to evaluate the selection process, i.e., the effectiveness of principal recommendations as an indicator of potential leadership talent, include:

(i) a self-assessment tool that asks participants a series of questions to benchmark leadership identity and levels of self-efficacy, at the start and end of the program

(ii) a 360° survey tool that includes the views of senior leaders in the school on potential leadership qualities of the participant.

Program 2: The evaluation tools used to evaluate the selection process, i.e., the effectiveness of participant self-identification as a selection approach, include:

(i) a survey tool completed by school senior leaders on the participant's development needs, including budget management

(ii) a pre-program test of participant skills in budget management, identifying if development is needed in this area.

Go to contents page

Component 2: Evaluation of selection processes

Hypothetical C – Using the Wallace Foundation rubric (see Table 7, p. 20)

Selection has been a problem for Indigo School Leaders with attrition rates higher and promotion into principal positions lower than expected. Table 14 below shows how the program providers used the Wallace Foundation rubric to report on progress in selection processes. The evaluator also administered an online survey about prospective candidates' experiences of the selection processes. Through use of the rubric the evaluator suggested that Indigo School Leaders investigate its attraction strategy including how the program could attain sufficient visibility to develop a strong candidate pool.

Table 14: Hypothetical example of the use of the Wallace Foundation rubric

Quality indicator	Description	Indigo School Leaders' self-assessment rating	Explanatory notes
I. Rigorous program admission standards	Program admission standards include criteria for: 1) nominating candidates 2) screening applications and 3) conducting and evaluating candidate interviews. They are aligned with the *Australian Professional Standard for Principals.*	All – well developed	All program admission standards meet these quality indicators.
II. Multi-dimensional approach to outreach and communication	Criteria and processes are designed to recruit high-potential candidates and are broadly communicated in multiple venues at the local, state and national level to give the program high visibility.	Some – emerging	While Indigo School Leaders has a process to recruit high-potential candidates (including referral through a sponsor) it has not yet begun a substantial outreach program. It has mainly relied on recommendations from people who have completed courses with the same provider.
III. Valid measures for assessing candidate potential	Measures for assessing applicant potential are valid, reliable, aligned with principal performance expectations and consistently used to make admission decisions.	All – well developed	All measures for assessing candidate potential meet these quality indicators.
IV. Competitive recruitment incentives	Incentives used to attract and retain highly qualified applicants are budgeted, responsive to applicant needs and equitably distributed across the applicant pool.	None – beginning	Indigo School Leaders does not use financial incentives to attract or retain course participants. However, it has been considering, but has not yet developed, a scholarship program.

Go to contents page

Component 3: Evaluation of program content, design and delivery

Hypothetical D – Using the AITSL 360° Reflection Tool to evaluate program content, design and delivery (see Table 9, p. 28 and Figure 2, p. 29)

The Indigo School Leaders program's focus on developing school leaders who are skilled in creating a positive school climate has informed the content, design and delivery of the program.

Participants work through a range of case studies of turn-around schools, work with mentors over the year of the program who assist them in resolving real-world issues in participants' schools, and undertake group work on reviewing best practices in resolving conflict and building teams to support student learning in a school setting.

One way that Indigo School Leaders evaluates program effectiveness is through the use of the 360° Reflection Tool. At the start of the program, participants are asked to use the tool, inviting raters from their school to also reflect on their current practice against the 15 areas examined in the tool.

With the permission of participants, the results from the tool are then reviewed by the program convenor, who identifies any particular areas of need for each participant. The profiles generated by participants (along with other data) are used to help the program identify mentors and to assign program participants into study groups.

Near the end of the program, participants complete the tool again. With the program cohort and their mentor, they work through the personalised development planning tools offered as part of the 360° Reflection Tool. This information is discussed prior to the conclusion of the program, and participants can identify their future learning needs as they potentially take on principal roles.

The program provider also reviews the data and comments from raters and participants, to generate an understanding of how participants developed through the program.

Component 4: Evaluation of participant performance and outcomes

Hypothetical E – Using climate surveys to assess graduate performance (see Table 12, p. 37)

The Indigo School Leaders program focuses on developing leaders who create a positive learning environment. This led the program provider to evaluate its graduates' impact on school climate.

Drawing on a range of surveys, including the School Climate Assessment Inventory (see pages 36-37), it created its own survey assessing school climate and leaders' actions to improve staff morale, relationships with the community, and teachers' feedback on program graduate performance. The survey was designed to collect information from staff, parents and students about their perceptions.

The program evaluation randomly selected program graduates to evaluate before and after the graduate became a principal (with graduates' and schools' consent).

The results of this analysis showed that Indigo School Leaders graduates were overall creating a more positive school climate including positive relationships between teachers and students, and stronger school-community partnerships.

Several of the findings noted, however, that the program graduates still struggled to work productively with other school leaders who had different views on administrative matters.

The findings of this evaluation were then relayed back to course designers for further analysis. Ultimately, the evaluation resulted in a greater emphasis on collaborative planning and co-leadership.

Go to contents page

D/ Endnotes

1. Jensen et al. (2015a).
2. Australian Institute for Teaching and School Leadership (2015d).
3. Jensen et al. (2015b), p. 22.
4. Watterston (2015). An unpublished 2016 update of this report found these numbers had not changed.
5. Australian Institute for Teaching and School Leadership (2015a).
6. OECD (2014).
7. Leithwood et al. (2004).
8. Jensen et al. (2015b).
9. Australian Institute for Teaching and School Leadership (2015a), Jensen et al. (2015b), Watterston (2015).
10. Australian Institute for Teaching and School Leadership (2015a).
11. Australian Institute for Teaching and School Leadership (2015a).
12. Gutierrez and Tasse (2007). This is often referred to as the 'theory of change' approach to evaluation.
13. Gutierrez and Tasse (2007). Different programs and evaluations articulate their program objectives, goals, intended outcomes and strategies to achieve them in different formats. For example, the 'logic model' and pathways approaches are popular.
14. For example, the Kellogg Foundation's Evaluation Handbook and Logic Models (see W.K. Kellogg Foundation 2004).
15. King (2013b).
16. Cheney et al. (2010).
17. Guskey (2002), Kirkpatrick (1959), W.K. Kellogg Foundation (2006).
18. Neuman-Sheldon et al. (n.d.). The Center for the Evaluation of Educational Leadership Preparation and Practice's purpose is to make available valid and reliable evaluation research tools, methods and training materials and strategies for leadership reparation programs. The Center provides tools, training, technical assistance and support for leadership preparation programs.
19. See Jensen et al. (2015b).
20. W.K. Kellogg Foundation (2004), p. 29.
21. Australian Institute for Teaching and School Leadership (2015d).
22. Australian Institute for Teaching and School Leadership (2015d).
23. We recognise that not all schools fit 'neatly' into a system such as government or Catholic schools. However, program providers can also work with independent schools, and various education associations, to ensure that the goals of the program meet the needs of schools in which aspiring principals will subsequently work.
24. Watterston (2015).
25. W.K. Kellogg Foundation (2004). In particular, see pp. 27-34 for guidance on developing program logic maps.
26. Stassen, Doherty and Poe (2001). See pp. 16-17 for tools to help define program goals and objectives. Note that these tools were designed specifically for higher education to assess student learning relative to learning objectives.
27. Taylor-Powell and Henert (2008). See chapter 5 for guidance on developing a logic model and chapter 6 for guidance on using a logic model to focus an evaluation. This resource also draws on the work of the Kellogg Foundation.
28. McCauley and Hughes-James (1994). See p. 63 for a participant survey. The survey provides examples of how program providers can formulate their own participant surveys. Note that this survey is very specific to the objectives, design and implementation of this particular leadership program. For example, the survey seeks feedback on whether participants developed closer working relationships with their superintendent and peers, their reflections on working with their 'executive facilitator' and how participants used learning journals required in the program.
29. Smith et al. (2011).
30. This resource was adapted from the Kellogg Foundation's Logic Model: W.K. Kellogg Foundation (2004).
31. This checklist has been adapted from W.K. Kellogg Foundation (2004).
32. Darling-Hammond et al. (2007).
33. Consistent with adult learning principles, adults learn best when given the opportunity to apply their new knowledge, skills and capabilities to real situations. Kolb (1984). Exemplary school leadership development programs ensure that participants have opportunities to apply their new knowledge, skills and capabilities during or shortly after completing the program. Darling-Hammond et al. (2007), p. 68.
34. Australian Institute for Teaching and School Leadership (2015a).
35. See Jensen et al. (2015b), p. 14 for a discussion of selection processes used by leadership development programs in education and other sectors.
36. Watterston (2015).
37. Cheney et al. (2010); Darling-Hammond et al. (2007); Jensen et al. (2015b); Leithwood (2012).
38. For a discussion of collaborative and peer-to-peer learning, see Jensen et al. (2015b), pp. 38-39.
39. Jensen et al. (2015b).
40. This requires program providers to build adequate data systems that build on the information collected during the recruitment process. For other practical guidance on attracting, recruiting and selecting the most appropriate program participants, see Cheney et al. (2010), p. 41.
41. Jackson et al. (2010).
42. Brown and Chai (2012). See page 771 for tool dimensions and items. Note that this tool was developed for the New Zealand context.
43. Cheney et al. (2010), p. 164.
44. Cheney et al. (2010), pp. 160-161.
45. Davis and Darling-Hammond (2012), p. 25.
46. Darling-Hammond et al. (2007), pp. 64-66.
47. Jensen et al. (2015b), p. 14.
48. Cheney et al. (2010), see pp. 169-171 for example rubrics and selection matrices used in multiple programs.
49. King (2013b).
50. King (2013b), see p. 8 for candidate selection and recruitment rubrics.

Go to contents page

51. Darling-Hammond et al. (2007); King (2013b); The Wallace Foundation (2008).
52. King (2013b), p. 8.
53. King (2013a).
54. Watterston (2015).
55. Jensen et al. (2015b).
56. This type of program structure or delivery involves participants coming together for regular program intensives over a period of time. Between intensives, participants return to their role and can begin to apply their new skills, knowledge and capabilities.
57. Jensen et al. (2015b); Watterston (2015).
58. Davis et al. (2005).
59. Showers and Joyce (2002); Timperley et al. (2007).
60. Australian Institute for Teaching and School Leadership (2015b).
61. McCauley and Hughes-James (1994), p. 63.
62. Morgan (2009), see Figure 1.
63. National College for Teaching and Leadership (2014).
64. Jackson et al. (2010).
65. Davis and Darling-Hammond (2012).
66. Darling-Hammond et al. (2007).
67. Jensen et al. (2015b).
68. Watterston (2015).
69. King (2013b).
70. Donaldson and Grant-Vallone (2002).
71. Australian Institute for Teaching and School Leadership (2015b).
72. The tool could also be used within other components of the evaluation framework, including the evaluation of selection processes and in the evaluation of outcomes. The AITSL School Leader Self-Assessment Tool can be used for similar purposes.
73. Ng Foo Seong (2013).
74. Guskey (2002).
75. Jensen et al. (2015b); Opfer and Pedder (2011); Wayne et al. (2008).
76. Guskey (2002).
77. Australian Institute for Teaching and School Leadership (2015d).
78. Corcoran, Schwartz and Weinstein (2012); Jensen et al. (2015b).
79. Individual self-assessment tools are used in other education systems including the US. The ISLLC Self-Assessment tool allows principals to assess their knowledge, skills and dispositions against the American ISLLC Standards for School Leadership.
80. Newcomer, Hatry and Wholey (2015), chapter 19.
81. Better Evaluation (2014).
82. Harrell and Bradley (2009), see page 24 for guidance on conducting semi-structured interviews including constructing interview questions (p. 35), interviewing protocols (p. 48) and conducting an interview (p. 66). See from page 79 for guidance on conducting focus groups.
83. University of Wisconsin - Extension (2009).
84. CT State Department of Education, USA (2013). Note these example survey questions were developed with specific regard to the jurisdiction's rubrics on effective teaching and learning. Therefore, evaluators should use these sample questions as examples only, and explicitly select those questions that are relevant to their program evaluation, or devise their own.
85. Colorado Education Initiative, (2014). The website provides a range of guidance and resources for teachers, school leaders and administrators. Teacher perception survey items can be found on the website. Two student perception surveys are available for students of different ages: grades 3 – 5 and grades 6 - 12. A student perception survey planning tool is also available.
86. Australian Council for Educational Research (2014).
87. Hallinger (2008a). Note that this tool is administered online. A sample rating subscale is found in Hallinger (2008b), p. 9.
88. NYC Department of Education (2014).
89. Corcoran, Schwartz and Weinstein (2009), (2012).
90. Neuman-Sheldon et al. (n.d.), chapter 5.
91. Australian Institute for Teaching and School Leadership (2015d).
92. New York State Education Department (n.d.). Note that these rubrics were developed and validated according to US performance standards. However, some of the rubrics and associated materials provide examples of how rubrics can be used to assess performance.
93. This tool provides example leadership performance plans that align to the Wallace Foundation rubrics.
94. New Leaders (2012).
95. Marzano et al. (2012).
96. Center on Great Teachers and Leaders at American Institutes for Research (2015).
97. Clifford et al. (2012).
98. Clifford et al. (2012).
99. Alliance for the Study of School Climate (2004).
100. Adapted from Centers for Disease Control and Prevention (2011).
101. Jensen et al. (2015b); Neuman-Sheldon et al. (n.d.).
102. Jensen et al. (2015b).
103. Day (2014).
104. Watterston (2015).
105. Corcoran, Schwartz and Weinstein (2009), (2012), Bill and Melinda Gates Foundation (2014).
106. Rapporteur, Moorman and Rahm (2007).
107. Bryman (2012).
108. Bryman (2012).
109. Donaldson and Grant-Vallone (2002).
110. Office of Quality Improvement (2010).
111. W.K. Kellogg Foundation (2006), p. 16; Bryman (2012), p. 649.
112. King (2013b). See Hoole and Martineau (2014) pp. 175-190 for a detailed discussion of evaluation methods.
113. Bryman (2012), p. 392.

Go to contents page

E/ Resource summary

This section contains a summary of key resources referred to in the full report.

Australian Institute for Teaching and School Leadership

The Australian Institute for Teaching and School Leadership (AITSL) provides national leadership in promoting excellence in the profession of teaching and school leadership.

School Leader Self-Assessment Tool – This tool asks individuals to self-assess their skills and activities directly mapped to the Standard. Program providers could use the participant self-assessment process to help them assess the success of their selection processes. The tool could be used to collect information on participants' self-reported experience and growth in the program, directly related to the Standard.

http://www.aitsl.edu.au/school-leader-self-assessment-tool

Aspiring Principal Preparation – This report draws on best-practice leadership development in education and other sectors to develop key considerations for the design of principal preparation programs.

http://www.aitsl.edu.au/docs/default-source/school-leadership/principal-preparation/aspiring-principal-preparation-(print-friendly).pdf

Aspiring Principals – This report outlines a specific plan for a national professional learning program. It provides research on program content, program delivery and selection.

http://www.aitsl.edu.au/research-and-evaluation/aitsl-research-repository/detail/?id=aspiring-principals-final-report

Environmental Scan: Principal Preparation Programs – This report identifies key elements fundamental to the success of principal preparation programs around Australia. It also identifies common weaknesses in programs and suggests ways forward that will lead to improvement.

http://www.aitsl.edu.au/docs/default-source/school-leadership/principal-preparation/environmental-scan-principal-preparation-programs-(screen).pdf

Australian Professional Standard for Principals and the Leadership Profiles – The AITSL Leadership Profiles can act as a rubric for reviewing the practice of principals post-program.

http://www.aitsl.edu.au/docs/default-source/school-leadership/australian-professional-standard-for-principals-and-the-leadership-profiles.pdf?sfvrsn=4

Australian Council for Educational Research

The Australian Council for Educational Research (ACER) is a recognised international leader in the development and provision of high-quality assessment and reporting tools and services for schools, universities, TAFE institutes and Registered Training Organisations, health professionals, employers and governments in Australia and internationally. It provides a range of research-based online assessment and reporting services to schools. Tests are available on a 12-month licence, or alternatively single-test pricing is also available.

Social-Emotional Wellbeing (SEW) Survey – The SEW Survey is an Australian, anonymous, strength-based survey for students aged 3-18 years, which provides an holistic view of students' wellbeing. Survey reports provide schools with data on the wellbeing of groups of students. Student responses are grouped by year level and gender. There is also an optional Teacher Perception survey that measures teachers' perceptions of their students' social-emotional wellbeing as well as their social-emotional competencies. The SEW Survey is available on the ACER Online Assessment and Reporting System (OARS).

https://www.acer.edu.au/sew

Go to contents page

Better Evaluation

Better Evaluation is an international collaboration to improve evaluation practice and theory by sharing and generating information about options (methods or processes) and approaches.

Interviewing Guidance – This webpage describes the use of interviews in quantitative and qualitative evaluation, including guidance on how to plan, prepare for, and carry out semi-structured interviews.

http://betterevaluation.org/evaluation-options/interviews

Center for the Evaluation of Educational Leadership Preparation and Practice

The purpose of the Center for the Evaluation of Educational Leadership Preparation and Practice is to make available valid and reliable evaluation research tools, methods, and training materials and strategies for leadership preparation programs. It offers a systematic process for collecting and analysing state data on degrees and certification by institution, and career advancement and school progress by graduates and institutions. The Center provides tools, training, technical assistance and support for leadership preparation programs.

Formative and Summative Evaluation Planning for Leadership Preparation Programs – This planner is specifically designed to facilitate planning and data collection on leadership preparation programs. It includes a conceptual model of the link between leadership preparation and outcomes based on evidence, a guide for identifying evaluation evidence, and an evaluation planning worksheet.

http://www.ucea.org/wp-content/uploads/2014/08/Developing-Evaluation-Evidence-2013.pdf

Center on Great Teachers and Leaders (American Institutes for Research)

The Center on Great Teachers and Leaders (GTL Center) is dedicated to supporting state education leaders in their efforts to grow, respect, and retain great teachers and leaders for all students. The GTL Center provides technical assistance and online resources designed to build systems that support teaching standards, ensure equitable access of effective teachers and leaders including recruitment and retention and human capital management, and use data to guide professional development and improve instruction.

School Evaluation Products – This website compiles school evaluation resources from GTL Center and other US websites.

http://resource.tqsource.org/gep/gepsearchresult.aspx

Principal Evaluation Practical Guide – This website compiles principal evaluation resources from GTL Center and other US websites.

http://www.gtlcenter.org/tools-publications/online-tools/principal-evaluation

Center for Creative Leadership

The Center for Creative Leadership is an international, non-profit educational institution to advance leadership practice and development worldwide. It publishes books and reports that aim to contribute to a process of inquiry and understanding in which ideas related to leadership are raised, exchanged and evaluated.

Evaluation Survey – This is an example of a participant survey used to evaluate a leadership program for American superintendents. Whilst this survey is very specific to the objectives, design and implementation of this particular leadership program, it provides examples of how program providers can formulate their own participant surveys.

http://insights.ccl.org/wp-content/uploads/2015/04/EvalOutcomesLDP.pdf

Go to contents page

Colorado Education Initiative

The Colorado Education Initiative is an independent non-profit that collaborates with the Colorado Department of Education (CDE), schools and districts across the state to accelerate achievement for all Colorado students. They target innovation and develop tools and resources to support effective practice in schools.

Teacher Perception Survey Toolkit – Colorado's Teacher Perception Survey comprises questions to measure elements of Principal Quality Standards that are most observable by teachers, covering eight elements: Distributive Leadership, Professional Growth, Student Learning and Expectations, Problem Solving, Conflict Management and Disciplinary Leadership, Vision and Goal Setting, Instructional Leadership, School Community, School Culture and Teaching Conditions.

http://www.coloradoedinitiative.org/wp-content/uploads/2014/09/TPS_Administration_survey-instrument-CEI.pdf

Student Perception Survey Toolkit – The Colorado Education Initiative has also produced a Student Perception Survey Toolkit that can be used by programs to gain feedback from students on school climate and principal performance.

http://www.coloradoedinitiative.org/wp-content/uploads/2014/09/SPS_Administration_survey-instrument-6-12-CEI.pdf

Connecticut State Department of Education

Connecticut's System for Educator Evaluation and Development (SEED) is a model evaluation and support system. The leader (administrator) evaluation was developed in partnership with www.newleaders.org. It is designed to fairly and accurately evaluate school leader performance in order to help strengthen practice to improve student learning.

SEED Administrator Evaluation Survey Question Bank – The SEED Administrator Evaluation Survey Question Bank provides a selection of questions that can be used to assess teacher views on school leader performance. The evaluation covers four areas of performance: student learning, administrator practice, stakeholder feedback, and teacher effectiveness, with an emphasis on instructional leadership.

http://www.connecticutseed.org/wp-content/uploads/2013/03/Admin_Eval_Teacher_Staff_Survey_QBank.pdf

Sean P. Corcoran, Amy Ellen Schwartz and Maryle Weinstein

The Impact of New York City's Aspiring Principals Program on Student Achievement – One of the first major studies of the impact of a principal preparation program was undertaken by the RAND Corporation for the New York City Aspiring Principals Program. The methodology used could inform further analysis.

http://epa.sagepub.com/content/34/2/232.short

Go to contents page

Dr Stephen H. Davis and Linda Darling-Hammond

Stephen Davis and Linda Darling Hammond are both renowned voices in the fields of school leadership and education more broadly. Stephen Davis has been an associate professor of education at Stanford University since 2002. He is the author of several articles on school leadership and decision making. Stephen Davis is a former school district superintendent, personnel director, and high school principal. Linda Darling-Hammond is Charles E. Ducommun Professor of Education at Stanford University. Her research, teaching, and policy work focus on educational policy, professional development, school redesign, and educational equity. She is author or editor of more than 200 journal articles and book chapters and 11 books.

Innovative Principal Preparation Programs Model: What works and how we know – This model highlights design elements aligned with seven key features of effective leadership preparation programs including their selection process.

http://files.eric.ed.gov/fulltext/EJ977545.pdf

Dr Thomas R. Guskey

Dr Thomas R. Guskey is an expert in evaluation design, analysis, and educational reform. He is a professor at the University of Kentucky, as well as an education consultant who has worked with educators in all 50 US states, Europe, and Asia. Dr Guskey has served as Director of Research and Development for the Chicago Public Schools and as the first Director of the Center for the Improvement of Teaching and Learning, a national educational research centre.

Model of Professional Development Evaluation – This is a five-step evaluation model that focuses on participants' reactions, participants' learning, organisation support and change, participants' use of new knowledge and skills, and student learning outcomes. This aligns closely to Components 3 and 4 of the evaluation framework put forward in this document.

http://region3pd.ncdpi.wikispaces.net/file/view/guskey%2Barticle%2BED%2BLeadership%255B2%255D.pdf

Philip Hallinger

Philip Hallinger is recognised internationally as an innovator in leadership development. A prolific author, trainer and consultant, he has lived in Asia for the past 25 years and works extensively with both private and public sector organisations. He is acknowledged as an innovation leader in the areas of instructional leadership, educational change, leadership development, and school improvement. He authored the Principal Instructional Management Rating Scale (PIMRS), the most widely used survey instrument in the world for measuring instructional leadership.

Principal Instructional Management Rating Scale – PIMRS is a well-known questionnaire designed to gain an insight into a principal's instructional leadership. PIMRS assesses three dimensions of the instructional leadership construct: Defining the School's Mission, Managing the Instructional Program, and Promoting a Positive School Learning Climate. These dimensions are further delineated into 10 specific instructional leadership functions.

http://philiphallinger.com/old-site/pimrs.html

Go to contents page

W. K. Kellogg Foundation

The W.K. Kellogg Foundation (WKKF) is an independent, private, philanthropic foundation in the US. It provides funds for community-based projects to support education and development of young (0-8 year old) vulnerable children. This includes improving the quality of both teaching and learning through leadership and professional development, and working with child care providers, schools and teacher preparation programs.

Logic Model Development Guide – The WKKF's Logic Model Development Guide provides additional guidance and support to program providers and evaluators in answering evaluative questions concerning the problem statement, needs analysis, outcomes, strategies and assumptions.

https://www.wkkf.org/~/media/pdfs/logicmodel.pdf

Evaluation Handbook – This report was written to guide the evaluations of WKKF-funded projects. Part 1 of the report offers an overview of the philosophical expectations behind their evaluative approach. Part 2 provides a more practical guide for planning, designing and conducting evaluations.

https://www.wkkf.org/resource-directory/resource/2010/w-k-kellogg-foundation-evaluation-handbook

Dr Donald L. Kirkpatrick

Dr Donald L. Kirkpatrick was Professor Emeritus at the University of Wisconsin and Honorary Chairman of Kirkpatrick Partners. He was the creator of the Kirkpatrick Model, 'the most recognized and widely-used training evaluation model in the world'. The four levels were developed in the writing of his Ph.D. dissertation: Evaluating a Human Relations Training Program for Supervisors.

Kirkpatrick's Techniques for Evaluating Training Programs – Kirkpatrick's model defines four evaluation steps for training programs: participants' reaction, learning, behaviour and results.

http://www.kirkpatrickpartners.com/OurPhilosophy/TheKirkpatrickModel/tabid/302/Default.aspx

Learning Sciences Marzano Center for Teacher and Leadership Evaluation

The Learning Sciences Marzano Center for Teacher and Leadership Evaluation promotes excellence in public education by providing and developing next-generation teacher and leadership evaluation tools and training. The Center identifies, develops, and disseminates cutting-edge resources in educational best practices, built on a foundation of expert research under the direction of national researcher and author Dr Robert Marzano.

School Leadership Evaluation Model – Dr Robert Marzano developed an extensive rubric for evaluating school leaders' performance based on his research of leadership practices associated with student achievement.

http://sde.ok.gov/sde/sites/ok.gov.sde/files/TLE-MarzanoLeaderModel.pdf

Philip Morgan

The Course Improvement Flowchart – The Course Improvement Flowchart is a tool that is designed to describe how university courses can collect feedback on course quality, and then use this information for course improvement.

http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1066&context=jutlp

Go to contents page

National Center for Biotechnology Information

Guidance on Secondary Data Analysis – This paper offers general information on planning, conducting and performing secondary data analysis.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3138974/pdf/11606_2010_Article_1621.pdf

National College for Teaching and Leadership (UK)

The National College for Teaching and Leadership (previously known as the National College for School Leadership) is an executive agency of the United Kingdom's Department for Education, which offers head teachers, school leaders, senior children's services leaders and teachers with opportunities for professional development.

Content Development Handbook: Leadership Curriculum – National College for Teaching and Leadership's Content Development Handbook: Leadership Curriculum is a guide to creating curriculum for school leadership programs, which may be useful in reviewing and improving content, design and delivery.

https://www.nationalcollege.org.uk/transfer/open/dev/contentdevelopment_november_14.pdf

New York State Education Department

Principal Practice Observation Tool – The Principal Practice Observation Tool is used to gather evidence for principal performance reviews, but could be modified to gather evidence on program graduates' leadership practice.

http://schools.nyc.gov/NR/rdonlyres/F6EAC82C-8FE0-4456-A2DD-5014D211275F/0/PPOTool201415.pdf

Principal Practice Rubrics – The New York State Education Department has a number of Approved Principal Practice Rubrics that can be used to assess leadership practice.

http://usny.nysed.gov/rttt/teachers-leaders/practicerubrics/#APPR

New Leaders

New Leaders is a US national non-profit organisation that develops transformational school leaders and designs effective leadership policies and practices for school systems across the country. New Leaders runs leadership programs to develop transformational school leaders, and collaborates with districts, charter management organisations and states to foster the conditions that enable highly effective school leaders to drive results for students.

New Leaders Principal Evaluation Rubric – The New Leaders program created a rubric for evaluating principal performance. It includes examples of evidence that can be collected in order to help accurately evaluate the principal.

http://www.newleaders.org/wp-content/uploads/NL_evaluationrubric.pdf

Principal Program Evaluation Report – This report contains tips for how programs can track the placements of their graduates.

http://www.newleaders.org/wp-content/uploads/5.TrackingParticipantJobPlacementandRetention.pdf

Principal Preparation Program Self-Evaluation: Lessons Learned by New Leaders – This series of reports offers tips and recommendations for programs looking to perform their own evaluations. In particular it provides helpful information on how to track particular participant information and measure program components.

http://www.newleaders.org/newsreports/publications/principal-preparation-program-self-evaluation/

Go to contents page

Rainwater Leadership Alliance

The Rainwater Leadership Alliance (RLA) is a coalition of school districts, universities, foundations, and non-profit organisations dedicated to amplifying the importance of quality school leadership as the critical enabler of academic growth and performance for children. They lead, manage, and support high-impact principal preparation and development programs in many regions of the US. The RLA exists to share data, provide exemplars, and promote and scale effective methods to develop and support school leaders.

School Leadership Framework and Competency Model – The Knowledge is Power Program (KIPP) School Leadership Framework and Competency Model is an empirically derived and evidence-based model that outlines the key behaviours exhibited by effective KIPP Leaders. The RLA has adapted the model to create a rubric for selecting school leaders. See pages 169-171 in the document at the link below for example rubrics and selection matrices used in multiple programs.

http://www.anewapproach.org/docs/a_new_approach.pdf

Continuum of Principal Preparation – The continuum creates a logical evaluation process and the opportunity to define program goals. It does not include outcome measures as part of the evaluative process.

http://www.anewapproach.org/docs/a_new_approach.pdf

Synergistiq

Synergistiq is a company which conducts research to support systemic improvements in social justice and human rights. Synergistiq works with schools and education authorities across Australia to evaluate and provide advice to support strategies aimed at school improvement, including assessing the effectiveness of educational leadership and professional development opportunities.

'Five A' Assessment Tool of Educational Leadership and Professional Development – This is a purchasable survey that measures the impact of professional and leadership development on participants and their schools. Specifically, the tool measures, in relation to each participant, the extent to which the professional development - aligned to their learning needs - was adapted to the requirements of their role, generated positive or negative affect, and advanced their knowledge and skill. It also measures the likelihood that the new knowledge and skills acquired by the participant will be applied at their school. As part of measuring this likelihood of application, the Tool collects information on how receptive the school culture is to supporting and embedding learning from professional development. It also provides information on the strengths and weaknesses of the professional development.

Having been tested and refined based on the feedback of thousands of Australian educators, the Tool is now being applied by several state jurisdictions.

http://www.synergistiq.com

University of Massachusetts Amherst

The University of Massachusetts Amherst is the largest public research university in New England. The Office of Academic Planning and Assessment has designed handbooks to guide the practitioner through the steps of student learning assessment.

Program-Based Review and Assessment: Tools and Techniques for Program Improvement – This provides a range of review tools for a general program review within a university setting. Particular tools assist in defining program goals and objectives. However, the tools are not specific to leadership development, so program providers would need to adapt the tools to fit their needs. The tools focus specifically on assessing student learning outcomes from a program. Note that these tools were designed specifically for higher education to assess student learning relative to learning objectives.

http://www.umass.edu/oapa/oapa/publications/online_handbooks/program_based.pdf

Go to contents page

University of Wisconsin

The Program Development and Evaluation Unit provides training and technical assistance that enables Cooperative Extension campus and community-based faculty and staff to plan, implement and evaluate high-quality educational programs. In UW-Extension, the program development process is captured in its program development model that includes situational analysis, priority setting, program action – the logic model – and evaluation.

Developing a Logic Model: Teaching and Training Guide – This provides a question checklist to evaluate the logic model of teaching courses for university students. It could be used to assess program goals and the logic behind the theory of change.

http://www.uwex.edu/ces/pdande/evaluation/pdf/lmguidecomplete.pdf

Comprehensive Assessment of Leadership for Learning Survey – This web-based survey measures school leadership practices across five domains: focus on learning, monitoring teaching and learning, building nested learning communities, acquiring and allocating resources, and maintaining a safe and effective learning environment. The survey tool requires an annual subscription.

https://www.leadershipforlearning.org/

Interviews: Talking and Listening to People – This presentation includes simple guidance on how to plan, prepare for and carry out semi-structured interviews to help evaluate program effectiveness.

www.uwex.edu/ces/4h/evaluation/documents/Interviews.ppt

The Wallace Foundation

The Wallace Foundation seeks to foster improvements in learning and enrichment for disadvantaged children by supporting the development, testing and sharing of new solutions and effective practices. In particular, they focus on improving the quality of school principals, the use of time devoted to learning during summer and the school day and year, and access to and the equitable distribution of quality arts learning and after-school programs.

Preparing School Leaders for a Changing World: Lessons from Exemplary Leadership Development Programs – This report examines eight exemplary principal development programs and identifies a series of factors that contributed to the programs' effectiveness, of which the selection process is one.

http://www.wallacefoundation.org/knowledge-center/Pages/Preparing-School-Leaders.aspx

Principal Preparation Program Self-Assessment Toolkit – The Wallace Foundation Quality Measures Principal Preparation Program Self-Assessment Toolkit is a rubric that outlines the indicators of high-quality principal preparation programs. It is designed to be used in assessing an existing program, or guiding the development of a new program. It is intended to provide stimulus for discussions between course providers and education systems, focusing on the quality of programs and their continuous improvement. Rubrics are provided to help assess course content and pedagogy, supervised clinical practice, candidate recruitment and selection, and graduate performance outcomes.

http://www.wallacefoundation.org/knowledge-center/Pages/Quality-Measures-Principal-Preparation-Program-Assessment.aspx

F/ References

Alliance for the Study of School Climate 2004, *School Climate Quality Analytic Assessment Instrument and School-based Evaluation/Leadership Team Assessment Protocol.*

Australian Council for Educational Research 2014, *Social-Emotional Wellbeing Survey*, viewed 12 November, 2015, http://www.coloradoedinitiative.org/toolkit/teacher-perception-survey-toolkit/.

Australian Institute for Teaching and School Leadership 2014, *Coaching*, viewed 16 October, 2015, http://www.aitsl.edu.au/professional-growth/support/performance-and-development-support/coaching

Australian Institute for Teaching and School Leadership 2015a, *Preparing future leaders: Effective preparation for aspiring school principals*, Australian Institute for Teaching and School Leadership, Melbourne.

Australian Institute for Teaching and School Leadership 2015b, *360° Reflection Tool,* viewed 13 October, 2015, http://www.aitsl.edu.au/australian-professional-standard-for-principals/360-reflection-tool.

Australian Institute for Teaching and School Leadership 2015c, *360° Reflection Tool Sample Questions*, viewed 12 November, 2015, http://www.aitsl.edu.au/docs/default-source/school-leadership/ sample-questions.pdf?sfvrsn=2.

Australian Institute for Teaching and School Leadership 2015d, *Australian Professional Standard for Principals and the Leadership Profiles*, Australian Institute for Teaching and School Leadership, Melbourne.

Avolio, BJ and Gardner, WL 2005, Authentic leadership development: Getting to the root of positive forms of leadership, *The Leadership Quarterly*, 16, pp. 315–338.

Barnett, M 2014, *Plan a Principal for a Day Program*, National Association of Elementary School Principals, viewed 7 September 2016, http://www.naesp.org/communicator-january-2014/plan-principal-day-program.

Better Evaluation 2014, *Better Evaluation: Interviews*, viewed 22 December, 2015, http://betterevaluation.org/evaluation-options/interviews.

Bill and Melinda Gates Foundation 2014, T*eachers Know Best: Teachers' Views on Professional Development*.

Blank, RK and de las Alas, N 2009, *Effects of teacher professional development on gains in student achievement: How meta-analysis provides scientific evidence useful to education leaders*, The Council of Chief State School Officers.

Bono, JE and Ilies, R 2006, Charisma, positive emotions and mood contagion, *Leadership Quarterly*, 17, pp. 317–334.

Brown, GTL and Chai, C 2012, Assessing instructional leadership: A longitudinal study of new principals, *Journal of Educational Administration*, 50, (6), pp. 753–772.

Bryman, A 2012, *Social Research Methods*, 4th edition, Oxford University Press, Oxford.

Buskey, FC and Karvonen, M 2012, Evaluating innovative leadership preparation: How what you want drives what (and how) you evaluate, *Journal of Leadership Education*, 11, (1), pp. 204–221.

Center on Great Teachers and Leaders at American Institutes for Research 2015, *Guide to evaluation products*, viewed 12 November, 2015, http://resource.tqsource.org/gep/gepsearchresult.aspx.

Centers for Disease Control and Prevention 2011, *Introduction to program evaluation for public health programs: A self-study guide*, Centers for Disease Control and Prevention.

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.

Chun, JU, Sosik, JJ and Yun, NY 2012, A longitudinal study of mentor and protégé outcomes in formal mentoring relationships, *Journal of Organizational Behaviour*, 33, pp. 1071–1094.

Clifford, M, Menon, R, Gangi, T, Condon, C and Hornung, K 2012, *Measuring School Climate for Gauging Principal Performance: A Review of the Validity and Reliability of Publicly Accessible Measures*, American Institutes for Research.

Colorado Education Initiative 2014, *Teacher Perception Survey Toolkit*, viewed 12 November, 2015, http://www.coloradoedinitiative.org/toolkit/teacher-perception-survey-toolkit/.

Committee on Developments in the Science of Learning 1999, *How People Learn: Brain, Mind, Experience, and School*, J Bransford, AL Brown and Cocking (eds), National Academy Press, Washington DC.

Corcoran, SP, Schwartz, AE and Weinstein, M 2009, *The New York City Aspiring Principals Program, A School-Level Evaluation*, Institute for Education and Social Policy, New York University.

Corcoran, SP, Schwartz, AE and Weinstein, M 2012, Training your own: The impact of New York City's Aspiring Principals Program on student achievement, *Educational Evaluation and Policy Analysis*, 34, (2), pp. 232–253.

CT State Department of Education, USA 2013, *Educator Effectiveness and Professional Learning: SEED Administrator Evaluation Survey*, Panorama Education.

Damen, F, van Knippenberg, B and van Knippenberg, D 2008, Affective match: Leader emotional displays, follower positive affect, and follower performance, *Journal of Applied Social Psychology*, 38, pp. 868–902.

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.

Davis, S and Darling-Hammond, L 2012, Innovative principal preparation programs: What works and how we know, *Planning and Changing*, 43, pp. 25–45.

Davis, S, Darling-Hammond, L, LaPointe, M and Meyerson, D 2005, *School leadership study: Developing successful principals* (Review of Research), Stanford University, Stanford Educational Leadership Institute, Stanford, CA.

Day, DV (ed.) 2014, *The Oxford Handbook of Leadership and Organizations*, Oxford University Press, New York.

Dempster, N, Lovett, S and Flückiger, B 2011, *Strategies to develop school leadership: A select literature review*, Australian Institute for Teaching and School Leadership, Melbourne.

Desimone, LM 2009, Improving impact studies of teachers' professional development: Toward better conceptualizations and measures, *Educational Researcher*, 38 (3), pp. 181–199.

Donaldson, SI and Grant-Vallone, EJ 2002, Understanding self-report bias in organizational behavior research, *Journal of Business and Psychology*, 17 (2), pp. 245–260.

Eby, LT, Allen, TD, Evans, SC, Ng, T and DuBois, DL 2008, Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals, *Journal of Vocational Behaviour*, 72, (2), pp. 254–267.

Ferlazzo, L 2013, Advice for aspiring principals: 'Shadow, connect and dream', *Education Week*, 21 September 2013.

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

Gutierrez, M and Tasse, T 2007, Leading with theory: Using a theory of change approach for leadership development evaluations, in K Hannum, JW Martineau and C Reinelt (eds), *The Handbook of Leadership Development Evaluation*, John Wiley & Sons, San Francisco, CA.

Go to contents page

Hallinger, P 2008a, *Principal Instructional Management Rating Scale*, Leadingware.com, viewed 12 November, 2015, http://philiphallinger.com/old-site/pimrs.html.

Hallinger, P 2008b, *Methodologies for studying school leadership: A review of 25 years of research using the Principal Instructional Management Rating Scale*, Annual meeting of the American Educational Research Association, New York.

Harrell, MC and Bradley, MA 2009, *Data Collection Methods: Semi-Structured Interviews and Focus Groups*, Rand Corporation, Santa Monica, CA.

Hattie, J 2003, *Teachers make a difference: What is the research evidence?*, Australian Council for Educational Research, Melbourne.

Hattie, J 2009, *Visible Learning: A synthesis of over 800 meta-analyses relating to achievement*, Routledge, Milton Park, UK.

Hay Group 2013, *Building the right foundation: Improving teacher induction in Australian schools*, Australian Institute for Teaching and School Leadership, Melbourne.

Hoole, ER and Martineau, JW 2014, Evaluation Methods, *The Oxford Handbook of Leadership and Organizations*, Oxford University Press, New York.

Jackson, N, Payne, L, Fraser, J, McCormick, J and Bezzina, M 2010, *Aspiring Principals: Final Report*, Teaching Australia.

Jensen, B, Hunter, A, Ginnivan, L, Sonnemann, J 2015a, *Evaluating your Principal Preparation Programs: Research Report*, Australian Institute for Teaching and School Leadership, Melbourne.

Jensen, B, Hunter, A, Lambert, T and Clark, A 2015b, *Aspiring Principal Preparation*, Australian Institute for Teaching and School Leadership, Melbourne.

King, C 2013a, *Principal Preparation Program Self-Assessment Handbook*, Wallace Foundation.

King, C 2013b, *Quality Measures: Principal Preparation Program Self-Assessment Toolkit*, Wallace Foundation.

Kirkpatrick, D 1959, Techniques for evaluating training programs, *Journal of ASTD*, 13, (11), pp. 1–13.

Kolb, DA 1984, Experiential Learning: *Experience as the Source of Learning and Development*, Prentice Hall, Inc., Englewood Cliffs, NJ.

Lave, J 1991, *Situated learning: Legitimate peripheral participation*, Cambridge University Press, Cambridge.

Leithwood, K 2012, *The Ontario Leadership Framework 2012: With a discussion of research foundations,* viewed 7 September 2016 https://iel.immix.ca/storage/6/1345688978/Final_Research_Report_-_EN.pdf.

Leithwood, K, Seashore Louis, K, Anderson, S and Wahlstrom, K 2004, *How leadership influences student learning*, Wallace Foundation.

Marzano, RJ, Carbaugh, B, Grego, M and Toth, M 2012, *Marzano School Leadership Evaluation Model*, Learning Sciences Marzano Center for Teachers and Leadership Evaluation, Palm Beach Gardens, FL.

McCauley, CD and Hughes-James, MW 1994, *An evaluation of the outcomes of a leadership development program*, Center for Creative Leadership, Greensboro, NC.

McDonald, S 2005, Studying actions in context: A qualitative shadowing method for organizational research, *Qualitative Research*, 5, (4), pp. 455–473.

Morgan, P 2009, The course improvement flowchart: A description of a tool and process for the evaluation of university teaching, *Journal of University Teaching and Learning Practice*, 5, (2), p. 2.

Nahavandi, A 2012, *The Art and Science of Leadership*, 6th ed, Pearson Education, New Jersey.

Go to contents page

National College for Teaching and Leadership 2014, *Content Development Handbook: Leadership Curriculum*, National College for Teaching and Leadership.

Neuman-Sheldon, B, Schuyler Ikemoto, G, Bailey, M, Erdfarb, T, Nerenberg, L, Patterson, N and Valdez, M (n.d.), *Principal Preparation Program Self-Evaluation: Lessons Learned by New Leaders*, New Leaders.

Newcomer, KE, Hatry, HP and Wholey, JS 2015, *Handbook of Practical Program Evaluation*, 4th Edition, Jossey-Bass.

New Leaders 2012, *New Leaders Evaluation Rubric*, New Leaders.

New York State Education Department (n.d.), *Approved Principal Practice Rubrics for New York State*, viewed 12 November, 2015, http://usny.nysed.gov/rttt/teachers-leaders/practicerubrics/#APPR.

Ng Foo Seong, D 2013, Assessing leadership knowledge in a principalship preparation programme, *International Journal of Educational Management*, 27, (4), pp. 425–445.

NYC Department of Education 2014, *Principal Practice Observation Tool*.

OECD 2014, *TALIS 2013 Results: An International Perspective on Teaching and Learning*, OECD Publishing.

Office of Quality Improvement 2010, *Survey Fundamentals: A Guide to Designing and Implementing Surveys*, University of Wisconsin.

Opfer, VD and Pedder, D 2011, Conceptualizing teacher professional learning, *Review of Educational Research*, 81, (3), pp. 376–407.

Pont, B, Nusche, D and Moorman, H 2008, *Improving School Leadership: Volume 1: Policy and Practice*, OECD Publishing, Paris.

Rapporteur, LS, Moorman, H and Rahm, S 2007, *School leadership development strategies: The Austrian leadership academy*, OECD Publishing.

Robertson, J 2008, *Coaching educational leadership: Building leadership capacity through partnership*, Sage, London.

Showers, B and Joyce, B 2002, *Student Achievement Through Staff Development*, 3rd Edition, Association for Supervision and Curriculum Development, Alexandria, VA.

Smith, AK, Ayanian, JZ, Covinsky, KE, Landon, BE, McCarthy, EP, Wee, CC and Steinman, MA 2011, Conducting high-value secondary dataset analysis: An introductory guide and resources, *Journal of General Internal Medicine*, 26, (8), pp. 920–929.

Stassen, MLA, Doherty, K and Poe, M 2001, *Program-based review and assessment: Tools and techniques for program improvement*, Office of Academic Planning and Assessment University of Massachusetts Amherst.

Strebel, P and Keys, T (eds) 2005, *Mastering executive education: How to combine content with context and emotion - the IMD guide*, Pearson Education, Harlow.

Taylor-Powell, E and Henert, E 2008, *Developing a logic model: Teaching and training guide*, University of Wisconsin - Extension, Cooperative Extension, Program Development and Evaluation, Madison, Wisconsin.

Timperley, H 2008, Teacher professional learning and development, International Academy of Education, *Educational Practices Series*,18.

Timperley, H, Wilson, A, Barrar, H and Fung, I 2007, *Teacher professional learning and development: Best Evidence Synthesis Iteration*, Ministry of Education, Auckland.

Umble, KE 2007, Evaluation for planning and improving leadership development programs: A Framework Based on the Baldrige Education Criteria for Performance Excellence, in K Hannum, JW Martineau and C Reinelt (eds), *The Handbook of Leadership Development Evaluation*, John Wiley & Sons, San Francisco, CA.

University of Tasmania 2015, *Shadowing for Aspiring Principals* (ESM762) - Courses and Units -

Go to contents page

University of Tasmania, Australia, viewed 16 October, 2015, http://www.utas.edu.au/courses/edu/units/esm762-shadowing-for-aspiring-principals.

University of Wisconsin - Extension 2009, *Interviews - talking and listening to people*.

van Veen, K, Zwart, R and Meirink, J 2012, What Makes Teacher Professional Development Effective?, *Teacher Learning That Matters: International Perspectives*, 62.

Wallace Foundation (The) 2008, *Becoming a Leader: Preparing School Principals for Today's Schools*, The Wallace Foundation, New York.

Wanberg, CR, Kammeyer-Mueller, J and Marchese, M 2003, Mentoring research: A review and dynamic process model, in JJ Martocchio and GR Ferris (eds), *Research in personnel and human resources management*, Elsevier, Oxford, pp. 39–124.

Watterston, B 2015, *Environmental Scan: Principal Preparation Programs*, Australian Institute for Teaching and School Leadership, Melbourne.

Wayne, AJ, Yoon, KS, Zhu, P, Cronen, S and Garet, MS 2008, Experimenting with teacher professional development: Motives and methods, *Educational researcher*, 37, (8), pp. 469–479.

W.K. Kellogg Foundation 2004, *W.K. Kellogg Foundation Logic Model Development Guide*, W.K. Kellogg Foundation, Brookline, M.A.

W.K. Kellogg Foundation 2006, *Evaluating outcomes and impacts: A scan of 55 leadership development programs*, W.K. Kellog Foundation, Brookline, M.A.

Yoon, KS, Duncan, T, Lee, SW-Y, Scarloss, B and Shapley, KL 2007, *Reviewing the Evidence on How Teacher Professional Development Affects Student Achievement. Issues and Answers*, Regional Educational Laboratory Southwest (NJ1).

aitsl.edu.au

facebook.com/aitsl

twitter.com/aitsl

youtube.com/aitsleduau

aitsl
Australian Institute for Teaching and School Leadership Limited