# Investing in Teachers

Introduction

International and national efforts have dramatically increased girls' and boys' access to education in the past two decades. Two-thirds more children were enrolled in primary school in 2012 than in 1999, requiring an additional 1.6 million teachers by 2015 to ensure 'education for all'.

Since 2010, concern for education quality has gained prominence. The United Nations Educational Scientific and Cultural Organization (UNESCO) has estimated that, worldwide, 250 million children are not attaining basic literacy and numeracy skills from schooling.
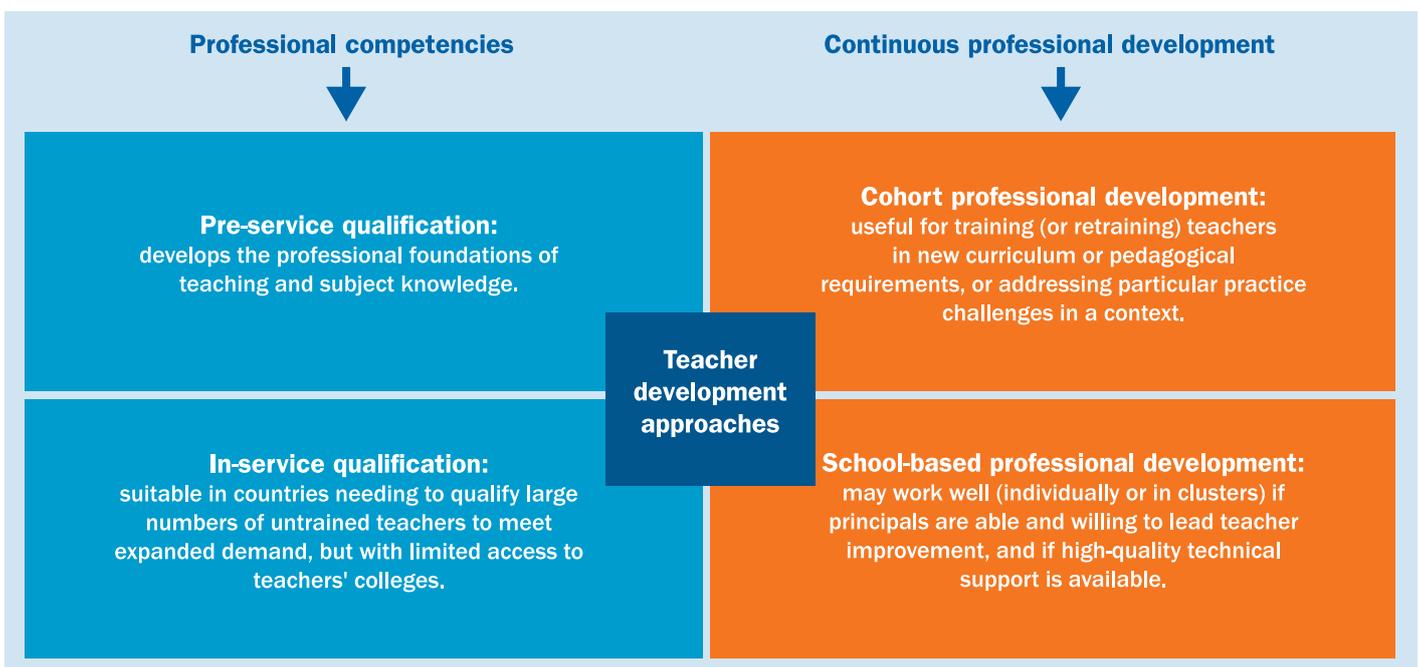
Education is a key sector for Australian development assistance, comprising around 20 per cent of total spending. Funding for teacher development is typically a small proportion of education investments. However, World Bank and other research suggest teacher effectiveness is the most important factor for improving student learning outcomes, therefore increased attention to teacher development may be warranted.

This evaluation—together with the *Supporting teacher development: literature review* (ODE, 2015)—provides evidence for improving teacher development programs. It examines 27 bilateral Australian aid investments in teacher development 2009–10 to 2014–15, using the typology shown in Figure 1 below.
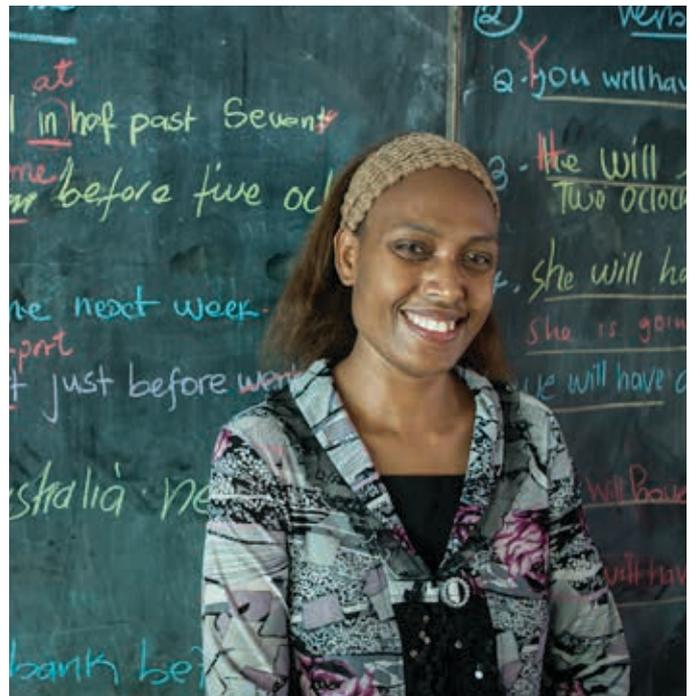
Grade 11 teacher Annette teaches English at Norsup Secondary School, Malekula Island, Vanuatu. DFAT supports education projects on the Island. Photo: Connor Ashleigh for DFAT.

Figure 1: The most suitable teacher development approach depends on context-specific needs and readiness

Professional competencies

Continuous professional development

Pre-service qualification: develops the professional foundations of teaching and subject knowledge.

Cohort professional development: useful for training (or retraining) teachers in new curriculum or pedagogical requirements, or addressing particular practice challenges in a context.

Teacher development approaches

In-service qualification: suitable in countries needing to qualify large numbers of untrained teachers to meet expanded demand, but with limited access to teachers' colleges.

School-based professional development: may work well (individually or in clusters) if principals are able and willing to lead teacher improvement, and if high-quality technical support is available.

Table 1: Overview of lessons and case studies from Investing in teachers

Chapter	Approaches and lessons	Case studies
Chapter 2: **Pre-service qualification**	**Systemic quality improvement:** these are good examples of matching teacher skills to classroom needs. They position pre-service institutions to provide sustained teacher training and support.	> Vanuatu Education Support Program > Basic Education Sector Transformation, Philippines > Basic Education Quality and Access in Laos
	Stand-alone approaches: these context-driven solutions had benefits, but fell short of 'good practice' in some respects. They largely avoided issues such as teacher recruitment, deployment and quality of school leadership.	> Malaysia Australia Education Project for Afghanistan > Instituto Catolico para Formacao de Professores (ICFP), Timor Leste > Papua New Guinea Education Program
Chapter 3: **Cohort professional development**	**Improving teacher development and management at all levels:** STRIVE is the best example of successfully supporting teacher development while strengthening leadership and management of teachers.	> Strengthening Implementation of Basic Education in Selected Provinces of Visayas, Philippines > Programs in the Pacific (Kiribati, Samoa, Vanuatu) and Nepal also used teacher professional development frameworks.
	Professional development outside government systems: these alternative delivery models reported some of the best outcomes among teacher development investments. However, they were not sustainable or scalable.	> Empowerment through Education for Afghanistan (CARE) > Early Childhood Care and Education in Khyber Pakhtunkhwa, Pakistan (SCF) > Basic Education Assistance for Mindanao in ARMM, Philippines (BRAC)
Chapter 4: **In-service qualification**	**Qualification-directed teacher development:** This was the least-used but potentially most-promising approach. In-service development for a qualification—as distinct from general professional development—demands a high quality curriculum and trainers. It needs the right study load, appropriate content for working teachers, and long-term government willingness, capacity and resources to sustain quality improvements.	> Education for All Fast Track Initiative, Laos > Third Primary Education Development Program, Bangladesh
Chapter 5: **School-based professional development**	**Improving leadership from school-level upwards:** while yet to demonstrate school-level outcomes, ProDEP is working with government to strengthen how principals, supervisors and district managers lead and manage teachers at all levels.	> Professional Development of Education Personnel (ProDEP), Indonesia
	Many programs support **'child-friendly'** and **school-based management** approaches.	> Cases not discussed in detail.
	'Cluster models': DFAT's experience echoes international experience of quality, capacity and sustainability problems, especially in remote locations.	> Education Development Improvement Program, Pakistan > Papua Education Sector Development, Indonesia

Contextual challenges

The evaluation highlighted contextual challenges that can affect the performance of teacher development investments in Asia and the Pacific. These are characterised in Box 1.

Box 1: Teacher development challenges

There are no roadmaps for effectively investing in teachers considering wide-ranging education challenges in developing countries:

> It can be difficult to argue the case for spending on teacher development compared to other development priorities, especially if teacher salaries already consume a large proportion of the education budget.

> School funding and appointment of teachers and principals may be politically or pragmatically driven, not based on need.

> Education policies, including curriculum requirements and expectations of teachers, may be contradictory or evolving.

> Governments may have little control or oversight of teacher education and training institutions.

> Large numbers of untrained teachers may already be working in schools.

> Education supervisors and principals may have no incentive to support teachers in obtaining formal qualifications, especially if this would remove teachers from classrooms.

> Teacher absenteeism may be high due to inadequate incentives, poor management or lack of supervision.

> Teaching conditions may be poor, and teachers may be underpaid and undervalued as professionals.

> Teaching undergraduates may use a teaching qualification to enter other professions, especially if teachers' college is one of few tertiary education options.

Findings

Teacher development needs to be embedded in improved teacher management systems

The evaluation found support for teacher development works best when negotiated within a government-owned and led education quality improvement agenda. Sustainable, scalable improvement is most feasible when policies and frameworks are in place for teacher management and development. Teacher systems include all aspects of attracting, recruiting, qualifying, deploying, retaining and effectively managing teachers and their performance in classrooms.

Another requirement is to support education personnel at all levels to drive quality improvement throughout the education system. This ranges from central government policy reforms through to school-level incentives and capacity to meet new expectations. In particular, DFAT needs to address

the 'missing middle' i.e. enable subnational education personnel to translate national teacher development improvements into effective school-level teacher management and support. A promising solution is to recruit and train provincial and district officers, district supervisors and principals as educational professionals. They can then be employed to support, mentor and monitor teachers in improving education quality and pupils' learning outcomes.

Global Partnership for Education teacher in a classroom in Laos. Photo: GPE/Stephan Bachenheimer

DFAT's experience provides valuable lessons

Investing in teachers uses case-study analysis to identify lessons in the four categories of teacher development, as summarised in Table 1. Chapter 6 of the full report provides a more detailed summary of the findings.

Considering these lessons, the evaluation recommends:

Recommendation 1: DFAT should pursue systemic improvements to teacher management.

DFAT should coordinate support for teacher development with government education policy reforms and system-wide improvements and avoid isolated, unsustainable investments. This will require careful analysis of stakeholder interests—and conflicts of interest—in teacher management, strong sector-wide policy engagement, and strategic negotiation with education ministries and other donors to agree priorities and resources.

Teacher development designs need more contextual precision

Successful teacher development investments have clear and realistic objectives. They monitor expected intermediate changes in teacher knowledge and practices. Successful investments also track long-term changes in education quality and student learning in schools. High-quality investments respond to wider education reform contexts and acknowledge constraints. They provide a pragmatic and logical case for the approach taken (that is, pre-service and/or in-service) and consider teacher development needs and opportunities in context.

Most of the cases studied showed DFAT effectively adjusting programs in response to experience and changed circumstances. However, there were some recurring design problems. These included:

> Timelines too short for changing teachers' understanding and workplace routines and practices.

> Indicators of improvement not identified at the right level in theories of change for teacher development programming, or unrealistic expectations of change considering the timeframe.

> Not clearly distinguishing the *specific teacher development approach* and rationale for it in the context (refer Figure 1 above).

> Inadequate attention to matching teacher development solutions to s*pecific learning issues* in each context. Examples of specific learning issues and appropriate design responses are provided in Box 2.

Box 2: Fit for purpose designs

Improving low literacy and numeracy: Requires focus on specific disciplinary knowledge and technical skills to teach literacy and maths.

When language of instruction differs from teachers' and/or children's first language: Teachers need extensive preparation including:

> knowledge of language children speak and language of instruction

> understanding how to teach children a second language

> incentives to develop and maintain second language proficiency if language of instruction differs from teachers' first language.

Multi-grade teaching: Requires specific skills to apply differentiated teaching for students at different levels of knowledge and proficiency.

Disability-inclusive education: Requires appropriate pedagogies and teacher development to ensure children with a disability have full access to quality education in the classroom.

What is feasible and appropriate varies greatly from one country to the next. Subject to contextual feasibility, the evaluation found several 'desirable design features' for effective pre-service and in-service teacher development. For example, DFAT designs should:

> assist governments to integrate pre-service and in-service training systems, because this is associated with better quality training

> ensure teacher training institutions effectively interact with national teacher policies and systems

> include a role for 'instructional leaders' because they are the most important element in students' learning after trained teachers.

Considering these findings, the evaluation recommends:

Recommendation 2: DFAT should carefully design teacher development investments.

Considering the difficulty of designing effective, efficient and sustainable teacher development investments, DFAT education program managers should pay careful attention to design. This means ensuring designs are well-matched to contextual needs, timeframes are realistic, the investment logic is sound, and monitoring and evaluation is properly planned and resourced.

DFAT needs to use indicators and data to monitor and evaluate outcomes

This evaluation found almost no data on outcomes that could be attributed to DFAT's teacher development investments. In most cases it was impossible to judge whether teacher development had led to improved teaching practices or improved learning outcomes for pupils. DFAT intends to pursue this evidence gap through further evaluation of selected teacher development investments (subject to successful negotiation with relevant programs and partner government personnel).

Investment documents showed about a third of investments had learning outcome-oriented indicators. However, few evaluations, reviews or quality reports included data on these; and none had undergone the rigorous evaluation necessary to establish causality or attribute effects to DFAT investment.

In some instances it was too early to report outcomes. But in most cases data focused on accounting for inputs and outputs without explaining the limited approach to monitoring and evaluation. Evidence of effect was collected most purposefully and systematically for programs delivered through national and international non-government organisations on a small scale. The programs used specialised expertise and resources for in-depth monitoring and evaluation. Newer investments, including sector-wide efforts with other donors (e.g. in Bangladesh, Laos and Nepal) seemed to be planned with more attention to outcome-level indicators and data. Many programs reported that inadequate partner monitoring of implementation made it difficult to maintain training quality, and ensure continuous learning and sustainable change.

The evaluation therefore recommends:

Recommendation 3: DFAT should work systematically to improve its monitoring and evaluation of the outcomes of investments in teacher development.

ODE and the Education Section in DFAT should support sector and program managers to improve monitoring and evaluation by identifying relevant indicators and data requirements. ODE and Education Section should assist one or two programs to undertake more rigorous evaluations that estimate the effects of teacher development on teacher knowledge, teacher practice and student learning.