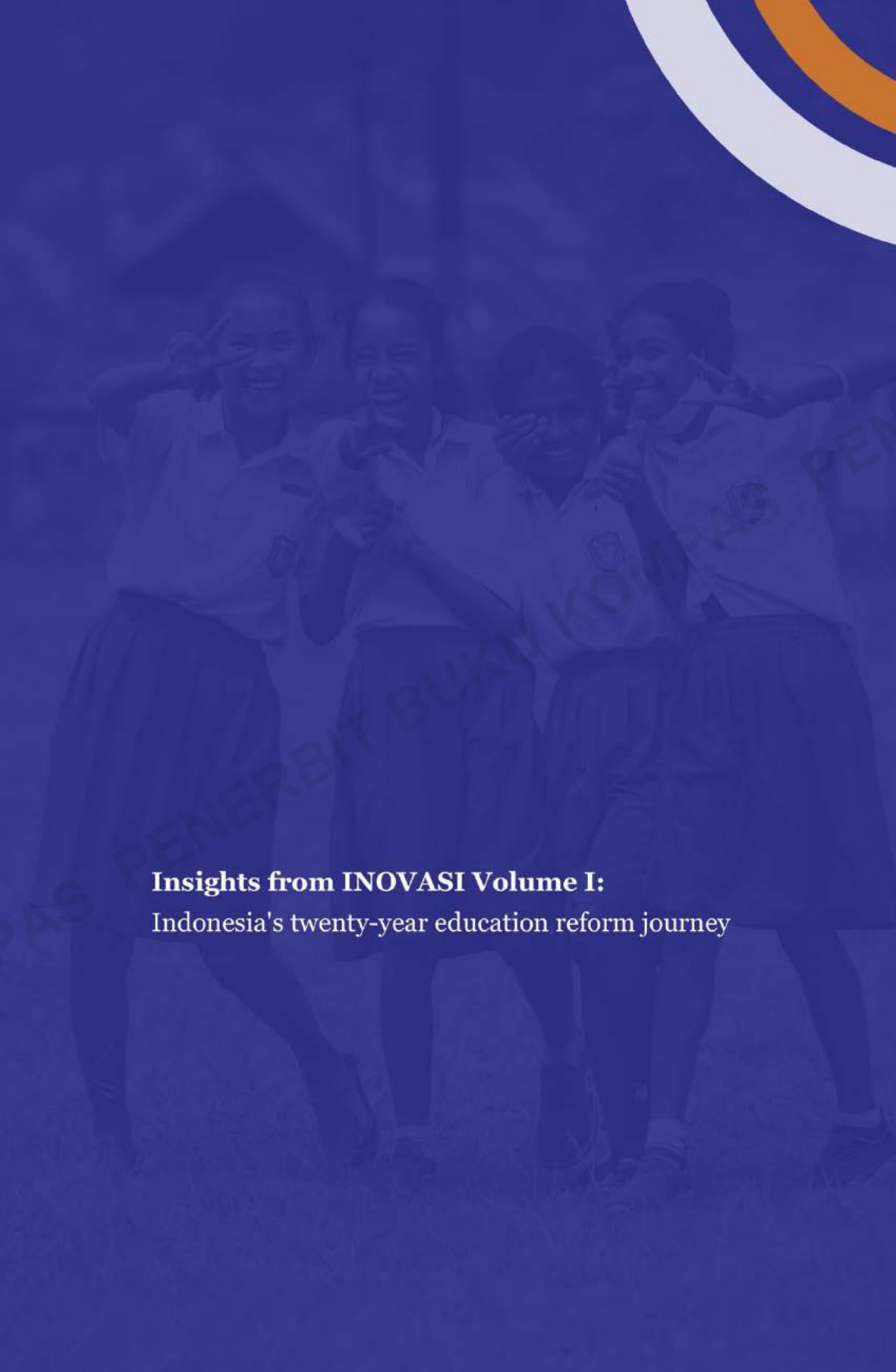
Insights from **INOVASI Volume I:**

INDONESIA'S TWENTY-YEAR EDUCATION REFORM JOURNEY



Insights from INOVASI Volume I:
Indonesia's twenty-year education reform journey

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INOVASI program is a partnership between the governments of Australia and Indonesia. Working directly with Indonesia's Ministry of Education and Culture, INOVASI seeks to identify and support changes to education practice, systems and policy which demonstrably accelerate improved student learning outcomes. The program (2016-2023) supports government partners (sub-national and national) to pilot, scale-out and institutionalise effective approaches. It responds to government of Indonesia requests for systems and policy support and seeks to broker connections and partnerships with civil society organisations and the private sector. The program has three focal areas for investigation: the quality of teaching in the classroom, the quality of support for teachers, and learning for all. The Program is managed by Palladium on behalf of Department of Foreign Affairs and Trade (DFAT) Australia.

Insights from INOVASI Volume I:
Indonesia's twenty-year education reform journey

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Foreword

The Indonesian government is undertaking an ambitious reform of basic education. Currently called *Merdeka Belajar* (Emancipated Learning), this reform represents a transformational change in the way education is conceived and delivered in Indonesia.

The Innovation for Indonesia's School Children (INOVASI) program played a key role supporting the government to find out what works to improve learning outcomes, to address COVID-19 related learning loss, and to develop and trial its new curriculum, assessment, and teacher development systems.

In such a vast education system, comprising over 50 million students, three million teachers, and 700 local languages, the success of these reforms is extremely consequential.

The first two phases of INOVASI represent an eight-year investment, managed by Palladium on behalf of the Australian government, through the Department of Foreign Affairs and Trade (DFAT). The program focused on the foundational skills of literacy, numeracy, and character education. It sought to address gender equality, and improve outcomes for children with a disability, children from remote communities, and speakers of local languages. Using an adaptive approach, INOVASI became a trusted friend, a partner to Indonesia's government. The current phase of the program ends in December 2023. National elections are scheduled to take place in 2024. The focus is now on the sustainability of Indonesia's comprehensive reforms.

Insights from INOVASI explores the reforms, and INOVASI's approach to partnership and adaptive programming, in two volumes. The first volume, *Indonesia's twenty-year reform journey*, describes the trajectory of Indonesia's reforms, beginning with the decentralization of basic education

in 2000s and culminating in the current transformational reforms in 2023. The second volume, *INOVASI and the reform of Indonesian education,* explores the ways in which INOVASI evolved as a development program - how it worked in adaptive and responsive ways to support the Indonesian government as it crafted those reforms.

What can we learn from Indonesia's reform journey? What can we learn from INOVASI's eight-year experience of partnering with the Indonesian government? Is it a matter of being in the right place at the right time? Will the changes to curriculum, assessment, and teacher development really improve learning outcomes?

It has been my great privilege to lead INOVASI since August 2017. The two volumes of *Insights from INOVASI* reflect the hard work, dedication, and talents of an extraordinary team of professionals. The two volumes also reflect a true partnership, a collaboration between nations, and between like-minded officials, professionals, and practitioners from within and outside the government in Indonesia.

I hope you will find some insight in the pages of these volumes.

Mark Heyward
Program Director, INOVASI

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GLOSSARY

Abbreviations and Acronyms	*Explanation*
ACER	Australian Council for Educational Research
ADB	Asian Development Bank
AKM	*Asesmen Kompetensi Minimum* (Minimum Competency Assessment)
AKSI	*Asesmen Kompetensi Siswa Indonesia* (Student Competency Assessment)
APBD	*Anggaran Pendapatan dan Belanja Daerah* (Local government budget)
Bappenas	*Badan Perencanaan Pembangunan Nasional* (National Development Planning Agency)
BGP	*Balai guru penggerak* (Provincial teacher training centre)
BOS	*Bantuan Operasional Sekolah* (School Operational Funds)
BPMP	*Balai Penjaminan Mutu pendidikan* (Local education quality assurance centre)
BPS	*Badan Pusat Statistik* (Statistics Indonesia)
BSNP	*Badan Standar Nasional Pendidikan* (National Education Standards Board)
DAK	*Dana Alokasi Khusus* (Special Allocation Fund)
DAU	*Dana Alokasi Umum* (General Allocation Fund)
DBH	*Dana Bagi Hasil (*Revenue Sharing Fund)
DFAT	Department of Foreign Affairs and Trade
ECDE	Early Childhood Development and Education
EQAS	External Education Quality Assurance
GDP	Gross domestic product

GoI	Government of Indonesia
INOVASI	Innovation for Indonesia's School Children, an Australia-Indonesia partnership program
KBK	*Kurikulum Berbasis Kompetensi* (Competency Based Curriculum)
KTSP	*Kurikulum Tingkat Satuan Pendidikan* (School Based Curriculum)
LPMP	*Lembaga Penjaminan Mutu Pendidikan* (Education Quality Assurance Agency)
MOEC	Ministry of Education and Culture
MoECRT	Ministry of Education, Culture, Research and Technology
MSS	Minimum Service Standards
OECD	Organisation for Economic Cooperation and Development
PIRLS	Progress in International Reading Literacy Study
PISA	Program for International Student Assessment
PPPK	Contract-Based Public Servants
Renstra	*Rencana Strategi* (Strategic Plan)
SD	*Sekolah Dasar* (Primary School)
SMA	*Sekolah Menengah Atas* (Senior High School)
SMK	*Sekolah Menengah Kejuruan* (Vocational High School)
SMP	*Sekolah Menengah Pertama* (Junior High School)
TASS	Technical Assistance for System Strengthening
TIMSS	Trends in International Mathematics and Science Study
TN2PK	*Tim Nasional Percepatan Penanggulangan Kemiskinan* (National Team for Acceleration of Poverty Reduction)
UN	*Ujian Nasional* (National Exam)
UNESCO	The United Nations Educational, Scientific and Cultural Organisation

UNICEF	The United Nations Children's (Emergency) Fund
USBN	National Standards Based Exam

CHAPTER I
INTRODUCTION

CHAPTER I: INTRODUCTION

Mark Heyward

Insights from INOVASI: Indonesia's twenty-year education reform journey

Insights from INOVASI is an analysis of the Indonesian Government's reforms to policies on teaching and learning. It consists of two volumes. The first examines the significance and trajectory of Indonesia's reforms. The second examines the role and contribution of the Innovation for Indonesia's School Children (INOVASI) program.[1]

Volume 1 explores the history of reform over twenty years, commencing with the reforms of the early 2000s. This begins with decentralisation and the 2003 National Education Law and culminates in the current emancipated learning (*Merdeka Belajar*) reform agenda, which includes a new curriculum (*Kurikulum Merdeka*), assessment model (*Asesmen Kompetensi Minimum,* or AKM), and teacher development approach.

The primary audience for Volume 1 of this study is the Indonesian education community, including government, specifically the Ministry of Education, Culture, Research and Technology (referred to throughout this series as the Ministry of Education[2]), the Ministry

[1] Throughout this report, 'INOVASI' is taken to refer to the DFAT-funded INOVASI Phase I and Phase II (2016-2023) programs, and includes the related DFAT-funded program, Technical Assistance for Education Systems Strengthening (TASS) (2017-2020).

[2] The Ministry, which is the subject of the study, has changed its name several times during the twenty-year period from Ministry of National Education to Ministry of Education and Culture, to Ministry of

of Religious Affairs, and the national planning agency (*Bappenas*) – as well as universities, non-government organisations, development partners and observers. The study describes the history and potential transformational impact of the reform program and suggests areas of focus to continue the reforms into the future. It explores the historical roots of the reforms and highlights their potential to support Indonesia's national development in highly significant ways, while acknowledging the political and social context in which they are being developed and implemented. It builds a case for policy continuity under future government administrations, and it identifies the areas of policy and system strengthening that will support implementation and sustainability of the reforms.

Indonesia's education reform agenda is comprehensive and ambitious. If successful, it has the potential to transform education and its broad impact on national development. The reform agenda aims to improve the performance of the basic education system and support the development of Indonesia as a growing and competitive economy in the region, an open and tolerant society, and a prosperous and peaceful nation.

Public policy in education, as in other sectors, is a dynamic domain. Policy reform is a political as well as a technical process. The current reform agenda builds on earlier efforts of the Indonesian government to improve education. This study traces the trajectory of Indonesia's reform program, its historical antecedents, its current implementation, and its potential future; it describes the key elements and their impact on improving learning outcomes, and it concludes with an analysis of the sufficiency of implementation efforts and of the reforms themselves to ensure sustainable improvements to learning outcomes for Indonesia's children.

Volume 2, which builds on the analysis and conclusions of Volume 1, explores how INOVASI's work has helped to inform the reforms in policy development and implementation. The aim is to appraise the efficacy of strategies used by INOVASI and TASS, particularly the flexible development approaches of Problem-Driven Iterative Adaptation (PDIA) and Thinking and Working Politically (TWP), in five policy areas. These areas are curriculum and assessment,

Education and Culture, Research and Technology, to Ministry of Education, Culture, Research, Technology and Higher Education.

teacher development, supply of children's literature to support literacy, inclusion of children with a disability, and gender equity.

The primary audience for Volume 2 is DFAT and the wider community of development practitioners and theorists.

The following three inquiries are pursued across the two volumes:

Inquiry 1: What does the *Merdeka Belajar* agenda distinctively contribute to the trajectory of education reform since decentralisation; and what are its implications for transforming teaching and learning at local levels?

Inquiry 2: Are the present policy agenda and extent of progress towards implementation sufficient to meet the objectives of the government's reforms?

Inquiry 3: What part have the development approaches of INOVASI and TASS played in their contribution to policy development and policy fitness for implementation?

Volume 1 consists of six chapters.

Chapter 1 introduces the study and provides a brief overview of the historical, political, and philosophical underpinnings of the current reforms.

Chapter 2 provides an overview of the decentralisation of political and financial controls from the national to subnational levels of government to set the scene for an extensive analysis of financial decentralisation, with a focus on expenditure on access and quality and the implications for the current education reform objectives.

Chapter 3 analyses the progress of education reforms in the first two decades of the twenty-first century, highlighting four key aspects of education management (improving the qualifications and management of the teaching workforce; school quality assurance; curriculum; and national assessment of learning) and implications for quality education and a greater focus on student learning.

Chapter 4 focuses on the learning crisis in Indonesia, exploring the evidence of a long-term learning crisis, prior to and including COVID-19 and suggesting positive ways of approaching the problem.

Chapter 5 is about the current reforms and what makes them transformational. It clarifies the significance of the reforms, the underpinning values, the targeting of literacy and numeracy skills, contextual school planning, and why differentiating teaching to the level of need is so integral to the reform agenda.

The final chapter (Chapter 6) in this volume is a conclusion: it appraises the sufficiency of the reforms.

Education in Indonesia

With a population of 280 million, Indonesia is the fourth largest nation in the world. Along with significant Christian, Hindu, Tridharma, and Buddhist communities, it has the largest Islamic population of any nation. Indonesia is a diverse country; an archipelago of 13,000 islands and home to over 300 ethnic groups, speaking over 700 distinct languages. Approximately 520,000 schools and madrasah (public and private), and 4.2 million teachers provide an education to around 63 million children (MoECRT DAPODIK, MoRA).

Indonesia's massive and historically centralised education system has served well to unify the nation, providing its citizens with a common language, a single political ideology, and a shared national identity. Moreover, the aim to provide access to basic education for all children has been largely met. This is a significant achievement for a young nation, which at the time of independence provided schooling to less than six per cent of its citizens (Brojonegoro 2001, cited in Kristiansen and Pratikno 2006: 514). But this success has come at a cost.

Education designed as an instrument for nation building during the Sukarno and Suharto years did not work as well for building the foundations of a democratic, open and tolerant society, for a prosperous and peaceful nation with a growing and competitive economy. The centralised top-down model that worked well for Indonesia's first fifty years of political and economic development is no longer appropriate for the reform era that commenced in the early 2000s. In the first fifty years, the government successfully expanded access to schooling, provided Indonesian children with basic skills, and ensured political stability, enabling the

development of a large and diverse economy. While the economy suffered as a result of a monetary crisis and political turmoil at the end of the New Order period, Indonesia was firmly established as a rapidly growing, emerging middle-income economy. But for the country to build an open, competitive, and democratic society, changes were still needed. Decentralisation, while bringing government closer to the people, exacerbated existing inequalities between provinces and districts and, within districts, between rural and urban schools. Learning outcomes remain disappointingly poor. These are the challenges currently being addressed in the reform era.

Under Dutch rule, education in Indonesia was largely informal or religious based. A tradition of Islamic schooling had existed for many years. In 1901 the colonial government introduced a centralised schooling system, based on the European model. Access was limited geographically, and schools were designated for specific groups, based on ethnicity and social status. Most schools were private and run by missionaries, though subsidized by the government. In 1906 the government established a system of village schools known as *sekolah rakyat* (people's schools). These schools aimed to provide the basics of literacy and numeracy in a three-year program but were mainly limited to Java (Aritanong 2000; Nasution 2001). While they received some support from government, *sekolah rakyat* were essentially owned and run by local communities.

It was in this context that Indonesian educationist Ki Hajar Dewantara developed his philosophy of education. Dewantara integrated Javanese philosophy and European educational thought, including that of Maria Montessori, Friedrich Fröbel and the Indian philosopher, Rabindranath Tagore. In the 1920's the *Taman Siswa* movement arose due to the limited access for indigenous Indonesians to the Dutch schools. *Taman Siswa*, *Muhammadiyah*, and *Ma'arif Nahdlatul Ulama (NU)* all represent a reaction against the Eurocentric and colonial flavour of the Dutch schools and were thus aligned with the nationalist movement.

In his speech at the first congress of the Consensus of the Indonesian National Political Association (PPPKI) in Surabaya in 1928, Ki Hajar Dewantara stressed that teaching can liberate humanity for life, *lahir dan batin* (outer and inner) (MoECRT 2022). This view of

schooling as an instrument for freedom, independence and democracy echoed the progressive views of John Dewey (1916): the goal of education is democracy, and to achieve it children must be active learners. Ki Hajar Dewantara subsequently became Indonesia's first minister for education.

In 1945, the national constitution, or founding law, set out a blueprint for education, explicitly rejecting the former apartheid system. This remains the basis for Indonesia's education system today. Article 31 of the constitution makes basic education universal, free and compulsory.

Since independence, education in Indonesia has been primarily about nation building. Put simply, under Indonesia's first president, Sukarno, education was about creating an independent and strong national identity. Under the New Order of its second president, Suharto, it was about unity and development. The education system played an important role in this, introducing a single national language*, Bahasa Indonesia,* and a single political ideology, *Pancasila*. The main challenge, until recently, has been to provide access to all Indonesian children.

Decentralisation, school-based management, and community participation; the 2003 National Education Law (*Sisdiknas*); and progressive curriculum reforms since 2004 have all been about democratising education and democratising the nation. In this spirit, the transformational *Merdeka Belajar* reforms have reclaimed the spirit of Ki Hajar Dewantara and Indonesia's early nationalist educationists. The architects of *Kurikulum Merdeka* draw explicitly on Dewantara's philosophy and his view that national independence depends on and reflects individual freedom (MoECRT 2022): 'Manners, attitudes, or character comprise the unity of thoughts, feelings, and intent, or will, which then creates energy … With the existence of 'character', every person stands as a free human being, an individual who can rule or master himself. This is a civilized human being, and this is the purpose and goal of education in outline.' (Dewantara, in MoECRT 2022: 28).

The expansion of schooling in Indonesia's first fifty years was impressive, but there was a downside. The rapid growth resulted in problems of quality, and the highly centralised system, while it did unify the nation, led to inefficiencies and problems of curriculum relevance at the local level. Teachers were underpaid and

underqualified. Under the New Order government, schools became tools of the state; principals and teachers began to see their role as instilling national discipline, rather than opening the minds of the young (Bjork 2005), and communities' lost control of their schools.

At a deeper level, the traditional didactic pedagogy typical of Indonesian classrooms was a top-down model, which served well to ensure unity and to reinforce a control-and-compliance approach to government. Didactic pedagogy aligns with traditional cultural and religious values, but at the expense of creativity, critical thinking, higher-order thinking, initiative, and innovation. In short, at the expense of democracy. Similarly, a one-size-fits-all approach to curriculum is relatively straightforward to implement in an authoritarian and low-capacity system, but this is to the detriment of equity and learning outcomes in general.

In traditional cultural frameworks, knowledge comes from an authority. It is received – from God, from scholars, from teachers, and from parents. It is fixed and immutable. The role of the teacher is to impart knowledge. The role of the student is to listen and learn. This traditional understanding is at odds with a contemporary understanding of knowledge as constructed by the learner. The concept of active learning assumes the latter. It thus conflicts with traditional cultural values.

This underlying tension is evident in the findings of the most comprehensive study of active learning conducted in Indonesia, undertaken by the World Bank in 2015. Andrew Ragatz and colleagues found that teachers failed to sustain changes to their teaching practice due to cognitive dissonance. Teachers are most effective when their teaching practices align with their knowledge and beliefs, when they are operating in a 'congruence zone'. They are least effective when they use practices that are not aligned with their knowledge or beliefs, or when they are operating in a 'dissonance zone' (World Bank 2015: 133).

Teachers can learn the techniques associated with active and cooperative learning, but, without changes to their underlying knowledge and beliefs, they feel uncomfortable implementing them. National curricula, since 1984, have endorsed an active learning approach (Sopantini 2014), but efforts to introduce and sustain progressive approaches through programs like *Cara Belajar Siswa Aktif* (CBSA) and Creating Learning Communities for Children

(CLCC) over many years have not yet resulted in transformational change across the system. Active learning was authorised at a high level, efforts were made to train teachers and to give them the ability to implement the new approach, but acceptance was limited. Moreover, in addition to not being in step with cultural values and beliefs, active learning was not in sync with the assessment system, which until recently tested recall of knowledge, and reinforced a traditional didactic pedagogy. Arguably, the failure to systematically reform teaching and learning stems from a deep, underlying, and unresolved tension between traditional values and beliefs, and contemporary constructivist philosophy.

Merdeka Belajar builds on previous reforms. It is consistent with the impetus of '*reformasi*' to decentralise and democratise, but it goes beyond this. It aims to empower schools, communities, teachers, and students to take charge of their own teaching and learning. It is aligned with a constructivist philosophy (Astuti and Muslim 2022), and it explicitly endorses active learning, diagnostic assessment, and differentiated learning. Significantly, it includes a new curriculum and assessment system that are well aligned. The new approach encourages teachers to teach according to children's needs, and not according to a centralised curriculum or a standardised, high-stakes national assessment system.

In adopting these approaches, *Merdeka Belajar* is a radical effort to democratise, to liberate schooling, teachers, and students. The central government provides a curriculum framework, with learning progressions defined in broad two-year intervals. It sets standards, and conducts a sample-based national assessment, giving feedback to districts and schools on their performance. But it does not dictate what and when teachers should teach. It allows the freedom for teachers to determine what children need and to adapt the curriculum to those needs.

The roots of *Merdeka Belajar* are found in the educational philosophy of Ki Hajar Dewantara. The democratic goal of empowering individuals is clear. The potential for *Merdeka Belajar* to accelerate improvements to learning outcomes for Indonesian children is significant. The stakes are high. The question is, are the teachers and is the Indonesian education system ready for *Merdeka Belajar*? That is essentially the question that this study addresses.

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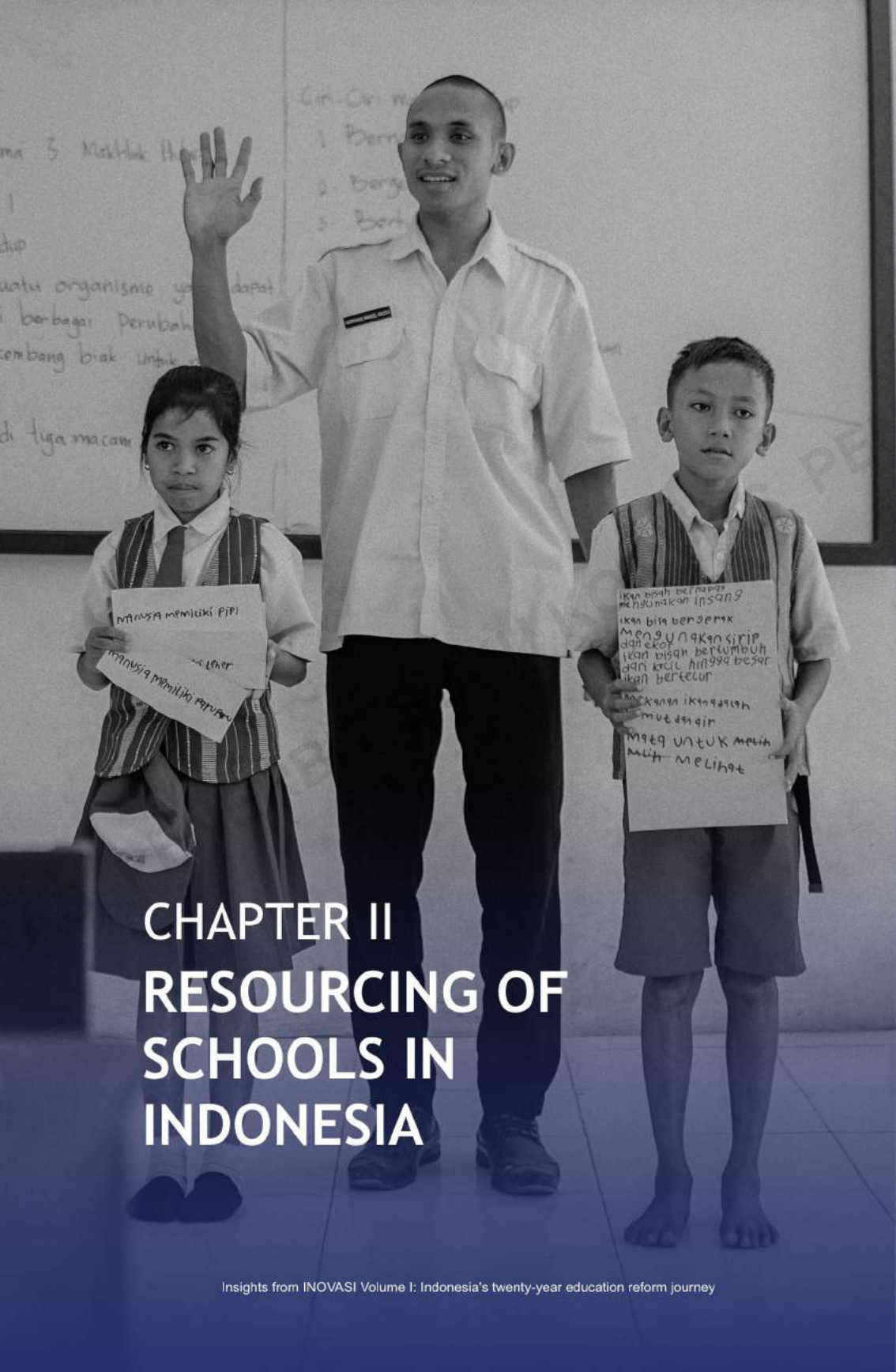


CHAPTER II
RESOURCING OF SCHOOLS IN INDONESIA

CHAPTER II: RESOURCING OF SCHOOLS IN INDONESIA

Adam Rorris & Ingga Vistara

Abstract

This chapter provides an overview of the political and financial decentralisation that was initiated in 1999 and then provides a discussion of the level of resourcing of schools in Indonesia. The initial discussion focuses on funding for education and resourcing of schools over time, as a portion of GDP and of total public expenditure, and the actual funding of schools – encouraging reflection on widely held assumptions about resourcing for Indonesian education and schools. The historical perspective is continued through analysis of funding for access to, and quality of, schooling over the last 20 years. This analysis draws attention to some potential fiscal space, via greater efficiency and a maturing enrolment profile, which would allow for greater quality-related expenditure in the future. The next part of the chapter focuses on the distribution of expenditure in districts – with comparisons made between a sample of INOVASI partner districts and other non-INOVASI districts. The discussion examines how the profile of expenditure has changed in some districts over time, considers whether this might reflect INOVASI influence and impact and poses the question of whether similar effects could be achieved across all districts. The last part of the chapter deals with options for improving quality-related expenditure across the whole system and proposes priority areas for action to realise such changes.

Introduction

This chapter on resourcing of schools[3] in Indonesia is set within a broader discussion in preceding and subsequent chapters about significant education reform – past, current, and future.

While other chapters discuss the *why, what,* and *how* of the actual reforms, including the current *Merdeka Belajar* reforms, this chapter provides a financial perspective on the key questions being addressed in this volume, specifically: To what extent do the current or possible future resourcing arrangements provide capacity to meet the objectives of the government's reforms?

The chapter is organised in six parts:

- An overview of political and financial decentralisation in Indonesia.
- National funding for education and resourcing of schools.
- Funding for access to, and quality of, schooling.
- Fiscal decentralisation and district expenditures for schooling.
- Spending within districts.
- Options for improving quality.

Overview of political and financial decentralisation

Following the end of the New Order period in 1998, Indonesia embarked on a rapid and far-reaching program of democratic reform. Within the space of a few years, the country began the transformation into one of the world's largest and most vibrant democracies. A key element of the changes ushered in under the banner of *reformasi* (reform) was a program of political and financial decentralisation. The passing of Laws 22/1999 and 23/1999 provided the third tier of government—districts and municipalities—with wide-ranging authority over the delivery of public services and development agendas (Nasution 2016).

Law No. 22/1999 concerning regional autonomy and Law No. 25/1999 on financial balance between the centre and regions were drafted by a team from the Ministry of Home Affairs, which was

[3] Discussion in this chapter does not encompass private schooling in Indonesia, as the government does not fund these schools.

responsible for regional government while Law No. 25/1999 was drafted by a team from the Ministry of Finance. Both laws contained a provision that they would come into effect in May 2001 (two years from the time of passage). Law 22/1999 defined regional autonomy as "authority to manage the region's own household". Regional autonomy consisted of the devolution of a wide range of public service delivery functions to the regions, and the strengthening of the elected regional assemblies (*Dewan Perwakilan Rakyat Daerah/DPRD*), which received wide-ranging powers to supervise and control the regional administration. The law established the district level (kabupaten/kota) as the level of government that was to have broad and wide-ranging autonomy[4] and removed the 'chain of command' system that had placed districts under provincial authority.

The law stipulated that the district level had responsibility for all governmental matters[5] except in the five areas of foreign affairs, defence and security, justice, monetary and fiscal affairs, and religion and other matters. These 'other matters' were listed in Paragraph 7 as "macro-level planning, fiscal equalization, public administration, economic institutions, human resource development, natural resource utilization, strategic technologies, conservation, and national standardisation".

Regions were given control over their own finances, their civil service, and their organisational set-up. Human resources (civil service personnel) and physical assets were transferred from the decentralised sections of central ministries to the local *'dinas'* offices. Since education was decentralised, responsibility for Ministry of Education schools moved to the district level[6]. However, since religion was one of the sectors reserved for the central government, madrasah and the Ministry of Religious Affairs education apparatus remained as an *instansi vertikal*.

These two laws had dramatic implications for the education sector, with managerial and financial control over all levels of public education, except higher education, being transferred from the central government to district-level governments (Kristiansen and

[4] *Otonomi yang luas*.
[5] Kewenangan dalam seluruh bidang pemerintahan
[6] There was initially some question as to whether this covered only basic education (primary + junior secondary) or also included senior secondary. Management of primary schools had already been effectively devolved to the district level in 1987, prior to the regional autonomy laws. Responsibility for management of senior secondary schools was devolved to district level and then transferred to the province level in 2017.

Pratikno 2006). It is widely assumed in development programs that decentralisation holds significant benefits for the administration of public services (Ahmad et al. 2005; Lewis and Pattinasarany 2009; Bardhan 2002). For the education sector, decentralisation has been viewed as an important means of stimulating user demand for improved access, higher quality, and better learning outcomes.

In the case of Indonesia, the record so far suggests that the impact of a decentralised education system has been mixed. The benefits that have materialised have been related almost entirely to access to schooling. Quality, on the other hand, has remained low and student learning outcomes have been persistently poor by regional standards. Significant investments in key reforms have not yet resulted in improvement in student performance in international standardised tests or resolved geographical imbalances in service provision (Chang et al. 2014: 4; De Ree et al. 2017).

National funding for education and resourcing of schools[7]

The quantum and distribution of education funding nationally (how much and for what) has a direct and major impact on the delivery of services provided by schools across Indonesia. By studying the trends in global funding for education over time (and in comparison, with total public expenditure and GDP) we can assess the financial commitment of government towards education – see Text Box (*Education expenditure data).*

National funding for education over time

Government of Indonesia (GoI) data show that public expenditure on education has grown significantly in the first two decades of this century. However, when the impact of price inflation is considered, the real growth in education expenditure has been far more modest. Indeed, between the years 2013-18 there was very little real growth at all (1.8% real growth spread across five years). This belies a very common perception amongst policy makers in Indonesia that the

[7] Discussion in this section draws on financial data for 2005-2008 from Constitutional Court Decision PUU-13/2008 where the Government of Indonesia provided a detailed breakdown of expenditure allocations. Data for 2001-2004 collected by World Bank (del Granado et al. 2007). Education expenditures and total national public expenditures 2009 onwards, from Ministry of Finance (Ministry of Finance 2008-19) Financial Note and Indonesia Budget Year (for each relevant year). Inflation data from BPS Key Indicators of Indonesia Table 5.2 Inflation Rate Year on Year 2002-2019 Statistic http://dds.bps.go.id/eng/download_file/Booklet_indikatorkunci.pdf.

education sector has been the beneficiary of increasing largesse from government coffers.

National funding as a portion of GDP and Total Public Expenditure

The amount of public money that a country commits towards education is usually standardised against the level of its economic production (GDP). This provides a measure of the extent of its national income that the country invests in social development and workforce readiness of its population.

Indonesia, with 2.8% of GDP spent on education, ranks at the bottom end of countries worldwide. It is considerably below the world average (4.1%) and the OECD average (5%).

At the same time, the education share (20%) of Indonesian national public expenditure is high by international standards. This is a function of government revenue raising weakness. The underlying issue is that government in Indonesia does not generate as much revenue as a share of GDP as most other countries.

Education expenditure data

The analysis of education expenditure in this chapter used Ministry of Finance publicly available data sets (Ministry of Finance, 2023).

Financial data by functional distribution were combined with another dataset showing distribution by institution. This enabled the extraction of higher education data from Ministry of Education national level funding, and the extraction of non-Ministry of Education funding from national level data.

The resource mapping spans the first two decades of the century (2004-2019), however, the trends in financial data are focused on the ten-year period 2010-19.

The starting point is set by the data series from Ministry of Finance (Ministry of Finance, 2008-19). The end point for analysis is 2019 which is the last year before the COVID-19 pandemic and the disruptive impact it had on government services and hence expenditures.

An earlier study (del Granado et al. 2007) undertook a high-level decomposition of education expenditure at national and sub-national levels which enabled extension of the analysis back to 2004.

Indonesia is a rapidly developing country with high ambitions for its continued social and economic growth. However, these aspirations are not matched by adequate investment in the education of its

population. Revenue raising weaknesses mean that Indonesia is under-investing in the education of its population, relative to other countries in the region.

Actual national funding for schools

While consideration of macro-trends in education funding is useful, the actual funding of schools in Indonesia – where the difference to student learning is made – provides more valuable information.

By only considering what is being spent on schools (not all of education-related spending) it is possible to understand better the actual cost of delivering schooling to more children in more locations and, in turn, to improve the quality of the schooling.

The official data (Ministry of Finance 2008-19) show a steep increase in public funding of schooling for the period 2010-13, where total real spending (measured in constant prices) increased by more than 35% in real terms from Rp. 149 trillion to Rp. 203 trillion over a period of 3 years.

Just as striking was the decline in real public funding of schools from 2015-19. A big drop in public funding for schools occurred in 2016 (down by Rp. 23 trillion). While real spending increased slowly after 2016, school spending measured in constant prices had still not reached 2015 total funding levels by 2019.

This analysis reveals that public spending on schools in Indonesia went backwards during the period 2015-19, when inflation is considered.

However, the education sector received increased public funding in 2019 that took it significantly above what it was receiving during the period 2015-18. The school sector therefore fared worse than the education sector taken as a whole.

Funding for access to, and quality of, schooling

Chapter 1 describes the impressive expansion of schooling opportunities in Indonesia's first fifty years, seeking to provide access to school for all Indonesian children. It also highlights the challenges that currently exist in improving the system so that a quality education is provided to all Indonesian children.

These two aspects of provision – access *and* quality – have figured prominently in the last three Indonesian planning documents. For example, in terms of the three *Renstra* (strategic plan) periods, the focus has been:

i) 2004-09 – Focus on Expanding Access.

ii) 2010-14 – Expanding Access and Improving Quality.

iii) 2015-19 – Continuing Quality and a New Focus on Learning.

School expansion into junior and senior secondary education in 2004-2009 is a case of extending access. This continued into the 2010-14 planning period, when there was also some emphasis on vocational education investment in secondary school (SMK). In the 2010-14 *Renstra* period, the quality agenda came more fully into play with a renewed teacher certification drive accelerating from 2009 onwards. It was also accompanied by a suite of policies that can be described as targeting system quality improvement: Minimum Service Standards for schools, aspirational National Education Standards for schools, curriculum changes, revised school accreditation

Assigning budget items as access or quality

Access categorised expenditures include DAU 100% (mostly salaries), physical infrastructure 100%, national government expenditure 25%, and BOS on a sliding scale from 75% in 2010 to zero % from 2013 onwards. National level expenditure is pro rata shared at 25% for access to account for the largely quality focus of its interventions. BOS is adjusted from 75% downwards to account for the rollout of free basic education policies that meant it converted from a subsidy for household costs (access intervention) to one of supporting quality improvements at the school level.

Quality categorised expenditures include BOS sliding scale from 25% in 2010 to 100% from 2013 onwards, teacher certification costs 100%, national level expenditure 75%, Otsus Autonomy funds 100%, DID funds 100%.

Data for 2004 has been collected from the World Bank publication (del Granado et al. 2007: 6). Page 6 provides analysis of shares in education expenditure across levels of govt.

For 2010 onwards, financial data by functional distribution were combined with dataset showing distribution by institution. This enabled the extraction of higher education data from MOEC national level funding, and the extraction of non-MOEC funding from national level data. https://data-apbn.kemenkeu.go.id/lang/en/post/10/anggaran-pendidikan. Data accessed on 23.01.23 https://data-apbn.kemenkeu.go.id/download/post/10/10_141022022018_95c3783c61dfb95d89421ad40a9f6515.xlsx

procedures, and changes in student assessment.

The 2015-19 *Renstra* (Ministry of Education and Culture 2015) maintained a focus on quality improvements.

More recently, the 2019-20 year also saw the introduction of the *Merdeka Belajar* reforms aimed at improving classroom learning. Analysis of school resourcing, spanning 2004-19, shows how school resources shifted from being weighted towards access in 2005-09 and move towards quality in 2010-19. That is, money generally followed the respective *Renstra* policy emphases.

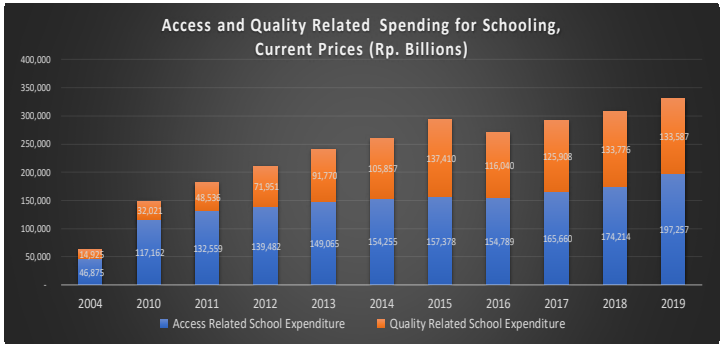
School resourcing for access and quality

Figure 1 and *Figure 2* set out school spending by access and quality for the period 2004-2009. Figure 1 presents the data by current prices and Figure 2 presents the data by constant prices, taking account of inflation.

Key observations in relation to these data include:

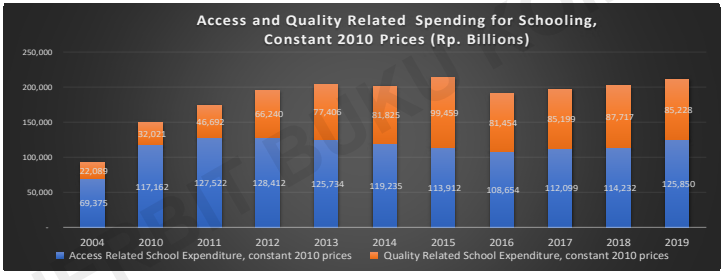
- There was a constant uptick in school spending in current prices (except for a drop in 2016).
- Even with strong inflation embedded in current prices, expenditure for access largely plateaued between 2013-2016.
- The big surge in public spending for improved access to schools largely happened during the *Renstra* period 2004-09 when outlays surged from Rp. 70 trillion to nearly Rp. 120 trillion per year in 2010 constant prices.
- Real spending for quality improvements tripled in the eight-year period 2004-12. Looking at the ten-year period 2010-19, spending on quality for schools grew more than 300% from less than Rp. 32 trillion to Rp. 99 trillion by 2015. However, from 2015 to 2019 spending on quality declined in real terms (2010 constant prices) from Rp. 99 trillion to Rp. 85 trillion in 2019.

Figure 1. Access and Quality-related Spending for Schooling, Current Prices (Rp. Billions)



Source: Ministry of Finance Financial Note and Indonesia Budget Year (for each relevant year)

Figure 2. Access and Quality-related Spending for Schooling, Constant 2010 Prices (Rp. Billions)



Source: Ministry of Finance Financial Note and Indonesia Budget Year (for each relevant year)

Access-Related Expenditure

In this section on access-related expenditure, public expenditure from the Ministry of Education run public schools is correlated with enrolments in public schools that are under the auspices of the Ministry of Education.

Enrolments in the public school system increased by more than 6 million from 2004 (39.1 million) to 2019 (45.5 million). This included a decline in primary school enrolments that corresponded with a demographic contraction of this school age cohort (net enrolment rates improved during this period). The decline in primary school enrolments from 2011 onwards was more than

matched by increases in enrolments at the junior secondary and secondary SMP/SMA/SMK schools.

The steep increase in real expenditures for the period 2004-2010 is in line with what would be expected with an overall increase in enrolments combined with a greater share of expenditure for the more costly SMP/SMA/SMK school services.

During the period 2010-19, SD enrolments declined with demographic contraction. Concurrent growth in SMP/SMS/SMK enrolments kept overall enrolments stable at around 45 million students from 2010 onwards. This meant the Ministry of Education transitioned to a higher proportion of junior and senior secondary students that is more costly to service. This higher cost profile relates to higher unit labour costs, specialisation driving lower student-teacher ratios, and more costly infrastructure provision, operation, and maintenance. It is impressive that the Ministry of Education school system delivered this growth in more costly enrolments without any increase in real cost over seven years (2012-19). Enrolment data from Bureau of Statistics (Statistics Indonesia, 2004-19).

Quality-Related Expenditure (2010-19)

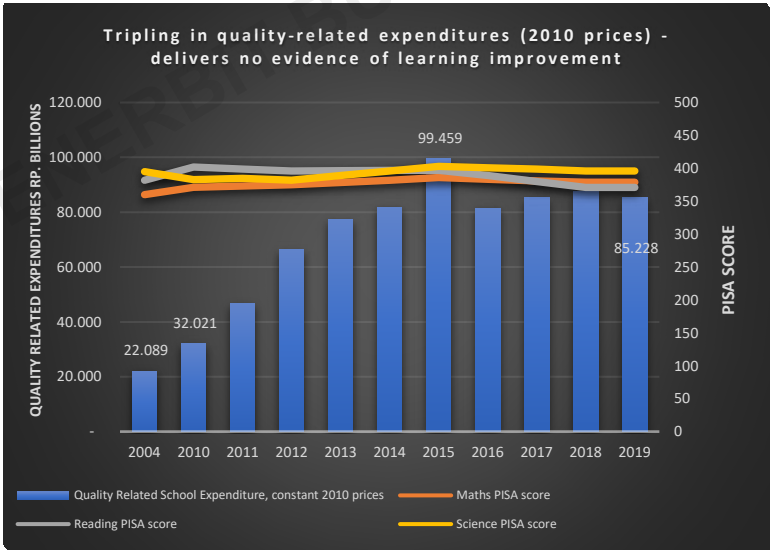
In contrast to spending for expanded access, real expenditures for improvement in the quality of schooling increased significantly from 2010 onwards. Quality-related expenditures included those that contributed to improving teacher capability e.g., certification and professional development, provision of teaching and learning materials for teachers and students, and provision of quality equipment and facilities.

However, while quality-related expenditures (2010 prices) almost tripled during the period 2010-19 (see *Figure 3*.) there is no evidence of learning improvement in that timeframe. The quality-related spending improvements do not demonstrate they delivered returns in improved learning based on the PISA results. This suggests that either the spending was ineffective, and/or that the expenditures on their own were not sufficient to deliver improved learning in the classroom[8].

[8] In contrast, Mourshed (2010) draws on research into improving school systems to note that 'systems focused on in this research demonstrate that significant improvement in educational attainment can be

Quality-related expenditures are foundational investments in securing certified teacher capabilities and suitable materials, equipment, and facilities. The lack of any evidence for a return in terms of improved learning outcomes does not mean of itself that quality-related expenditures were wasted. On their own, they were shown to be ineffective, but they will have laid the foundations for future improvement if they can support a learning-focused approach within the classroom. For example, it requires a teacher with adequate skill and pedagogical knowledge to apply learner-focused techniques in the classroom. To the extent that the teacher certification program (with its training, certification, and allowances) delivers and retains these teachers in the system, it is creating a technical pool of expertise that can be mobilised and activated in the classroom. For that foundational benefit to be realised, it requires a change in the behaviour of teachers and in classroom learning. The same applies to other quality-related expenditures such as school operational funds (BOS) for materials, equipment, and improved facilities.

Figure 3. Tripling in quality-related expenditures delivers no evidence of learning improvement.



Source: Ministry of Finance Financial Note and Indonesia Budget Year (for each relevant year)

achieved within as little as six years' (Mourshed 2010: 14). For further discussion on realising substantial change see discussion on Vol.1 Ch. 7 and Vol. 2 Ch. 6.

The Fiscal Space for Future Spending

The changes in school resourcing over time can be graphed as the relative shares of total school expenditures for access and quality objectives – see *Figure 4*. The expenditures largely followed the shape of these policy focus areas as they shifted in priority over the fifteen-year period.

Based on these data, two inter-related high-level observations can be made:

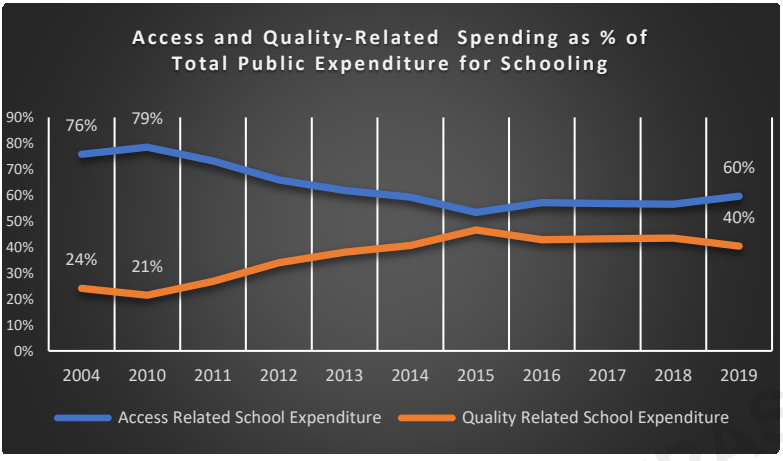
- Greater efficiency in providing access enabled the Ministry to substantially increase the share of resources it committed to improving the quality of schooling.

  Figure 4. illustrates how expenditures for access steadily reduced their share of total expenditure just after the *Renstra* (2005-09) period. From a peak 79% share of total expenditure in 2010, access-related expenditures declined to 60% by 2019. This improved efficiency in catering to a more expensive-to-teach school enrolment cohort (greater share of junior and senior secondary students) created the fiscal space to expand investment and resourcing for quality improvements.

- Maturing of the enrolment profile and stability of current shares of expenditure (access vs quality) suggests future resourcing for quality improvements will have to come from an approximate 40% share of total school spending.

It seems unlikely that the school system will continue to enrol increasing numbers of higher cost students without increasing the real value of access-related expenditures - for example, total salaries. The fiscal space that has been created for investing in improved quality is probably near the limits of its total share of spending. It will therefore be important for the system to maximise the efficiency of its spending to improve learning. Cost-effective methods that change classroom dynamics can help to realise the value of the existing and ongoing investment in having more qualified teachers as well as better equipment and facilities.

Figure 4. Access and Quality-Related Spending as % of Total Public Expenditure for Schooling



Source: Ministry of Finance Financial Note and Indonesia Budget Year (for each relevant year)

Fiscal Decentralisation and District Expenditures for Schooling

As described earlier in this chapter, Indonesia was transformed in the space of the first two decades of this century from a highly centralised delivery model of government services to a largely decentralised system. The government embarked on public sector decentralisation in 2001, whereby the 34 provinces and more than 500 districts took on the heavy lifting for delivering education and other important services.

Law No. 25/1999 on Fiscal Balance between the Centre and the Regions was designed to:

1. empower regions and increase regional economic capabilities.
2. create a financing system for the regions which was "just, proportional, rational, transparent, participatory, accountable and provides certainty".
3. provide a funding system that reflected the division of functions (between levels of government), and which reduced regional funding gaps.

This section considers (1) the changes in shares of resourcing that accompanied these changes, and (2) the impact on the effectiveness and efficiency of the public spending for education within the fiscal decentralisation system as implemented.

Impact of fiscal decentralisation on expenditure patterns

In terms of the general budget for all sectors, the main effect of the new financial decentralisation law was to increase the share of national budget revenues flowing into regional budgets from about 20% in 2001 to 31% by 2018 – see Table 1.

Table 1. Spending, by level of government as a share of total government spending, 2001-18 (%)

	2001	2005	2007	2009	2011	2013	2015	2018
Central	74	68	63	62	64	62	58	**58**
Province	6	7	8	8	8	8	9	**11**
District	20	25	29	30	28	30	33	**31**
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: World Bank calculations based on Ministry of Finance data.

For the education sector, the budget papers show all education-related expenditures from each Ministry. These expenditures cover schooling, higher education and other training and education-related expenditures. At this very highly aggregated level, national expenditures have moved between 32%-44%, but have trended down from 2011. The province level of government has had the most significant increase from less than 5% in 2001 to more than 20% by 2018 – see Table 2. However, this jump is largely due to senior secondary schools being shifted to a province level responsibility from the district level of government. This in turn, meant district expenditure dropped from more than 60% in 2001 to less than 50% by 2018.

Table 2. Share of total education spending, by level of government (%)

	2001	2005	2007	2009	2011	2013	2015	2018
Central	32	40	41	44	38	36	37	**32**
Province	4	5	7	5	6	6	7	**22**

District	64	55	52	50	56	58	56	**46**
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

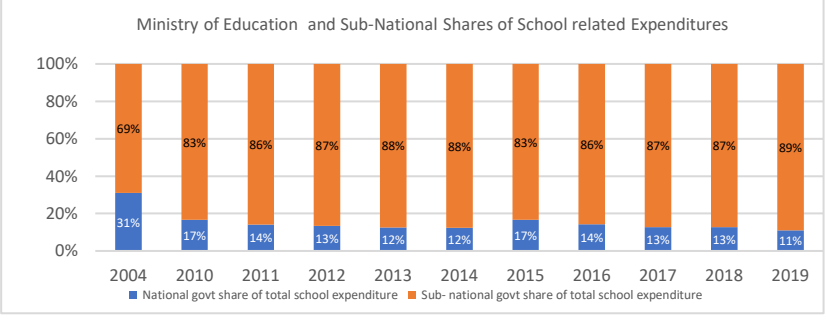
Source: World Bank Consolidated Fiscal Database using Ministry of Finance data.

Of note in this analysis is the change in the Ministry of Education funding. In 2004, the Ministry of Education contributed approximately 30% of public funds available for public schools. By 2018 this had gradually declined to just over 10%[9]. In other words, while national level education spending shows the national government (all ministries and departments) retaining a strong 30% share, these mask the declining role of the Ministry of Education which was reduced to a minor funding partner of public schools in Indonesia – see Figure 5.

The declining share is attributed to the aging demographic profile of the teaching force and the exit of many of the higher paid teachers as they retired. A declining share of expenditure on salaries (mostly for teachers at the district level) is an important development as it opens space for other types of expenditure.

However, this trend may not continue as aggressive teacher recruitment of 500,000 targeted new teachers in the last two years will reverse the trends in a decade (as they go up the pay scale). However, until more teachers are employed there is a fiscal window to advocate for spending on quality/learning inputs.

Figure 5. Ministry of Education and sub-national shares of school related expenditures (%)



Source: Ministry of Finance Financial Note and Indonesia Budget Year (for each relevant year)

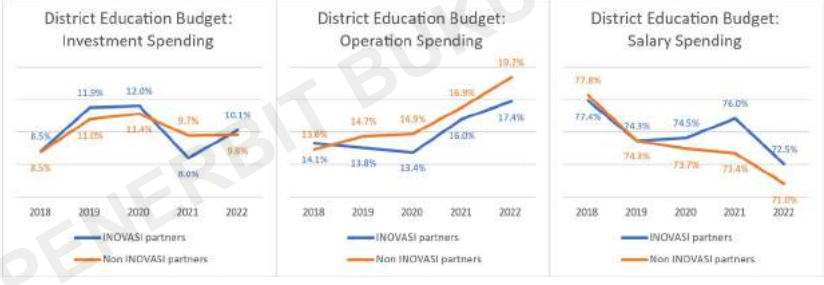
[9] National and regional government accounting of 'education' spending covers everything from pre-school, schooling, tertiary, vocational and training related expenditures of other ministries and departments. Non-school related expenditures need to be excluded from analysis to get a better look at what is being spent and by whom on school education.

Spending within districts

In this section, we look at spending within a sample of districts. This sample consists of ten INOVASI partner districts[10]. The in-depth engagement of INOVASI within its partner districts enabled access to financial information and provided an opportunity to gain insights into the nature of district and school expenditures.

The 514 districts and cities across Indonesia should present a highly diverse array of expenditure patterns. Notwithstanding this, Figure 6 shows that there is a substantial degree of similarity of spending patterns between the sample districts and non-partner districts across the country. While INOVASI district selection was not designed to be representative of Indonesia's districts, the similarities of these spending patterns suggests that similar factors and influences come into play in both groups as they budget for education spending.

Figure 6. Comparison of education spending patterns of INOVASI partner and non-INOVASI partner districts, 2018-22.



Source: Ministry of Finance & Subnational Government Budget data

As shown in the third chart, salaries make up the bulk of district education spending in both groups. This is to be expected. Both groups also demonstrated declining trends of salary spending, with significant numbers of teachers reaching retirement age. This decline is beginning to diminish with new contract civil servants (PPPK) being recruited from 2021[11]. INOVASI partner districts, with their smaller number of civil servant teachers, demonstrated a

[10] Ten partner districts that are the focus of the analysis are: (1) Probolinggo, East Java; (2) Sumenep, East Java; (3) Bulungan; North Kalimantan; (4) Nagekeo, NTT; (5) West Sumba, NTT; (6) Central Sumba, NTT; (7) East Sumba, NTT; (8) Bima, NTB; (9) Sumbawa, NTB; (10) Central Lombok, NTT.

[11] In 2020, INOVASI supported MoECRT to map the shortage of civil servants. A target of one million new teachers was set for the new contract teacher program. The first selection took place at the end of 2020 - with 270,000 teachers recruited nationally in 2021, and a further 250,000 recruited in 2022.

bigger swing than non-INOVASI districts. This decrease in salary spending opens up possibilities for districts to spend more on operational and capital investment, which can be used for quality and learning improvement such as teacher training and books provision.

Share of education expenditure for 'learning' in districts

Looking further into this sample of districts, we can ask whether a program like INOVASI has had an impact on district spending, and, specifically, did partner districts change their spending habits and increase spending on 'learning' and efforts to improve quality as a result of the program? The answer to these questions is important, not just for INOVASI and Indonesia's development partners, including DFAT, but for the Indonesian government. Programs like INOVASI can provide a model for government interventions, and especially for new approaches for province-level agencies such as provincial teacher training centres (Balai guru penggerak – BGP) and local education quality assurance centres (Balai Penjaminan Mutu Pendidikan – BPMP) to work with districts to facilitate change.

The INOVASI program focused its work with districts on efforts to improve teaching and learning at the classroom level. This is distinct from the broader category of quality spending captured earlier in this chapter, which includes improvements to buildings, teacher-certification-related training, and national BOS allowances.

To get a more focused measure of expenditure for 'learning' in these districts, an analysis of only the following were considered in the scope of 'learning' expenditure:

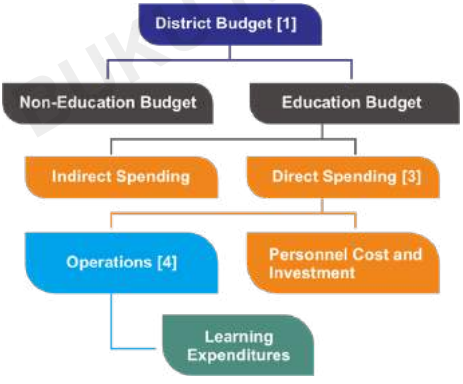
- Teacher training and competency improvement
- Local government school operational funds (*(BOS Daerah, or BOSDA*)
- Provision of learning aids – especially focused on teaching of literacy and numeracy
- Books for improving reading
- Teaching aids to improve understanding of number
- Inclusive education provision
- COVID-19 response expenditures

Diving deep into the fiscal data obtained by INOVASI, we can see that the ten partner districts allocated 24 million AUD for learning expenditure over the five years beginning in fiscal year 2018 (for most districts the first year of joining INOVASI) and continuing through 2022. To reflect the substance of these allocations, the expenditure for learning is compared with the overall district budget. With a total district budget for the ten districts of 7.3 billion AUD, for 2018-2022, the expenditure for learning was less than 0.5%. However, this simple comparison does not account for districts' fiscal capacity, fiscal space, and budget discretion. In other words, how much of the district budget was in fact available to spend on learning-related programs?

To understand this, we need to understand the complex process of how budgets are commonly classified in the Indonesian public budgeting system.

Figure 7 illustrates the complexities of budget classification. At the top of the hierarchy, we see the fiscal *capacity*: how much is available for education in the district budget? The total district budget is classified in two groups: education and non-education spending. This begins with the requirement that a minimum 20% of budget must be allocated for education.

Figure 7. Classification of District Budget



As we go down the hierarchy, we reach the second level of the classification: direct verses indirect spending. This is where we begin to move from fiscal *capacity* to fiscal *space*. *'Indirect spending'* is defined as allocations that are not directly tied to programs. This is mostly comprised of teacher salaries and government overheads. This indirect spending is non-discretionary. Thus, our focus on learning-related expenditures relies on *direct spending*.

At the lowest level of the hierarchy lies the 'type' of direct spending: *operations* verses *personnel cost and investments*. While most

direct spending is within education policy discretion, spending on personnel cost (mostly professional and functional allowances for teachers) and investments (mostly school construction and rehabilitation) mainly comes from specific fiscal transfers from central government (*DAK* and *DAU-Spesifik*) and is non-discretionary. Thus, expenditure for *learning* is mostly resourced from the operation spending category, where local government has discretionary control.

Therefore, to properly reflect the significance of 24 million AUD spending on learning mentioned above, we need to compare it with the portion of the budget where the districts have discretion, as expressed in Table 3.

Table 3. Percentage of district budget classification allocated for learning.

Budget Component	Amount in million AUD	Percentage of budget classification	Percentage allocated for learning
[1] Total Budget	7,319	- -	0.3%
[2] Education Budget	1,981	27%	1.2%
[3] Direct Spending	714	36%	3.4%
[4] Operations	314	43%	7.6%

Source: Budget data from INOVASI's Partner Districts

District expenditure on activities to improve learning outcomes was less than 0.5% of the APBD spend in sample districts. However, as shown in Table 3, expenditure on learning was 7.6% of the districts' discretionary budget.

The education budget allocation of the sample districts averaged at 26.6% of the total district budget, with very slight positive trends over the five years (Figure 7). As the data indicate, spending on education was already over the 20% requirement so there was little incentive for local governments to substantially increase their education budget, even if the fiscal capacity of the district improved following national and regional economic growth.

More positive trends are evident in direct spending for education, which provides an opportunity to increase learning-related expenditures. The positive trend for operation spending, shown in the first chart in Figure 7, was mainly due to a declining spend on

salaries, due to civil servant teacher retirements. But this fiscal space contracted as local governments began to recruit additional teachers.

Figure 7. Per year analysis of District Budget, Education Budget, and Direct Spending

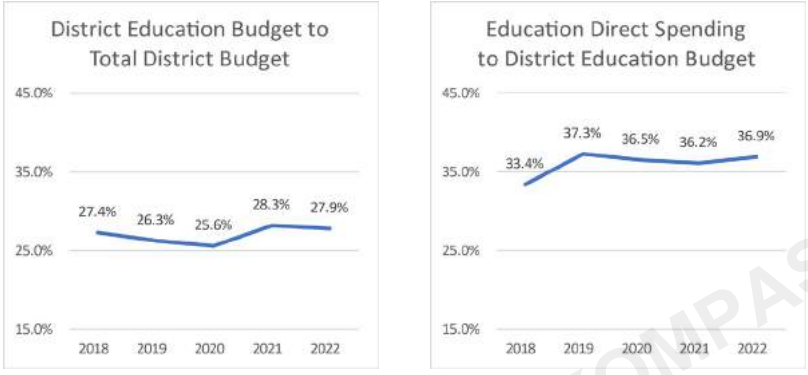
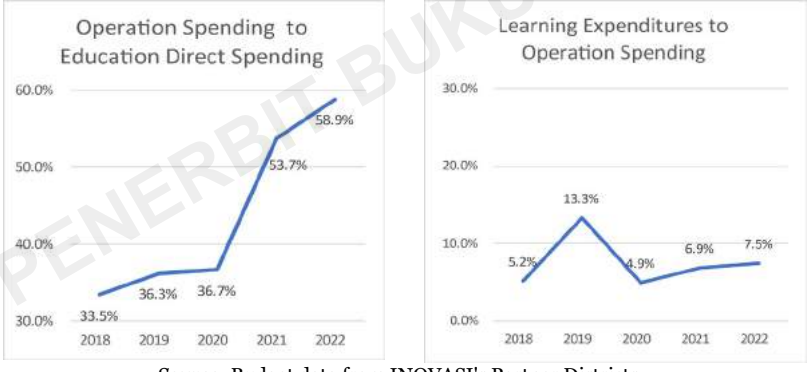


Figure 8. Per year analysis of Operation Spending and Learning Expenditures



Source: Budget data from INOVASI's Partner Districts

This growth in operation spending provided a promising opportunity to advocate for increased learning expenditures. This is reflected in the yearly growth of expenditure on *learning* as a portion of operations spending, as shown in the chart on the right (

Figure 8). This is a positive picture, notwithstanding the significant drop in 2020.

The strong growth in 2019 can be attributed to robust commitment from districts to scale out INOVASI pilot programs. This ceased in 2020, due to the COVID-19 pandemic and a stagnation of operation

spending. The steady increase in 2021 and 2022 indicates a progressively renewed commitment of districts to fund programs to improve learning outcomes as schools reopened, supported with growth of operation spending.

While we cannot directly attribute the increase over five years to the impact of INOVASI, it is very plausible to suggest that the program has influenced district budget choices through its engagement with decision makers and its strong focus on improving learning outcomes.

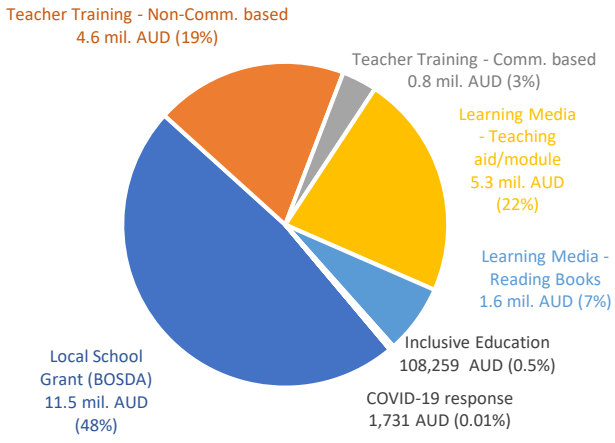
INOVASI's small but focused expenditure on supporting districts to improve learning outcomes appears to have had an outsized effect. This raises the question of whether similar effects could be achieved if the Ministry of Education and the Ministry of Religious Affairs funded targeted activities focusing on improving the quality of classroom practice (using BGP, BPMP and BDK, for example).

Where education expenditure for 'learning' is allocated

In Figure 10, we can see how the district budget for learning described above was allocated among types of expenditures.

Local government school grants *(BOSDA)* accounted for 48% of the expenditure on learning (at 11.5 million AUD). This is due to flexibility offered by the grant mechanism. BOSDA enables districts to set priorities and allocate a supporting budget - and leave it to schools to create better tailored programs. Further analysis might be required to unpack these BOSDA allocations to see exactly what is spent on learning and what contributes to other spending.

Figure 10. Percentage of expenditure for learning by type

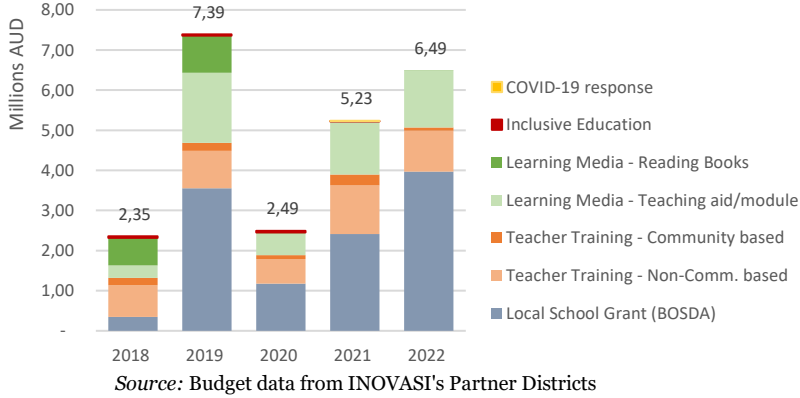


Source: Budget data from INOVASI's Partner Districts

The two smallest allocations were support for inclusive education expenditure and COVID-19, with only 108,259 AUD (0.5%) and 1,731 AUD (0.01%) respectively. The modest allocation for inclusive education is likely because most spending on this area at the school level was supported through BOS and BOSDA. The very small amount for COVID-19 is because COVID-19 spending was mostly classified as a non-education budget.

With analysis of annual education expenditure allocations (Figure 9), we can see how changing context and external events affect how districts allocate spending.

Figure 9. Percentage of expenditure for learning by type and by year



Source: Budget data from INOVASI's Partner Districts

A contraction in 2020 clearly indicates how COVID-19 affected spending. For example, the previously substantial allocation for reading book provision was discontinued in that year.

In 2021 and 2022, spending on teaching aids and module development began to expand significantly as the new curriculum was introduced which drove the need for new teaching aids and module development.

Conclusion

This analysis of spending in ten sample districts highlights the complexity of district budgeting processes. District decision makers commonly feel constrained in allocating resources to programs intended to improve learning outcomes due to limited fiscal space. This is due mainly to the intricacy of specific fiscal transfers and the dominance of teacher salaries in the district education budget. Notwithstanding this, as we have shown, allocations to learning-related programs increased over the five years of this analysis.

Through policy advocacy, based on successful pilots and local data on learning outcomes, INOVASI succeeded in tapping, on average, 7.6% of the discretionary budget in sample districts, and as much as 13.3% in 2019. This highlights the possibility for successful district-level advocacy to increase spending on learning-related programs.

Options for improving quality.

This last section provides discussion on the strengths and weaknesses of current funding arrangements in relation to extending the *Merdeka Belajar* quality improvement agenda, and discussion and analysis of priorities that might be considered for future program activities.

Improvements in the financing mechanisms of fiscal decentralisation[12]

The three types of revenue sources for regional governments are summarised in *Figure 10*, with more detail provided in the Text Box: *Financing mechanisms of fiscal decentralisation*. The strengths and weaknesses of these mechanisms provide a focus for discussion on how to deliver improvements in the quality and efficiency of service.

[12] Summarised from Al-Samarrai & Lewis (2021: 148)

More nuanced studies can identify the conditions under which it is more likely to deliver improvements. (Channa and Faguet 2020)

Figure 10. Fiscal mechanisms – summary view from objectives to use of transfers.

	DBH	DAU	DAK
Objectives	Adequacy and political	Equity	Efficiency and equity
Types	General	General	Specific (input-based) matching, closed ended
Pool determination	Fixed percentages of national revenues	Minimum 26% of domestic revenues	Ad hoc
Pool distribution	Point of origin	Formula	By rules; since 2017, by proposal
Use	No restriction (except 0.5% of oil and gas revenue sharing should be allocated to education)	No restriction	Capital

Source: Al-Samarrai & Lewis (2021)

A recent Public Expenditure Review (World Bank 2020) identified generic problems in the case of Indonesia. These are summarised as:

- *Public Financial Management challenges* – While there has been creditable progress in many aspects of public financial management, for example, a strong five- year planning process and concerted efforts to improve accuracy in budget revenue estimation, there are still systemic constraints observed in all sectors.

- *Coordination challenges* – coordination difficulties and fragmentation among central agencies limit the effectiveness of major government programs in achieving their objectives. Decentralisation poses additional challenges for central line agencies' accountability and monitoring.

- *Allocation of fiscal transfers* – Despite incremental improvements, fiscal transfers are still not allocated in a manner that reduces inequality between provinces and districts or which drives improvements in service delivery. The Government has laid the foundations to strengthen the "fiscal social contract" between citizens and local governments (provinces and districts). If the Government

also increases local government autonomy to raise own-source revenues, while holding them accountable, more efficient and effective spending should follow.

- *Data to measure and drive performance* – Fiscal data and sector-specific output and outcome data are key to measuring and driving effective government performance. However, consistent and credible local government spending data by functions are lacking, making it difficult to evaluate subnational spending efficiency within sectors. Data on outputs and outcomes are available in some sectors but are not consistently used and are of poor quality. Even at the central government level, there are limitations in tracking the quality of spending in priority sectors such as health and education, as data are not necessarily shared across key agencies and ministries, nor sufficiently disaggregated for meaningful analysis.

Financing mechanisms of fiscal decentralisation[1]

Law No. 25/1999 on Fiscal Balance defined three types of revenue sources for regional government budgets APBD:

- revenues from the region's own tax base (PAD)
- "balancing" funds from the central budget APBN
- other (grants and regional borrowing).

The 'balancing funds' constitute the Indonesian system of intergovernmental fiscal transfers. This system comprises DBH (*Dana Bagi Hasil*/Revenue Sharing Fund), DAU (i/General Allocation Fund), DAK (*Dana Alokasi Khusus*/Special Allocation Fund) and other kinds of grants.

DBH is the mechanism by which the central government distributes a portion of national tax revenues to local governments. The tax mechanisms consist of revenue from property taxes, the personal income tax, and the tobacco excise tax. The non-tax mechanisms consist of natural resource revenues (SDA) from forestry, fisheries, mining (geothermal and other), and gas and oil. The DBH funds are most significant for provinces and districts with large natural resource revenues. The DBH seeks to reduce fiscal imbalances between the central government and the subnational governments, but also has the vital political objective to persuade resource-rich provinces that resource flows from decentralisation can meet their financial needs.

The **DAU** objective is to increase equity among provinces and among districts according to their fiscal needs and capacities. Built into it is the aim to counteract the concentrated distribution of DBH funds to resource rich provinces and districts. The pool of finance for the DAU is fixed in law as a minimum of 26% of total planned domestic revenues, net of amounts otherwise shared with subnational governments (for example, through the various revenue sharing schemes). Recently, the DAU pool has been set at about 27% of revenues. Districts receive 90% of the total pool and provinces get 10%.

There are two types of **DAK**: capital (DAK *fisik*) and noncapital (DAK *non-fisik*). Officially, districts that receive a capital grant are meant to provide counterpart funds in the amount of 5% of the grant, but in recent years the matching component seems to have been relaxed. The noncapital DAK consist of teacher certification grants and BOS.

The DAK objectives are: (1) to reduce inefficiencies that are a function of spatial (benefit) spill overs, especially in education, health, and infrastructure; (2) promote the application of minimum service standards across all functions; and (3) foster economic stabilisation by stimulating increased capital spending. In practice, DAK allocations are very strongly associated with DAU distributions; therefore, implicitly at least, the DAK also reduces inequity. Overall, the system of intergovernmental transfers in Indonesia is mostly concerned with correcting horizontal fiscal imbalances. The pool of finance for the DAK varies from year to year based on negotiations between the Ministry of Finance and the National Parliament.

Other grants include special autonomy funds (Dana Otsus) for Aceh Papua, and West Papua; a special transfer to Yogyakarta (Dana Keistemewaan); and a small regional incentive grant (DID). Provinces also make transfers to districts from their own-source revenue (raised from motor vehicle taxes, a fuel tax, a surface water tax, and a cigarette tax). All transfers except the DID are judged according to inputs rather than results. The DID is the government's only ongoing incentive-based (performance) grant, although other transfers—especially the DAU—include implicit (and perverse) incentives.

[1] Summarised from Al-Samarrai & Lewis (2021: 148)

Addressing the perverse incentive to increase personnel numbers.

Allocations of the DAU to the districts comprise a basic allocation and a fiscal gap allocation, with the basic allocation being approximately 45% of the total.

The basic allocation is determined as a simple function of a district's spending on personnel as a share of total spending by all districts on personnel. DAU allocations are distributed monthly in equal instalments, usually in the first week of the month. The current allocation formula implies that the more a district spends on

personnel relative to other districts, the larger its basic DAU allocation (and thus its total DAU allocation) will be. This gives districts a strong incentive to increase their spending on staff such as teachers, even if their student-teacher ratios are already low, which may have negative consequences for other aspects of education quality. (Al-Samarrai & Lewis 2021)

On the other hand, the fiscal gap allocation is derived from the difference between a district's fiscal needs and its fiscal capacity. District fiscal needs are estimated based on a number of proxies including population size, geographic area, poverty, a service delivery cost index, the human development index, and per capita gross regional domestic product (GRDP). Fiscal capacity is the sum of a district's other revenues, consisting of own-source revenues and tax and non-tax revenue sharing. DAK and other transfer revenues are not included in the estimation of district fiscal capacity.

The fiscal gap allocation is the better targeted horizontal fiscal equalisation mechanism. It has an in-built weighting system for the variable costs associated with service delivery across very different district profiles based on geography and demography as well as economic development. While it is not expressed in per capita terms, its formula takes population into account.

The evolution of Special Allocation Fund (DAK) grants allocations

DAK fisik allocations to districts have been based on infrastructure proposals submitted by subnational governments. The proposals are considered by technical ministries and Bappenas before being approved by the Ministry of Finance.

DAK *non-fisik* allocations (comprising teacher certification grants and BOS grants – see the Text box - *BOS grant allocations*) have been a growth area and more significant for schooling than other sectors.

- Teacher certification grants are uniform lump sum transfers allocated to districts, based on the number of teachers being certified. This spending encourages the teacher certification process and is directly tied to the number of teachers certified.
- The Regular BOS allocation in 2021 (disbursed in February 2021) considered the variation of costs faced by schools across Indonesia. Two factors were considered – price index and economies of scale. These factors were considered to devise a per capita cost which was then multiplied by the number of students in schools. This resulted in a high increase in BOS allocation for areas with the greatest need. For example, districts in the Papua province received more than three times as much BOS funds in 2021 year compared to the previous year, and remote areas like Natuna (Riau Islands) and Talaud (North Sulawesi) received

BOS grant allocations

BOS refers to per-student grants allocated directly to schools (through provinces). There are two main types of BOS grants (*BOS Reguler* and *BOS Afirmasi dan kinerja*). BOS grants have evolved and are benefiting from the engagement of the INOVASI program to improve the efficiency of their distribution and targeting.

BOS, school operational funding, developed from emergency grants called Dana Bantuan Operasioal (DBO) given primarily to private schools during the Asian Monetary Crisis of the late 1990s and early 2000s and was designed to help poor schools, especially private schools, survive the emergency. The BOS was introduced in 2005 for all primary and junior secondary schools to enable schools to cover their operational expenses. Previously schools had to raise funds from their local communities to cover these costs.

The funds are provided from the central budget and delivery systems have developed over the years to ensure that schools receive the funds in full and on time. Guidelines on the use of the funds have similarly evolved over the years to ensure that funds are used for the maximum benefit of the students. Some districts also top up the BOS from their own funding.

Funds can be used among other things for administration of examinations, supporting poor pupils, teacher in-service training, additional teaching staff and books, equipment, and materials. Issues that have arisen over the years and had to be addressed by changes in guidelines included large amounts of funding allocated to hire extra staff even though in many cases the schools were already generously staffed by districts and funding being allocated to provide benefits to teaching staff.

more than 50% increase in their BOS allocations. (INOVASI 2021)

- For affirmative and performance-based school funding (BOS *Afirmasi dan kinerja)*, INOVASI conducted advocacy and provided technical advice in the development of the funding formula and targeting of schools. Schools were prioritised based on the characteristic proxy that determined school hardship in facing the COVID-19 pandemic, school size, teacher workforce composition and number of poor students. The BOS calculation formula, selection of regions and schools, and allocation value were formalised as Minister Regulation 23/2020 and Minister Regulation 24/2020, which were passed in June 2020.

From the beginning of 2022, the Ministry of Education discontinued the Affirmative BOS scheme because the formula for regular BOS was further refined to accommodate additional variables through its revised unit cost formula. Affirmative practices will be maintained via the regular BOS scheme.

The improvements to the affirmative and performance-based BOS in 2020 as well as the regular BOS in 2021 will help reduce persistent disparities and support enhanced education opportunities for all.

Conclusion

Building on the discussion and analysis through this chapter, we conclude that there are several areas that might provide for more efficient and effective funding for improvement of student learning in Indonesia.

Indonesia is the world's fourth largest country by population, third biggest democracy and largest Muslim nation. By some projections (Wellington Capital Advisory 2022) Indonesia could possibly become the fourth largest economy in the world by 2045.

Achieving such strong economic gains will require a transformation of the economy towards higher value-added products and services. This will in turn require a workforce and population that is better educated and, in turn, a significant improvement in learning at school level will lay the foundations for that to happen.

To make this happen, some priority areas for action are outlined below.

1. In terms of total spending, consideration can be given to how Indonesia might increase its **total spending** on education to a level that is greater than 3% of GDP, and more towards 6%. Inferior spending on the schooling of its population, challenges any country to compete, sustain high rates of economic growth and transition to more complex production and services. The focus of government policy makers should begin to move away from examining public spending for education as a share of national public spending, and more towards the share of GDP. This is a more meaningful indicator of the level of investment required to help realise the economic potential of the country.

2. Just as important as level of spending, is the **effectiveness** of the spending for education. The public school system has shown to be relatively efficient as a whole in absorbing the high numbers of enrolments in junior and senior secondary schools. However, it has not proven effective in improving the quality of learning, even with very significant increases in spending with that intention. In the future, the school system can usefully turn towards a stronger classroom focus on learners and their needs. This can be cost-effective by helping to realise a return on the investments that have already been made with certified teachers in classrooms and the provision of better schools, facilities, and equipment. The experience from INOVASI suggests that the focus on learners can be supported when resourcing is geared towards improving classroom dynamics through supportive schools and districts. Establishing district accountability for quality of learning may well be a prerequisite for the support and maintenance of these low cost - higher trust interventions.

3. Revising the DAU financing mechanism is a high priority. Reform needs to eliminate the **perverse incentive** for districts to employ additional teachers in order to increase their basic DAU allocation. One way to effect the change would be to convert to a single allocation formula (a modified version of the Fiscal Gap Allocation) that would render the DAU as an instrument for delivering horizontal fiscal equalisation across regional governments. It could still consider population size, poverty rates, remoteness and cost of service delivery and minimise its reliance on historical funding patterns. Eliminating the basic allocation would reduce incentives

for districts to overspend on teachers and would encourage them to spend more efficiently.

4. Establishing **data exchange** between monitoring systems is a practical but important technical step to relieve the administrative burden on schools and government authorities. Further, clear and consistent definitions for education budget expenditure (e.g., a common chart of accounts) for budgeting and reporting by central and local governments will contribute to better analysis of expenditure and better advice about future expenditure that will have more impact for the economy and society (World Bank 2020).

5. A financing framework to **vary fiscal and administrative rules** for regions would help accommodate differences in fiscal and administrative capacities (World Bank 2020). Regions have vastly different initial conditions, spending capacity, and education needs. From high performing cities to remote and low performing districts, spending priorities are different and technical capacities are also highly varied. Some regions will need more support from central-level government, while others should be freed up to accelerate high performance.

6. The INOVASI program has shown that a **focus on learning** in the classroom is associated with greater expenditure by district governments themselves on improved classroom learning. The cost-effectiveness and reach of future programs can be enhanced by facilitating agencies, such as the newly established BGP and BPMP, concentrating on technical advice or support, while the program and activity cost component can be financed by partner districts, schools, or other components of the local ecosystem, such as universities or non-government organisations. Winning the support of senior officials and local leaders will help ensure the continuation of these learning-focused-programs.

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CHAPTER III
EDUCATION REFORM, 2000-2019

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EDUCATION REFORM 2000-2019

Hetty Cislowski

Abstract

Building on the discussion about financial decentralisation in Chapter 2, this chapter focuses on changes in four key aspects of education management that are central to realising the national goal of all children, regardless of their social status and religion, receiving a good education. These changes, driven by the Education Law of 2003 and the Teacher Law of 2005, have taken place in the context of a transition from a highly centralised education system to one which will allow and support local solutions to local problems, and of a massive expansion in the number of schools and teachers and the expansion of the number of local government entities. For each of the four policy areas – improving the qualifications and management of the teaching workforce; school quality assurance; curriculum; and national assessment of learning – the chapter outlines key steps in the reform process and provides a reflection on the four policy trajectories in the context of the current reform program, *Merdeka Belajar*.

Introduction

The purpose of this chapter is to provide a brief description of the progress of reforms undertaken by the Ministry of Education over the past two decades in four key aspects of education management: improving the qualifications and management of the teaching

workforce; school quality assurance; curriculum; and national assessment of learning[13]. The chapter is written from the viewpoint of a technical observer in country. An understanding of the context of these reforms and the challenges that arose in implementation is relevant for understanding the current reform program, *Merdeka Belajar*.

A key point to note in this discussion is that the transition from a highly centralised education system to one which could both allow and support local solutions to local problems was made more difficult by two factors: the scale of the task, and the continuing rapid expansion of education, particularly in remote and rural areas where both infrastructure and local government capacity were, and in many cases still are, weak.

Not only was there a massive expansion in the number of schools and teachers, the number of local government entities also increased steadily. In 1999 (the baseline for decentralisation) there were 292 local governments and in 2015 there were 508 local governments. (Nasution 2016). There are now 514 local governments. The continued creation of new entities has many implications for the making and implementation of policies and practices that are directed to improving students' learning (described in Volume Two).

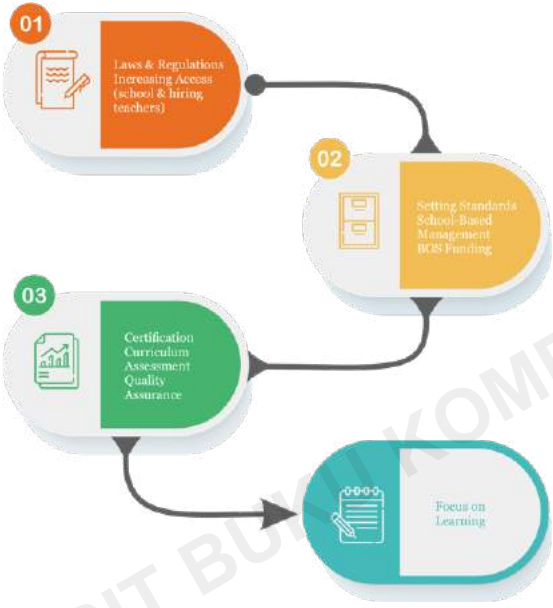
The Education Law 20/2003 – the aspiration to provide universal quality education.

The Education Law of 2003 outlined the scope of change that would be needed for the national education system to ensure that all children, regardless of their social status and religion could receive a good education. It described specific strategies for:

- the roles of government, communities, and parents.
- the content of curriculum and the assessment arrangements
- facilities
- standards
- school management
- the appointment, management, and support of teachers.

[13] In reviewing progress on national reforms in education this chapter refers specifically to policies and regulations developed by the Ministry of Education for the schools in the public system, which comprise approximately 84% of all schools. The Ministry of Religious Affairs oversees the religious schools and adopts or adapts national policies as it deems appropriate. Religious schools, mainly Islamic, participate in national assessments and generally follow the national curriculum with additional or modified content.

Figure 11. Key reforms which have supported the transition from increasing access as the key focus, towards increasing the quality of education and systems for quality assurance.



In two decades, strategies and policies were developed in each of these areas by the Ministry of Education with the intention to improve access to quality education – see Figure 11. These reforms supported the transition from increasing access as the key focus, towards developing the quality of education and establishing systems for quality assurance.

Improving the qualifications and management of teachers

The rapid expansion of education and the transition to a decentralised system of government provided a strong impetus for both the Education Law of 2003 and, more specifically, the Teacher Law of 2005, which took a big step towards professionalising the workforce. With thousands of new schools having been built in the last few decades of the 20th Century and in the first decade of the 21st Century, tens of thousands of new teachers had been hired who

lacked appropriate skills and qualifications. Equally important to the upgrading of qualifications was the need to re-focus the orientation of teachers away from a civil service culture of compliance and maintenance of the status quo to a professional culture which valued and supported personal responsibility, initiative, and creativity – encouraging teachers "to shape policy and practice in the schools". (Bjork and Raihani 2018).

Figure 12. Components of the Teacher and Lecturer Law 2005

- The core principle that teaching is a profession.
- The requirement that all teachers meet a minimum standard of a four- year degree before being certified and that all teachers should be formally certified after attaining the four-year degree.
- The reform of preservice teacher education institutions.
- A mandatory 24-period (18-hour) per week workload required to gain and maintain certification.
- A "special" area allowance for teachers in defined areas such as remote locations, border regions.
- Improved processes of in-school induction and probation.
- A comprehensive system of teacher appraisal and public service salary increases.
- A more systematic program of continuing professional development.
- The merit-based appointment of principals and supervisors based on mastery of the four core competencies.

The Teacher Law (see Figure 12) was designed to cover virtually all aspects of teacher management and development with an objective that by 2015 all teachers in the system should be certified. Certification was the over-arching concept. It specified the requirements for aspiring teachers to be employed; how existing teachers could upgrade their status and receive an allowance; how many hours teachers should be working per week to maintain their status; and how teachers would be assessed regularly to maintain their status. For over a decade the World Bank was a significant partner with the Ministry in delivering the massive training agenda, monitoring progress, and evaluating the impact of the Teacher Law.

Implementing the program for teacher certification

The planning and resources required for this multi-year program to reform the teaching workforce are well documented in *Teacher Certification in Indonesia: A Strategy for Teacher Quality Improvement* (Jalal et al. 2009). Achieving the goal of every teacher having a four-year degree soon became recognised as a long-horizon

task which might not be met in the original time frame. By 2006, a quarter of the teacher workforce still had no qualifications beyond their high school graduation certificate and were yet to enrol in a four-year undergraduate program. More than 60% of teachers did not hold the four-year degree qualification (S1) and would need to upgrade their existing qualifications (World Bank 2020b). Only when the four-year qualification status had been achieved[14], could teachers apply to undertake the competency assessment.

Assessing teacher competence also proved, quite quickly, to be impossible in its original format. Supported by the National Education Standards Board (BSNP), the Ministry intended to assess teacher competency with reference to the four core competencies expressed in the Teacher Competence Standard (professional, pedagogical, personal, and social), through both written tests and classroom observation. The classroom observation was intended to be undertaken by the existing supervisors (*pengawas*) and other educators who would be trained for the role. This was not acceptable to the teacher associations who had sufficient support in the parliament to block the process. The compromise adopted for the certification process was that, instead of being observed in the classroom, teachers would prepare a portfolio of materials e.g., lesson plans, assessment samples, student outcomes, publications, reflection on practice and evidence of professional learning. The portfolio would be assessed by a local teacher training institution and if approved, certification would be granted. If not approved, the teacher would be required to undertake 90 hours of training followed by a test of content. The test had a very low benchmark and over 90% of teachers passed.

Early monitoring undertaken by the World Bank using a randomised control treatment evaluation found that the certification process using portfolios had no impact on student learning. Similar findings were also obtained by other researchers (Kurniawati et al. 2019). There were many concerns both about the integrity and content of portfolios and about the efficacy of the 90-hour training program. The portfolio approach was abandoned in 2012 and replaced by a teacher competency test developed by the Ministry of Education to determine whether a teacher had acquired the desired knowledge and was therefore eligible for certification

[14] The share of teachers with the minimum Bachelor's (S1) degree increased from 37%%in 2006 to 90% %in 2016 (World Bank 2020b).

and receipt of the certification allowance, equivalent to a doubling of their salary.

The competency test had two components, subject knowledge, and pedagogical knowledge. The initial results showed very low levels of knowledge in subject domains and little understanding of pedagogy. The pass rate was set very low which reflected political pressure from teacher associations to enable most teachers to be awarded the certification allowance. However, the timing may have also reflected pressure on the ministry to expend its budget which was usually confirmed late in the financial year, with little time to implement initiatives requiring significant forward planning. The result was that the passing score, agreed to be 30%, was too low to distinguish between high- and low-quality teachers and 95% of teachers passed (*Bappenas,* 2015).

Concerns about the validity of the certification process

The goal of better teaching and learning through certification and the allowance was not realised. The World Bank's monitoring found that no significant differences were apparent between certified and uncertified primary teachers in pedagogical knowledge or student learning outcomes. Reflecting on this, the World Bank observed that the focus on a bachelor degree was a weak indicator of quality, and that new policies should be linked to demonstrated teacher ability and teachers should assume greater responsibility for quality education (Chang et al. 2014).

Returning to Bjork's observation of the situation in 2005, the opportunity to become a civil servant was a strong motivational factor, the impact of which included "an ultimate decline in many teachers' work ethic, and consequently a further decrease in the status of the profession" (Bjork 2005: 14). There are many reasons for the failure of the certification process; however, a positive outcome was the attention directed to a more practical, as opposed to theoretical, approach to improving the quality of teaching. It is also clear that certification and related increases in teacher remuneration made teaching a more desirable career option for young people and increased demand for places in teacher training courses. It is suggested that this will lead to a positive impact on the system in the long term, with better trained teachers gradually

replacing those who are less qualified.

The Teacher Quality Framework (2015)

The Teacher Quality Framework represented a shift to developing skills and knowledge for use in the classroom. It involved two key policy directions:

1. Strengthening teacher quality, accountability, and management systems.
2. Investing in future teachers, from pre-service to induction and early support.

This Framework focused on reform at three points in the teacher development process – teacher selection, pre-service, and in-service training and support. The Framework drew on a substantial body of in-country knowledge and expertise developed over several decades through Ministry of Education and development partner programs for improving teaching, especially focused on student-centred learning. (For a comprehensive review of these programs see: Cannon and Arlianti 2008; Shaeffer and Arlianti 2015).

In 2017 the Australian Government and the World Bank collaborated with the Ministry of Education to further enhance the Framework through the "Improving Dimensions of Teaching, Education Management, and Learning Environment" (ID-TEMAN)" initiative (Afkar et al. 2020). Over the past eight years the INOVASI program has also contributed to improving the Framework by identifying and supporting changes to education practice, systems and policy which demonstrably accelerate improved student learning outcomes. (See Volume 2, Chapter 3).

Current challenges – managing the workforce and ensuring equity for children in rural and remote area schools.

Arising from incomplete, or perhaps imperfect, decentralization there are significant conflicting national and subnational interests in the management of the teaching workforce. The current teacher-student ratio for primary schools is approximately 1:17 which is among the lowest in the world (UNESCO Statistics 2020). This has been a direct result of the allocation of 20% of the budget for education expenditure (See Chapter 2). However, the low teacher-

student ratio has had no impact on improving student's learning and is a significant financial opportunity cost for other investments in quality which could support learning more directly (Chang et al. 2014).

A logical strategy to reduce the over-supply of teachers would be to restrict the number of teachers being employed as civil servants, however, while the national government may be keen to do so, many of the sub-national governments would not be so inclined. This tension arises because the national government sets the overall quota for a district, but the local government can choose to hire teachers as permanent civil servants (*pegawai negeri sipil,* or PNS) or on a short-term basis under the category of contract teachers (non-tenured civil servants; *aparatur sipil negara* or ASN). In a diagnostic study for government, (ADB 2021) it was also noted that principals may hire teachers using school operational funds (BOS) and it is likely that the local government would encourage them to do so, thereby freeing-up local government funds for other purposes. These school-hired contract teachers are often paid well below the civil service salary rates and appointments are susceptible to patronage. Understandably, the non-PNS teachers tend to go along with the arrangements because they live with the hope of one day being employed as a civil servant.

The challenge of over-hiring of both permanent civil servant teachers and honorary teachers is highlighted in the World Bank Public Expenditure Review (World Bank 2020a: 120) and other analyses which conclude that "many districts could supply more and better education, even without any additional [financial] resources" (Lewis and Al-Samarrai 2021). In part, to address this problem the government announced a selection process for non-tenured teachers to become Contract-based Civil Servants (PPPK) with salaries paid from the national budget through a transfer mechanism (Kemdikbud 2021). While this may not be a popular move from the district perspective, it has potential to improve the security and salaries of many teachers and ensure a workforce that is more responsive to the needs of education.

Another challenge is the provision of quality teachers to remote and disadvantaged areas. To address this the ministry has developed a range of approaches including the 3Ts program (Frontier, Outer islands and Disadvantaged Areas). The 3Ts program selects young graduates to undertake a one-year placement prior to their

professional post-graduate study. There are also incentive allowances for experienced teachers to be appointed to 3T areas, and scholarships for trainees in hard to staff areas. However, in conversation, a senior government officer of the Ministry of Education expressed frustration that many of the trainees who accept 3T appointments do not stay with the suggestion that more or different incentives may be required.

In recognition of the mixed results of incentive allowances, the high rates of teacher absenteeism and the poor learning outcomes of students in rural and remote areas, a different approach (Kiat Gure) has been trialed by the ministry in collaboration with the National Team for Acceleration of Poverty Reduction (TNP2K), the World Bank and the Australian Government. The Kiat Guru program (2014-2018) introduced a social accountability mechanism in which parents and community members monitored progress monthly on agreed indicators and targets. The evaluation found a significant positive improvement in students' learning attributed to the active engagement of parents. It also found, perhaps controversially, that the impacts were higher under conditions in which teacher absence was monitored by camera. (World Bank 2020a).

Standards and Quality Assurance

The Education Law 20/2003 set out the requirement for eight education standards which would be used to guide, monitor, and improve education services. For this purpose, the BSNP was established as an independent body with contracted academics and education experts to develop and review the standards. The Board's writing teams had considerable independence in their work, which is reflected in different approaches in style and level of detail of standards documents. The style was also at times, overly prescriptive, with little opportunity for contextualisation. This contributed to some unrealistic expectations and over-staffing – for example the expectation at the time for one teacher for every grade in the school even if there were only a few students for each grade.

The Board developed the eight standards between 2005 and 2007, with significant revisions made by Ministerial regulation in 2013 and 2016. For over a decade, these standards framed the development and operation of quality assurance and development programs including school accreditation, school self-evaluation,

annual reporting by schools, teacher certification, minimum service standards, and teacher and principal development programs.

Table *4* provides an overview of the five standards most relevant to discussion about quality assurance. The other three education standards described school facilities and infrastructure, school management and school financing. Overall, the standards covered both the inputs to schools (e.g., teacher qualifications and number of teachers) and aspects of the teaching and learning process (e.g., assessment, hours of instruction).

Table 4. Extract of five Education Standards most relevant to quality assurance (Ministry of Education and Culture 2018)

Graduate competency (of students)
Attitudinal qualities: belief in God; character - honest, and caring; responsible; lifelong learners; and physically and mentally healthy. *Knowledge dimension:* factual; conceptual; procedural; and metacognitive. *Skills dimension:* creative; productive; critical; independent; collaborative; and communicative.
Content (of the teaching program)
Core Competencies: including spiritual (religion and character), social attitudes (*Pancasila* and citizenship). *Basic Competence*: knowledge and skills based on subject matter in the Curriculum.
Learning Process (implemented by teachers)
Learning characteristics: lesson planning; lesson implementation; assessment of learning processes and results; supervision of the learning process. *Implementation requirements*: duration of lesson time, hours of instruction, class size, classes per school; Textbook, Classroom and laboratory management, core activities, closing activities. *Process and Outcome Assessment*: Supervision of processes by heads and supervisors of schools/madrasas, district/province education offices, and LPMP.

Educator (teachers and principals)

Teachers:

Academic Qualification: bachelor's degree (S1 / D4) and Educator Certificate.

Four Teacher Competencies: personal, social, pedagogical. and professional

Workload of civil servant teachers: 37.5 hours of work + 2.5 hours of rest @ 60 minutes

Eligibility for professional allowances: 24-40 Learning Hours (SD @ 35 minutes,

Principals:

Academic Qualification: bachelor's degree (S1 / D4) and Principal Certificate.

Four Principal Competencies: personality, social, managerial, supervision, and entrepreneurship.

Workload of PNS Principals of school/ Madrasahs: 37.5 hours of work + 2.5 rest hours @ 60 minutes to carry out tasks: managerial, supervision, and entrepreneurship.

Assessment

Scope: includes teacher, school and government assessment of attitude, knowledge, and skills.

Aims: to monitor and evaluate learning process, progress and continuous improvement; assess achievement of graduate competency standards.

Form: class, school and national exams and assessments.

Source: MoEC 2016 Education Standards (Revised). Regulation Numbers 20, 21,22, 23, 24 of 2016. Author's translation

National quality assurance and improvement processes

Four distinct quality assurance processes, based on the education standards, emerged during the period 2000-2010 each with different objectives related to quality assurance. These processes involved classification of schools, acknowledgement of good practices, monitoring indicators of quality, and school improvement – see Figure 15.

Figure 15. Four quality assurance processes based on the education standards

These national approaches to quality assurance emerged at different times to meet different needs and though they were all connected in some way to the national education standards, they were not aligned with one-another. For example, a school classified as a National Standard School would not necessarily meet the Minimum Service Standards. The lack of alignment, the logistical issues associated with the ratings and the costs of implementing the MSS meant that three processes were never fully implemented. A greater understanding of the role of school leadership and the engagement of the school and community in school self-evaluation influenced the development of the current school improvement processes.

Subnational resources for school quality assurance and improvement in line with the standards

Initially, the tasks of monitoring and supporting school quality were intended to be met by subnational personnel who could support quality assurance processes – the supervisors from the district and provincial levels (*Pengawas*) and staff of the *Lembaga Penjaminan*

Mutu Pendidikan (LPMP). There was considerable variation in the extent to which supervisors and LPMP officers were able to undertake these roles given the many changes in their roles over time, the weak alignment of appointment criteria with the required capabilities, and the lack of resources for development activities and travel. There is, however, still enormous potential for their involvement in school improvement in the current reform process.

Minimum Service Standards (MSS)

The Minimum Service Standards (MSS) is one of four formal processes designed to support education quality assurance. The MSS are the responsibility of the Ministry of Home Affairs, for each of the services which the government provides to citizens. While the indicators for districts/cities and schools initially focussed on inputs to the learning process, the 2010 MSS also included expectations for actions to be taken by teachers and principals, the e-learning process itself and learning outcomes – see Table 5.

Table 5. Summary of district/city and school level MSS Indicators (MoHA Regulation 15/2010)

District/city level indicators

1. Access	Provide schools within walking distance of 3 km for SD/MI and 6 km for SMA/MA/SMK.
2. Class sizes	32 for SD/MI; 36 for SMP/M with desks and chairs and white board.
3. Science Lab	Desks & chairs for 36 students; at least one set of science equipment
4. Staff room	Staff room with desks and chairs; separate room for principal of SMP.
5. Teacher supply	SD: 1/32 and minimum 6 teachers per school; special regions 4 teachers per school
6. Teacher supply	SMP/MP: 1 teacher per subject; special regions 1 teacher per cluster of subjects
7. Teacher qualifications	SD/MI: 2 teachers have the academic qualifications and 2 have certification
8. Teacher qualifications	SMP/MT: 70% have the academic qualification, half of whom have certification; Special regions: 40% have the academic qualification, half of whom have certification.

9. Teacher qualifications	SMP/MT: all teachers of Mathematics, Science, Bahasa Indonesia and English have the academic qualifications and certification.
10. SD/MI Principal qualifications	All principals have a bachelor's degree or 4-year diploma and certification
11. Principal qualifications	All principals have a bachelor's degree or 4-year diploma and certification
12. Supervisor Qualifications	All supervisors have a bachelor's degree or 4-year diploma and certification
13. Dinas plan for improvement	District/city governments develop and implement a plan to assist schools in developing a curriculum and effective learning processes
14. Supervision	Supervisors visit once per month with 3 hours for supervision and guidance

School level indicators

1. Textbooks SD/MI	Provision of the approved text books for all students in primary grades
2. Textbooks SMP/MT	Provision of the approved text books for all students in junior secondary
3. Science kits	Specified science kit, visual aids and resources for experiments
4. Library books	Specified number of enrichment books and reference books
5. Teacher workload	Hours of work per week for permanent teachers (37.5) inclusive of teaching and other duties such as lesson planning.
6. School operating weeks	Schools operate 34 weeks pa; specified teaching hours per week for each grade
7. National curriculum	Schools implement the national curriculum.(KTSP) in accord with regulation;
8. Lesson plans	Teachers develop lesson plans based on the curriculum
9. Classroom assessment	Teachers develop and implement an assessment program to support learning
10. Supervision of teachers	The principal supervises teachers and provides feedback twice each semester;
11. Reporting to parents	Teachers provide student assessment reports to the principal each semester

12.	Reporting upwards	Principals report semester exam results to parents and to the Dinas or MoRA office.
13.	School Management	Schools implement School Based Management

Source: MoHA Regulation 15/2010: Minimum Service Standards for Basic Education in Regencies/Cities

A baseline survey (Asia Development Bank 2010), against which subsequent progress could be measured, found significant differences between urban and rural schools. It also found many schools to be in poor condition with classrooms not conducive to learning and very low levels of resources and textbooks. Approximately 40% of schools were not providing the minimum hours of instruction and in one third of primary schools and almost half the junior secondary schools, visits by principals to provide supervision and feedback to teachers were limited to one or two per semester.

On the other hand, there was a high degree of compliance with requirements for all teachers to be involved in curriculum planning, development of lesson plans and assessment and reporting. More than 80% of schools had some elements of effective school-based management but almost half did not meet the three requirements of an annual plan, an annual report and evidence of an effective school committee.

The expectation of the Ministry of Home Affairs across all services was that districts/cities would conduct a baseline study, set targets, calculate the costs of meeting all the MSS and monitor improvement. However, there was little evidence that the districts and cities were willing or able to undertake these processes. In 2011, a pilot study in 18 districts undertaken by the Decentralisation Support Facility, a government and World Bank program, reported that basic district planning processes were a logical and necessary precursor to the establishment of MSS in districts/cities but in most districts these processes were not in place (DfS 2012). This study and the Baseline Survey showed that the MSS could be an effective tool to identify gaps in the quality of services but without effective strategic planning by local government and a massive injection of funds, it was a weak tool for quality improvement.

Rating schools

The establishment of categories of schools was intended to recognise excellence and to inspire schools to work towards improving standards. An objective was to establish at least one international standard school at each of the levels of schooling (primary, junior-secondary, and senior-secondary) in each district. The recognition was prestigious and carried many advantages including additional government funding, the opportunity to charge fees and to set high academic entrance requirements. Such schools became 'preferred schools' *(sekolah favorit)* and attracted enrolment from the higher socio-economic strata. In fact, most were already preferred schools, located centrally and catering to the local elite.

The rating process required that a school (public or private) be nominated and then assessed by senior officers of the ministry. From 2013 the task of assessing schools was passed to the provinces. The rating process involved scoring 326 indicators drawn from the national standards. These ratings were weighted to give a score (percentage) and schools would then be assigned to a category, according to their score. Figure 13 sets out the informal hierarchy of schools.

Figure 13. Informal hierarchy of schools

1. Regular school, with modest resources.
2. Model school, aspiring to become (SSN).
3. National Standard School (SSN), with superior resources.
4. National Standard School Plus, SSN + some international elements.
5. International Standard Pilot Schools (RSBI), now discontinued.
6. International Standard School (SBI), judged to be international standard in resources and programs.

Source: (Bappenas 2015)

Ministerial Regulation 78/2009 elaborated on the curriculum, the funding arrangements, and operating requirements for the pilot schools and mandated that 20% of enrolments were to be students from low socio-economic families, supported by scholarships. None of the pilot schools in 2012 had achieved the 20% low socio-economic enrolment and there was little incentive for them to do so as there was no limit on the level of enrolment fees or the monthly tuition fees that could be levied on students from families who could afford the fees. In contrast, other schools were not allowed to charge any tuition fees. In the context of the government's Free Basic Education policy, the inequity in school resourcing was taken up by advocacy groups who were successful in

an application to the Constitutional Court which ruled in their favour for the Ministry to discontinue the RSBI.

School Accreditation

The Accreditation Board (BAN-SM) was established by Regulation 19/2005 to set up and run a system to assess and monitor the extent to which each school was operating in accord with the national education standards. The role of BAN-SM included development and review of indicators, the budget and schedule for assessment, and reporting on the process. Provincial Boards (BNS-P) were responsible for the selection and training of assessors and managing the assessment process.

While the accreditation process was mandatory, schools could nominate when they were ready to be assessed. Preparation for the accreditation process involved school planning with community engagement, undertaking improvements in the learning environment, identification of learning resources, participation in teacher and principal development activities and completing the questionnaire. Apart from readiness, the timing of the accreditation process was also dependent on the budget that had been allocated for each particular year.

Compliance with the eight standards is assessed by ratings (1-5) on 157 indicators for primary and junior secondary schools and 169 indicators for senior secondary schools. The scores are weighted to provide a final score which generated the accreditation rating A, B, C, or D (D = Failed).

The accreditation began in 2007 and schools were generally positive about the process. By 2013, it was estimated that around 90% of schools had received an accreditation visit, with the majority being rated A or B. Re-accreditation was to be conducted every five years but it was clear this timeline was not feasible given the limitations of the ministry's budget and the backlog of schools awaiting their first accreditation visit. (ACDP 2012)

The take-up was uneven across the country with big differences between provinces in the percentage of schools waiting for accreditation. In Papua, for example, 80.5% of schools had not been accredited by 2012, reflecting issues of location (hard to get to) and school size – with many small schools having insufficient resources to meet infrastructure, equipment. and staffing criteria.

Standards for small remote schools that recognised the limitations imposed by context would have been useful. For example, standards that acknowledge quality multi-grade teaching as an appropriate response in a particular context.

School Self Evaluation (SSE) - moving away from compliance towards school improvement.

The ministry's interest in school self-evaluation was consistent with current global education trends in school improvement and school effectiveness literature which promote a whole school approach to improving learning. The SSE was developed to aid schools in their annual planning and to assist them to prepare for the accreditation process. It was also a step towards self-directed school improvement. Being entirely voluntary, and without regulation or official follow-up, it had the advantage of intrinsic motivation.

The Ministry of Education's Centre for Quality Assurance developed and introduced the process on a small scale in 2011 and extended it to most schools in 2013. The support materials for each school included:

- a set of questionnaires to be completed by the principal, all teachers, and a sample of students.
- support materials on implementation and use of data.
- the opportunity to upload the results to the MOEC website.

The SSE questionnaires have 143 statements which are rated 1 – 4 with the ratings being referenced to both MSS and the National Standards – see Table 6.

Table 6. Ratings for school self-evaluation

School Self Evaluation	
Score	**Level achieved**
0-1	Below Basic Minimum Service Standards
1-2	Below National Standards
2-3	At National Standards
3-4	Above National Standards

Equating scores from self-evaluation with MSS and National Standards was confusing to schools as well as to district/city officials. The basis for equating (other than intuition) was not clear as it was possible to get a high ranking on one system and fail on another.

The ministry issued Regulation 28/2016 to clarify the situation for schools. It reinforced the two components of education quality assurance, namely:

- Internal education quality assurance, which is the responsibility of principals and includes 2 instruments – the School Self Evaluation questionnaires and the new Internal Education Quality Assurance System (SPMI).
- External education quality assurance, which is largely implemented by the school accreditation process every five years, implemented by the BAN-SM and the Provincial Board assessors.

A review of the external education quality assurance (EQAS) was undertaken in five provinces (TASS 2018) to investigate: relevance and utility of the system; effectiveness of support and implementation; and capability of key stakeholders to implement it. While it was found that the two self-evaluation instruments (SSE and SPMI) were widely used by schools there were concerns about the validity of the data and its utility. The recommendations from the review included:

- national policy action, re-focussing EQAS and BAN-SM on school improvement
- revision of the standards
- revision of the legal basis for school quality mapping and improvement
- improving the capacity of personnel (national level, supervisors, and school level)
- strengthening the collection, analysis, and use of data).

In addition, the Accreditation Board itself had concerns. The increasing number of schools being accredited as good and excellent between 2015 and 2019 was at odds with the data on student

learning achievement on both national and international tests (Susetyo et al. 2022).

The current system: the Indonesian School Assessment System

The BAN-SM reviewed its standards and processes in relation to the problems that had been identified. In 2019 it established 35 "core statements" for all levels of education, based on four key performance areas – graduate quality (11 indicators), learning process (seven indicators), teacher quality (four indicators), and education management (13 indicators). There were also some special statements for specific types of schools, for example, nine additional statements for vocational high schools. Following a trial of these components and comprehensive consultation the changes were approved by the Minister for Education and encapsulated by the ministry in Regulation 1005/P 2020 (Susetyo et al. 2022).

Regulation 1005 P/2020 represented a huge breakthrough. It recognised teacher quality as the central element for improving students' learning and shifted the focus from compliance assessment to performance assessment. It recognised the need for assessors to be recruited based on relevant capabilities and personal attributes; and established the use of dashboard monitoring (*Rapor Pendidikan*) to streamline the process and prioritise schools most in need of an assessment visit to follow-up areas of weakness.

Curriculum Reforms

As in many countries, curriculum and assessment are highly politicised. In the fifty years prior to decentralisation, the national curriculum was revised seven times (see Volume 2). In the twenty-year period of this review, Indonesia has had five national curricula, with limited opportunity for full implementation or evaluation of each and resulting in some curriculum reform scepticism among teachers and the wider community.

Local content in the 1994 curriculum

A revision to the 1994 curriculum was completed in 1997 and was still in the early stage of implementation at the time of decentralisation. It included ten subjects in the primary school, one

of which was named 'local content' and was allocated 20% of instruction time.

The idea of local content was to provide relevance and flexibility for different regions. This was a significant departure from the historically centralised national curriculum, designed to ensure conformity and to strengthen national identity. However, it was quickly interpreted as a burden for teachers who were more accustomed to teaching from a textbook in a 'dichotomous style' in which there were only right or wrong answers. The World Bank's assessment of the state of basic education in 1998 concluded that "the curriculum is not yet sufficiently integrated across subjects and grades, nor is it fully integrated with textbook content, teacher training, and assessment. The changes have not been effectively disseminated to all schools, and teachers have not been adequately supported with detailed guides. In addition, the number of subjects and their level of difficulty are often more than teachers and students can handle effectively" (World Bank 1998). A review of its implementation suggests that teachers were not adequately prepared for it and rejected or did not comprehend the underpinning principles (Bjork 2005).

Competency-Based Curriculum (KBK) 2004 and School-based Curriculum (KTSP) 2006

The 1994 curriculum had not been sufficiently socialised nor supported at the time of decentralisation and the new Education Law provided an opportunity to launch a new competency-based curriculum (*Kurikulum Berbasis Kompetensi*, or KBK) in 2004. Around this time the graduate, content and process standards were being developed by the BSNP and it became obvious that there should be some alignment between the curriculum and the content standards. As a result, KBK was replaced in 2006 by what became known as the 'school-based curriculum' (*Kurikulum Tingkat Satuan Pendidikan*, or KTSP), with the expectation that teachers would be able to take the standards and outcomes and design an appropriate learning process for their situation.

Implementation was phased in over a three-year period during which schools and madrasahs were expected to develop their 'KTSP document' including their objectives, curriculum structure, school calendar and syllabi. A school team, led by the principal was

responsible for preparing the curriculum document, with support from the district office and LPMP. It was expected that the school committee would be involved in the preparation of the document and sign-off prior to it being submitted to the district or provincial office for approval. Individual teachers would then develop their lesson plans in accord with the approved school curriculum document.

A Rapid Assessment (CSAS 2008) in 15 provinces found that while over 90% of schools said they had 'begun implementation' only 56% had their document endorsed by the local education office. When asked who had developed the document, 58% said 'themselves', 26% said 'the local education office' and 15% answered 'the provincial office'. Most schools identified the teacher working groups (KKG or MGMP) as the forum in which they developed their documents. When asked what challenges they had faced in implementing their curriculum, a lack of access to, or information about, effective teaching was most frequently cited.

Emerging concerns about behaviour and character lead to a new curriculum, K13

Unrelated to the implementation of KTSP, concerns were being expressed in the media and amongst lawmakers about student misbehaviour – including bullying at school, street fights, smoking, religious extremism and cheating on exams. The ministry responded by directing more attention to the development of character and strengthening religious values and observance. There was also an emerging narrative from the government (expressed in the RPJMN and *Renstra* (strategic plan)) about the need for students to be better prepared for their future in a competitive global environment, including the need for soft skills and character attributes more aligned with *Pancasila*. It was also apparent that the school-based approach to curriculum was a step too far, that it assumed too much capacity at school level, and that the system was unable to properly implement it. The focus on outcomes and competencies in KTSP was to be replaced by a more prescriptive approach to what would be taught and how it would be taught.

In November 2012 the ministry developed a series of documents to explain the rationale and development process for the new curriculum (MoEC 2012) – see Table 7.

Table 7. Rationale for K13

Future Challenges	Future Competencies
• Globalisation: World Trade Organisation, Association of South East Asian Nations, SEAN Community, Asia-Pacific Economic Cooperation; China-Australia Free Trade Association • Environmental issues • Progress of IT • Knowledge convergence • Knowledge based economy • Rise of creative and cultural industry • Shift of of global economic powers • Influence and impact of techno science • Quality, investment and transformation in the education sector • Result of TIMSS and PISA	• Communications skills • Clear and critical thinking skills • Ability to weigh the moral aspects of an issue • Ability to be an effective citizen • Ability to try to understand and be tolerant towards different views • Ability to live in a global community • To have a wide interest on life • To be work ready
Rising Phenomenons	**Community perception**
• Drugs • Corruption • Plagiarism and cheating in national exams (*UN*) • Social unrest	• Too much emphasis on cognitive aspects • Students' burden is too heavy • Lack of character building content

The consultation period for *K13* was three weeks and there was intense media coverage. The curriculum did not get off to a good start. It was immediately perceived as being very top-down, with no room for localisation. It mandated a thematic approach to integrate all subjects, including character education in every lesson, which was seen by some teachers and advocates to be another work-load issue.

Science and Social Sciences had been removed from the primary grades as separate subjects, in part to allow more time for additional lesson hours in Religion and Character. There was also a reduced emphasis on English and local languages, also to allow for increased time for Civics, Bahasa Indonesia, Mathematics, Sport and Health, and Art and Culture.

In response to criticism from many sources about the downgrading of Science, English, and local language, Science was put back into the curriculum for Grades 4 – 6 by integrating some science content into other subjects, and it was agreed that English could be offered as an elective subject. Despite these concessions, there was ongoing pushback from teachers on structure and content, supported by

academics and the teacher unions. Some parents and NGOs were not happy with the extension of hours of instruction; others welcomed the incorporation of values and moral education across the curriculum.

There were also concerns about the quality of the textbooks, which were developed in a very short-time frame, and the perceived additional workload for teachers. While the new curriculum was intended to reduce teacher workload (relative to KTSP requirements) it became apparent that the additional assessment and reporting functions and the requirement to incorporate moral themes in all lessons would require considerable effort from teachers. This was particularly the case for small schools where only one teacher per grade meant that collaboration across a grade, to share the burden, would not be possible.

In relation to pedagogy, one of the new practices included in *K13* was the requirement to adopt a thematic approach. The thematic approach was intended to help students to see the interconnectedness of knowledge and the application of thinking skills across all disciplines but in K13 the dominance of this approach was considered excessive by some, particularly because of the way in which the requirement was imposed on lesson planning (Anshory and Isbadrianingtyas 2019). A change of minister enabled a softening of many aspects that had offended a wide range of stakeholders – not just the teacher associations, but parents, academics, business leaders and media. The change of minister also enabled an extension of time for the 'national rollout' of workshops that had been scheduled for 2013 and 2014 – see Figure 14. The training program was put on hold while a brief review was undertaken. Teachers were advised

Figure 14. A new paradigm in teacher training and support

Move to a new paradigm in teacher training and support.

Centrally designed "train the trainer" workshops have been the method of choice for informing and supporting teachers over decades of curriculum rollouts. Rarely, if at all, has the training been completed across the country before the next iteration of the curriculum.

K13 is possibly the last curriculum to depend heavily on paper resources and in-service training roll-out. The increase in internet connectivity, availability of on-line resources and, learning from more adaptive processes developed during COVID-19 created a new paradigm for teacher training and teacher support.

that they could continue with *K13* or the previous curriculum while a more thorough review was undertaken.

On completion of the *K13* review in 2015 the curriculum was re-issued in 2016 with minor revisions. By this time, however, the planned roll-out of socialisation workshops had been delayed to the point that many teachers may not have made any significant changes in what or how they taught before *K13* was halted by the pandemic in 2020.

The Emergency Curriculum for COVID-19 and a new curriculum in progress

In response to the COVID-19 pandemic and the burden on teachers to implement blended learning under sometimes very difficult and constantly changing circumstances, an emergency curriculum was rapidly prepared, based on *K13,* but with a reduced content load and a focus on essential competencies. Implementation support for the *Emergency Curriculum* included literacy and numeracy modules, with sections for teachers, students, and parents.

School closures, learning from home, and the COVID-19 emergency focussed the attention of teachers more strongly on individual students' needs and individual factors which impeded or facilitated their learning. It also enabled a sharp focus on the core foundational skills of literacy and numeracy in early grades.

While the immediate focus in the COVID-19 period was the implementation of the *Emergency Curriculum*, the ministry continued to work on a prototype curriculum which was launched in 2022 as *Kurikulum Merdeka*. The new curriculum was conceived both as a means of addressing COVID-19 pandemic learning loss in the intermediate term and improving educational outcomes in the longer term. It specifies learning outcomes at a high level in two-year learning stages. *Kurikulum Merdeka* was designed to free up the teaching and learning process, providing resources for less-skilled teachers, and enabling competent teachers to make decisions about how to best design and deliver the curriculum at the school level, *Kurikulum Merdeka* supports the child-centred 'teach at the right level' (TaRL) approach and encourages teachers to draw on the local context and student interests to make the school developed curriculum more relevant and engaging. Chapter 5 of this volume provides further description and analysis of *Kurikulum Merdeka*. See, also Volume 2 Chapter 6.

National Student Assessment Programs

National exams have had a troubled history in Indonesia. Prior to 1971, national exams were conducted mainly to determine eligibility for entry to the next level of education. This was replaced in 1983 by the National Final Phase Learning Evaluation (EBTANAS) which introduced a combination of school marks and national exam marks, however, concerns about abuses in this system and some lack of understanding about the technical aspects led to a reversal to a purely external national examination in 2002, the National Final Exam (UAN) for Grades 6, 9 and 12.

The establishment in 2005 of the National Education Standards Board (BSNP) included responsibility for the UN (National Exam), administered by the Ministry of Education. With a rapidly growing student population and an increase in significance, the logistical burdens related to the printing, distribution and security of the UN were considerable. Each year, as exams results were announced there was extensive media coverage of the logistical problems, cheating, leakage of answer keys, substitution of candidates and stress and anxiety for students and teachers. A media monitoring service (CSAS 2009) identified over 500 articles related to the UN in six national newspapers over a six-month period between November 2008 and April 2009. Almost 200 articles were logged for April – the exam month. The main issues highlighted were advocacy for a legal challenge to the UN, failures in administrative arrangements, and evidence of cheating. Issues were also raised about the impact on students and teachers, the fairness and validity of the exams, the budget, the purposes of the exam and how data would be used.

Many of the identified problems were linked to the significance of the exam. Student and family expectations of entry to a 'good' public school were determined by scores reported to the second decimal place. In 2006-7 a group of NGOs and human-rights activists (The Advocacy Team for the Victims of the National Examinations) mounted a successful lawsuit to abolish the UN on the grounds of ruthlessness to students and unfair administration. The legal processes proceeded successfully from the district to the provincial level and finally to the Constitutional Court in 2009. The Supreme Court also ruled in favour of the complainants, and it appeared that the exams would be abolished, but a 'clarification' of the judgement allowed the exams to be held, subject to the ministry undertaking

specific improvements in administration which included identifying low performing schools and providing grants to support additional lessons and resources.

Challenges in national assessment and progress towards abandonment of the national exams (UN)

A number of factors ultimately contributed to the demise of the national exams and the foundation for a new approach in assessment.

Widespread distortion of results from the inclusion of school marks

From 2004 to 2014 a student's final exam mark was a composite of the pure exam score and the school score. The purpose of this composite score was to improve the overall validity of the exams by considering school assessment. However, analyses within Bappenas showed how the inclusion of a school mark with the 'pure exam mark' could significantly inflate the final score – see Figure 15 as an illustration of the impact that the school mark had on the final score for Mathematics, noting that similar discrepancies were also observed in Bahasa Indonesia, Science and English. It was possible for students who failed in the UN external tests to achieve an overall pass mark higher than students who had a high score on the external exams. Consequently, the pass rates were incredibly high. In 2012, 99.5% of students passed the UN, and some unlikely results were reported such as the high ranking of a disadvantaged province in the rank order of provincial mean exam scores. Following the analyses by Bappenas and the Assessment Centre, the inclusion of school marks in the composite score was abandoned (Bappenas, 2015).

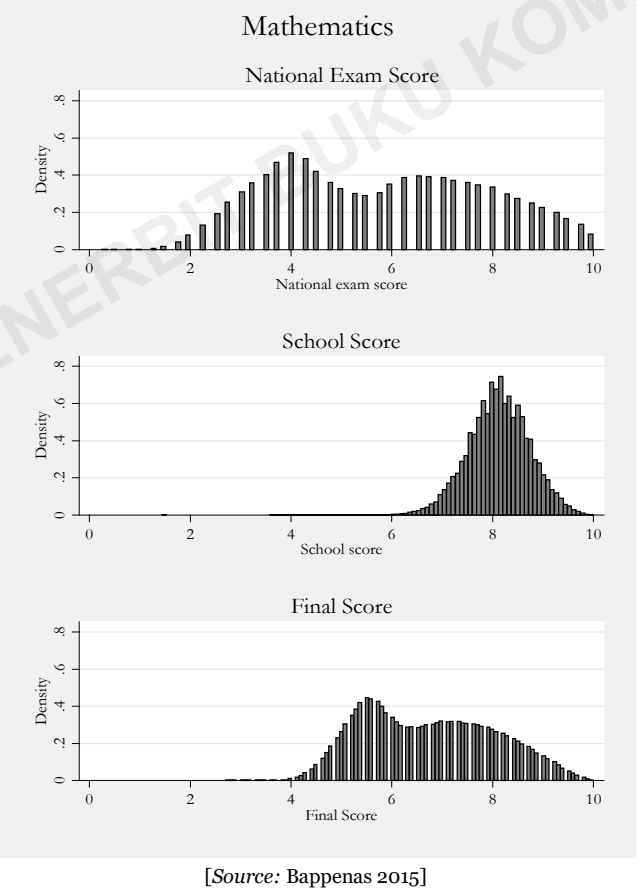
Persistent cheating and logistical problems

In an analysis of the exams in 2009, the situation was described as "mounting pressure from multiple high stakes based on fear of negative consequences; the very real possibility that the national exam has exceeded its feasibility limitations; combined with weak quality assurance and feedback mechanisms" (CSAS 2009: 9).

Conducting a high stakes exam at the scale required in Indonesia was costly. It was projected that each year around six million

students would be tested within a few weeks, across the entire archipelago. Apart from large numbers of security and supervisory staff being required, some districts also engaged police officers. In 2011 five versions of each exam paper were prepared to deter cheating and in 2013 up to twenty versions of each paper were prepared for the same reason. This increased the workload of the Assessment Centre tasked with generating many items and tests formats that would be technically equivalent in content and level of difficulty. It also increased the security risks associated with each stage of the development and administration of the exams as more people became involved. At the school level, considerable amounts of money and effort were being spent on exam preparation and 'try-outs' with inequity increasing as parents who had limited funds were unable to afford the fees for exam preparation.

Figure 15. National exam score and school score for mathematics



[*Source:* Bappenas 2015]

In 2013 a regulation (32/2013) was issued to abandon the external exams for Grade 6 on the basis that sufficient places existed for most students to proceed to the next level of education and schools were sufficiently capable to conduct end of stage exams. It was also true that for many years preparation for the national exams seriously distorted the curriculum at Grade 6 (as well as Grades 9 and 12) and required parents to pay for extra lessons related to exam preparation. Primary schools were given the responsibility for the end of stage exams with the ministry's Assessment Centre providing a percentage of nationally developed items as a quasi-form of moderation. This seemed to work well and there was little objection.

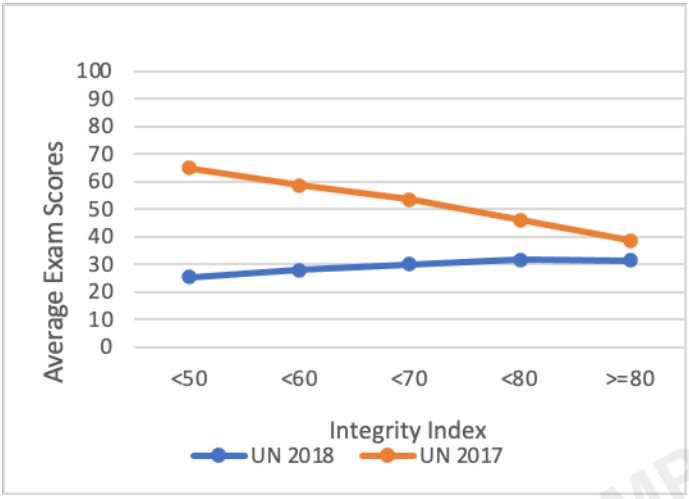
The national exams begin to lose their purpose.

Once the school marks had been removed from the calculation of the UN score, the UN scores were very low. Low marks on national exams were problematic, both for students and the government, with excessive numbers of students failing the tests and unable to graduate from school. Regulation 131/2015 was issued to separate the UN from determination of school graduation which would be awarded on school marks. While the immediate problem was solved by the new regulation, the UN remained a controversial issue. It was increasingly difficult and costly to control cheating, even with multiple versions of the tests being developed. In 2016 the budget for the UN was around one trillion IDR (approx. 100 million AUD).

Moratorium called on UN 2016, and rescinded.

In response to the continued low pass rates and high levels of cheating, the minister announced a moratorium on the UN in 2016 and introduced a new school level assessment, called the National Standards Based Exam (USBN). The new exam would be developed by schools with 10% of items being developed by the Assessment Centre. It was intended to be aligned with *K13*. However, this was not possible without a change in the Law (a lengthy process) and the UN was re-instated in time for the planned launch in 2017. The two exams, USBN and UN were conducted separately within a few weeks of each other. Grade 12 and Grade 9 students sat for two final exams, one of which determined graduation and the other (UN) would rank Grade 9 students for entry to either academic (SMA) or vocational (SMK) senior secondary school.

Figure 16. Difference in average exam scores and Integrity Index scores (2017 and 2018 for SMA and MA combined).



Source: Advice prepared by INOVASI using Puspendik data.

Introduction of computer-based testing

Computer based testing for the UN was introduced as a pilot in 2017 and then fully implemented in 2018. It was a remarkable achievement by international standards. At the same time, the Assessment Centre introduced psychometric procedures to detect cheating. Initially the exam results had a negative correlation with the integrity score – see Figure 16. This information was fed back to schools and there was a significant improvement in integrity scores the following year. Perhaps for the first time, it seemed that there could be some confidence in the reliability of the test scores: a new baseline was being established which had mean scores on various subjects approximately 20 - 40 points lower than those prior to computer-based testing.

The final demise of the UN – cancelled in 2019 due to COVID-19 and then abolished in 2021

It was deemed that the UN, with the evidence of low score achievement and the National Standards Based Exam (USBN) in operation, had very little purpose other than national monitoring. The government was also developing alternative national monitoring at grades 4, 8 and 11. Thus the UN was abandoned

during the first year of COVID-19 and formally discontinued in 2021 when it was replaced by the national assessment program, *asesmen kompetensi minimum*.

Legacy of computer-based testing and the UN

A review of computer-based testing s (Berkhout 2020) showed that with the use of technology, a government can substantially reduce cheating on a high-stakes national exam. In addition, the annual operational cost of computer-based testing decreased substantially from around 9.2 million AUD to 2.4 million AUD. The authors found evidence that computer-based testing supported the "transition from a cheating culture to a learning culture" as students and teachers invested more time and effort in learning rather than how to cheat more effectively. They also noted that as the computer-based testing expanded there was evidence of a ripple effect: schools who were not directly involved in computer-based testing in the pilot also showed a reduction in cheating, "either through peer pressure or voluntarily".

A legacy of the UN is that the Assessment Centre put appropriate systems and processes in place with a team of qualified and expert personnel who will continue to apply their skills and knowledge to the current and future assessment programs. Some important lessons learned from the changes in the past two decades include the need for precision and consensus on the purpose of a particular assessment, the application of specific assessments tools for specific educational purposes and the need to ensure the reporting of assessment information is aligned with the needs and capabilities of the intended users.

New approach - Student competency assessment

Given the known weak performance of Indonesian students on PISA tests at age 15 years, the need for reliable diagnostic information and trend data in the lower grades was critical. From around 2008 the Ministry of Education, with support from the World Bank, worked on assessment frameworks in Reading, Mathematics, Biology, and Civics subjects for Grades 4, 8 and 10. These frameworks were modelled on international tests such as PISA, TIMSS and PIRLS and were used to construct the *Indonesian National Assessment Program* (INAP) which was first administered in 2015. Although

national benchmarks could not be reasonably established from the pilots, the ministry noted that from samples taken from international tests, the performance of Indonesian students was "far below the international average" (MoEC 2017). This was an ambitious and obviously costly program, initially undertaken only in provinces which agreed to participate and support the test administration. Nonetheless it was an important step towards cyclical competency-based assessment.

At the same time, the ministry was increasingly concerned about the need to improve class-based assessment and to support teachers to teach and assess higher order thinking skills which were required by the K-13 syllabus. The *Asesmen Kompetensi Siswa Indonesia* (AKSI) was designed to meet the needs of schools and to establish a comprehensive program for national monitoring via a sample of students in Grades 4, 8 and 10.

The AKSI pilots in 2016-2018 covered Mathematics, Reading and Science, including students' ability to use higher order thinking skills in those domains. The tests used a format like those in international tests and approximately 10% of the items were from TIMSS and PISA, to allow for a comparison of levels of achievement. The intention was to assess one grade each year, creating a three-year cycle for assessment. *AKSI for Schools* (*AKSI-Sekola*) was also being developed to enable teachers to download parallel forms of the tests to use in their classroom assessment at any time.

The testing program was halted at the onset of the COVID-19 pandemic and by the ministry in anticipation of a new assessment program that would be aligned with the spirit and objectives of the new curriculum.

National assessment is now an integral component of the *Merdeka Belajar* reforms. It has three components: the minimum competency assessment (AKM) which assesses reading literacy and mathematical literacy; the character survey which measures attitudes, values, beliefs, and habits that reflect a student's character; and the learning environment survey which measures a range of school level factors that influence learning including the teaching and learning process in the classroom and school climate. The AKM was first conducted in 2021 and again in 2022. Deliberately avoiding the potential for it to become an end-of-stage test, Grades 5, 8 and 11 are to be tested each year. Every school is tested but not every student: schools are required to select a sample

of students according to national sampling guidelines. The efficacy of these arrangements has yet to be assessed.

The issuing of report cards, known as *'Rapor Pendidikan'* for schools, districts, and the national system in 2022, based on 2021 national assessment results, for the first time gave credible feedback to teachers, schools, and communities on their educational performance. Schools and districts are now beginning to familiarise themselves with the report cards and to use the assessments as intended to inform and drive policy and priorities. The process and outcomes of this are described in Chapter 6.

International assessments

Indonesia has participated in several international assessment programs:

- PISA – Program for International Student Assessment (participation 2000 – present)
- PIRLS – Progress in International Reading Literacy Study (participation 2006 – 2011)
- TIMSS - Trends in International Mathematics and Science Study (participation 1999-2011)

PISA assesses Reading, Mathematics and Science of 15-year-olds and collects data on a range of school and student variables. From this it provides participating countries with trend data, analyses of factors associated with different levels of performance and country comparisons.

The decision to withdraw from the TIMSS and PIRLS programs was partly attributed to cost saving and partly due to the Assessment Centre developing in-house capability to develop and administer similar tests.

Continuity in the PISA program has provided international and Indonesian benchmarks for the national assessment program. The Assessment Centre has also benefited technically from its association with the OECD in the areas of item development and the inclusion of student surveys and system indictors alongside cognitive assessment. The 2018 results, together with the trend data over almost two decades, are now considered significant catalysts for reform. (See Chapter 4: The Learning Crisis).

Reflection on the four policy trajectories

This chapter has briefly outlined the reform efforts and challenges in four key aspects of education policy – teacher quality and management, quality assurance, assessment, and curriculum on the basis that these are major policy levers at a central level which can be deployed to create and support a change in direction.

The chapter is silent on issues of school leadership, school culture, parent engagement, and school-based management. Nor has the chapter examined major cross-cutting issues such as gender equality, disability, and social inclusion. This does not suggest in any way that policy in these areas is of lesser importance. Each of these is critically important for students' learning and have been integral to the INOVASI program.

Across the four national policy domains explored in this chapter the progress and outcomes of the reforms have been influenced to varying degrees by the unresolved nature of Indonesia's decentralisation, the cultural legacy of the civil service from the New Order period, and by the scale and diversity of the implementation environment.

While the Teacher Law and the accompanying reform program were unable to deliver the expected results during the past two decades, positive impacts can be seen in the increasing professional status of the workforce and the higher level of teaching qualifications now being attained. The massive growth in the number of applicants for teaching means that this is now a preferred occupation, and in many areas, employment can be selective, based on merit, though this is not yet always the case.

The bold ambition for initial and ongoing certification was defeated almost at the start - the initial proposal to have in-class observation failed because of resistance to the idea that all teachers are not equal. The subsequent portfolio approach and then competency testing did not sufficiently differentiate teachers and it is therefore unsurprising that there has been no finding of a positive relationship between certification and student learning outcomes. The ministry is in the process of implementing a teacher competency framework based on five levels of competence in the classroom. This is a very

positive development and will be aligned with the broader civil service competency framework. There are still critical issues to be resolved in recruitment, conditions, and budget for teachers, all legacies of challenges associated with decentralisation.

The search for meaningful and manageable tools for school quality assurance shows a clear trajectory. It began with systems for external monitoring of compliance with numerous indicators (mainly inputs) to generate ratings of schools. There was little follow-up action or support associated with the activity and very little data were of value to schools for improvement in learning. The current model of quality assurance has two parts, an annual streamlined school-based self-evaluation which focuses on learning outcomes and an external assessment of processes and resources. The information is captured in a dashboard of achievements and areas for improvement which can be used for system level reporting and, potentially, differentiated support to districts and schools. In this progression there have also been attempts to align quality assurance with Minimum Service Standards which are a requirement of the Ministry of Home Affairs for all districts. The revised Minimum Service Standards include indicators of learning and equity as well as inputs to the education process which should encourage districts to focus their plans and funding more on learning outcomes than has been past practice.

In many if not all countries, both curriculum and assessment are issues where politics and populism are active forces. Indonesia is no exception. The curriculum has been particularly vulnerable to changes in the level to which teachers are empowered or disempowered in making decisions about the content and learning process in their classrooms. The manner and the speed at which new curricula were developed and rolled out in the past, and the quality of the support materials, had a negative influence on credibility and degree of acceptance – a different approach has been taken for the *Kurikulum Merdeka,* as described in Chapter 5.

The national exams persisted long after their original purpose (to determine whether students could progress to the next level of education) was no longer relevant, given the progress in access to school. The exams continued to be high stakes for teachers and students largely because of perceived teacher and school status and competitive entry to “preferred schools”, including the opportunity to attend a free public school as opposed to paying fees at a private

school. Consequently, cheating and mal-administration were major problems for the ministry which were not solved until computer-based testing and calculation of the integrity index were established, by which time the support for, and indeed the need for, national exams had largely evaporated. COVID-19 and the recovery period created the opportunity for the ministry to finally drop the UN and develop a new national assessment (the minimum competency assessment) with the specific purpose of monitoring quality at Grades 5, 8 and 11. The extent to which the new assessment also provides useful information for schools is critical for learning improvement.

In relation to the four reform areas discussed, there is a history of political influence and populism. There is also evidence of the desire to continually improve policies and policy implementation to support learning. 'Reform' is possibly not the most appropriate word to have used for this chapter as it implies that success is reaching a desired, well defined and static position. The 'reforms' examined in this chapter did not achieve all their initial objectives, but they have moved the system forward from the initial emphasis on access and compliance to a stronger focus on learning and empowerment of teachers.

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CHAPTER IV
THE LEARNING CRISIS

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Hetty Cislowski

Abstract

This chapter sets out the nature and scope of the learning crisis in Indonesia – historically and as exacerbated by the COVID-19 pandemic – a crisis which had a greater impact on students already disadvantaged by household poverty and the low standard of education available to them in disadvantaged and remote areas of Indonesia. The magnitude and scope of the challenge is set out using data from PISA and national assessments, and via comparisons with other countries and over time. This analysis is followed by discussion of the cost to individuals, communities, and the country of continued low performance in basic skills, as well as discussion on the relationship between poverty and learning. Set against this challenging analysis, the chapter then turns to discussion about the urgency for improving learning and lessons from the pandemic. It sets out five 'extraordinary' strategies that have the potential to support a transformation in teaching and learning. The chapter concludes with a positive observation that current reforms, and what has been learned from INOVASI and other development programs, provide a foundation for the required intensive effort to transform teaching and learning in the elementary grades in Indonesia.

Introduction

In Indonesia, and globally, children's learning was abruptly and very significantly disrupted by the COVID-19 pandemic in 2020-21. This

was widely talked of as a "learning crisis" which impacted most severely on children who were already disadvantaged by household poverty and the low standard of education available to them in many disadvantaged and remote regions. Responding to the disruption focussed attention sharply on what students should be expected to achieve at each level of schooling. It also created the environment for more open dialogue about the level of student attainment in Indonesia prior to the disruption of the pandemic and what changes might be needed in education policy to better support students who were disadvantaged or faced barriers in their learning.

Reflecting on the performance of Indonesian students on the most recent international assessment of learning (PISA 2018) the Education Minister, Nadiem Anwar Makarim, stated to a press conference that "The country is in a period of learning crisis. The COVID -19 pandemic has made the situation even worse … Seventy per cent of our students who are aged 15 have reading and mathematics skills below the minimum competency. We have to declare a crisis which needs extraordinary solutions." (Tempo.co 2022). This is perhaps the strongest call for action on learning that has been made by a Minister for Education in Indonesia in the past two decades. It is timely. Not only is the Indonesian performance on international tests lagging far behind other countries, over the past two decades there has been little or no improvement in learning (Beatty et al. 2021).

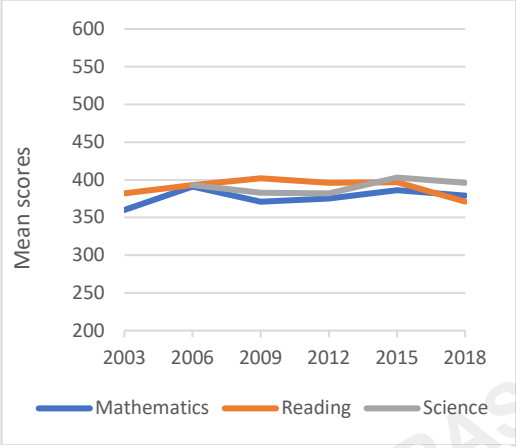
This chapter explores the evidence of a long-term learning crisis, prior to and including COVID-19, and suggests positive ways of approaching the problem, the first steps being to understand what the data show about student performance and the urgent need to act.

The main source of evidence for the learning crisis - low performance on PISA tests

Indonesia has participated in each of the PISA tests (Program for International Student Assessment) of 15-year-olds from 2000 to the present. It also participated in PIRLS (Progress in International

Reading Literacy Study) for Grade 4 in 2006 and 2011 and in TIMSS (Trends in International Mathematics and Science Study) for Grade 8 in 1995, 1999, 2003, 2007 and 2011). The international assessments are important for Indonesia not only for the international benchmarks they provide but for the provision of trend data which, to date, could not be reliably calculated from Indonesia's national assessments which have been subject to many changes over the past two decades.

Figure 17. PISA - Indonesian trends in mean scores for Mathematics, Reading and Science 2003-2018



Source: OECD (2019) Program for International Student Assessment (PISA). Results from PISA 2018. Indonesia Country Note. http://www.oecd.org/pisa

Looking at the trend in scores from 2003-2018 the PISA data highlight two features: the lack of significant progress over a long timeframe - see Figure 17, and the high percentage of students not achieving the minimum level of competence – see Figure 18. [Source: OECD PISA Database.]

The inevitable conclusion from two decades of PISA data in Indonesia is that, despite an almost tripling of the national education budget and sustained efforts to improve teachers' qualifications, remuneration and capacity development (CPD) opportunities, over the long term the trend in the average scores shows very little or no improvement. Around 70% of students are not meeting the minimum competence thresholds in Mathematics and Reading. This observation is not new. The lack of progress was noted in the Background Study for three successive National Medium Term Development Plans, including the most recent one.

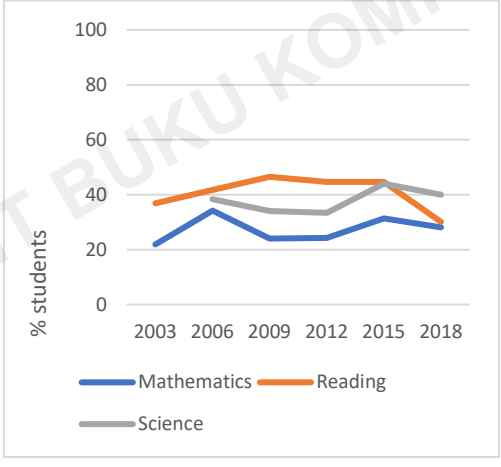
It should be acknowledged at the outset that there are divergent opinions about the relevance and reliability of the PISA tests as evidence of student achievement. In an analysis of the concerns that

have been expressed Zhao (2020) identifies three categories of issues which are raised about PISA:

(i) that the tests represent a Western/European view of education which is inappropriate for many of the participating countries.
(ii) that there are flaws in the development of the tests and their implementation.
(iii) that the negative impacts of media interpretation of results and the extent to which tests may have a normative influence on education globally are skewing the curriculum towards the PISA-like competencies. (Zhao 2020).

In relation to these concerns, it is important to recognise that representatives of the participating countries contribute to test development and review processes, have a role in assessing the cultural relevance of items for their students, provide advice on the sample to be drawn in their country and are responsible for test administration. The misuse of assessment data by the media and other parties underscores the need for the OECD and participating countries to provide guidance and support to ensure accurate and meaningful reporting of student performance information and technical matters.

Figure 18. PISA - Indonesian trends in the percentage of students achieving Minimum Competence (Level 2 and above) for Mathematics, Reading and Science 2003-2018



Source: Trend data for the percentage of students achieving minimum competence are derived from Tables of Levels of Proficiency in the PISA Database, provided in each PISA Results report from 2003 to 2018. Trend data for science begins in 2006.

Reporting of test results, not just PISA, must always be sensitive to context and opportunity. Poverty and parents' level of education have huge impacts on children's readiness for learning as well as the rate at which they master the basic skills of literacy and numeracy. While poverty rates are steadily declining, Indonesia has only

recently transitioned into a middle-income country. There are still massive inequities between rural and urban areas and across the diversity of the archipelago. Moreover, there are significant differences in results for students from private schools and state schools. Around four in ten students in Indonesia attend private schools, which is significantly higher than the average for OECD countries and neighbouring countries such as Thailand and Vietnam (MoEC 2016). These factors must be acknowledged in provincial, national and international comparisons and planning for improvement.

Comparisons with other countries and comparisons through time

As a middle-income country, hovering between lower and upper middle-income status, Indonesia could reasonably be compared with other middle-income countries which participate in PISA such as the Philippines and Vietnam, who are also close neighbours. More broadly, Indonesia might also be compared with countries in other parts of the world such as Brazil, Peru, Colombia, and Morocco which are also middle-income countries. However, all comparisons are complicated by a range of contextual factors such as the level of socio-economic diversity within each country, the nature of the education system, cultural, political, and geographic factors.

Comparison of student performance over time, within a country, is also complicated. For example, in Indonesia the rapid expansion of schools in rural and disadvantaged areas around the turn of the century, generated an influx of disadvantaged children entering the education system. Consequently, the share of 15-year-olds from the poorest quintile of Indonesian households enrolled in school increased from 53% to 74% between 2009 and 2013 (*Bappenas*, 2015). From this, it might be expected that PISA scores would be lower in 2018 when more students from poor households were in the test sample than were in the 2012 sample. While it appears that this may have been the case, there was only a statistically significant difference in the Reading score (25 points) between 2012 and 2018. Mathematics and Science scores declined within this time frame, but not significantly - see Table 8. A more fine-grained approach might look at drop-out rates, year by year in different districts and provinces.

Table 8. Indonesian students' PISA trends in mean scores 2000-2018

	2003	2006	2009	2012	2015	2018
Mathematics	360	391	371	375	386	379
Reading	382	393	402	396	397	**371**
Science	395	393	383	382	403	396

(Source: OECD, PISA 2018 Database, Tables I.B1.10, I.B1.11, I.B1.12, I.B1.26 and I.B1.27

Notwithstanding the differences within country, the results between 2000 and 2018 suggest four observations can be made about the average scores:

- The average PISA scores (Mathematics, Reading and Science) were low and can be described as consistently low.
- Reading scores showed a trend of improvement until 2018 when there was significant decline.
- Mathematics scores were consistently lower than scores in Reading and Science except for the 2018 test cycle.
- Science scores were higher than Reading and Mathematics scores in four of the seven test cycles.

Evidence from national assessment in Indonesia

In the past, national examination scores at Grades 6, 9 and 12 had been found in many areas to be grossly inflated by the inclusion of school scores and by high levels of cheating. The school scores were generated by internal assessment and were in some cases negatively correlated with the "pure" (external) exam scores. Following analyses by B*appenas* in 2014, the school scores were abandoned which resulted in lower average national exam scores which dropped further with the introduction of Computer Based Testing and application of processes to detect cheating. (MoEC 2015). A brief summary of changes from 2000 to 2019 in the national exams in Indonesia was provided in Chapter 3.

In addition to the end of stage examinations at Grades 6, 9 and 12 the Ministry of Education has also administered several national sample tests of Literacy, Mathematics and Science for national monitoring on grades other than the end of stages. The first of these tests was INAP (Indonesian National Assessment Program) in 2016 for Grade 4, followed by the AKSI (*Asesmen Kompetensi Siswa Indonesia*) conducted in 2018, for Grades 4 and 8. Although the

results cannot be directly compared with PISA test results, the AKSI showed a similarly low level of achievement in Mathematics and Science with about 70% of students scoring in the category "Poor". There was a higher level of achievement found in Reading with more than half the students (53.2%t) above the category "Poor". See Figure 19.

Consistent low level of competence in Mathematics

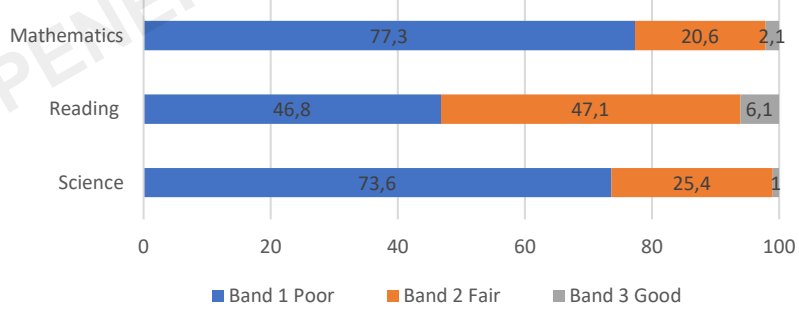
It appears that, for some time, insufficient attention has been given to the low performance in Mathematics, relative to Reading. On both national and international assessments Mathematics is lagging behind performance in Reading – see Table 9.

Table 9. Percentage of students achieving below minimum competence on PISA.

Percentage of students below minimum competence on PISA assessments						
Year	2003	2006	2009	2012	2015	2018
Reading	63.2	58.3	53.4	55.2	55.4	59.9
Mathematics	78.1	65.8	76.7	75.7	68.6	71.9

Source: Ministry of Education and Culture (2018) *Asesmen Kompetensi Siswa Indonesia,* Puspendik, Jakarta.

Figure 19. AKSI Grade 4 2017 national sample - percentage of students scoring in competence bands.



[Source: OECD database 2003-18.]

On average, only about three students out of ten have been achieving minimum competence in Mathematics on PISA tests. From inspection of the percentage scoring in each band, it is apparent that improvement is not simply a matter of 20 or 30% of students being pushed up to achieve Minimum Competence (Band Two) - see Table

10. The bulk of students (40%) are in the very low scoring category (Level 1b) with many students only able to correctly answer a few questions. This is a strong signal that learning in the early grades needs to be strengthened so that in later grades students have mastery of the skills and mathematical concepts which allow them to apply the skills to problem solving and practical mathematical scenarios.

To convey an idea of the scale of the effort that will be needed, in 2023 there are approximately 24 million students and 1.6 million teachers in Indonesian primary schools. A huge effort will be required, equivalent to the 'Literacy Movement' over the last two decades, in hundreds of districts to help teachers to understand mathematical thinking and concepts and to develop their own skills and competence to inspire students and guide their development. This would need to be a long term and well-funded commitment from national and local levels to achieve the improvement required. Non-government organisations and some of the mathematics teacher associations are already active in some districts, supporting both teachers and students in the development of skills, concepts, and applications of mathematics to everyday problems.

Table 10. Percentage of students in each skill band for Mathematics

PISA Mathematics 2018: Percentage in each Competence Band and Below Competence						
Level 1b	Level 1a	Level 2	Level 3	Level 4	Level 5	Level 6
40.6%	31.3%	18.6%	6.8%	2.3%	0.4%	0.0%

[*Source:* OECD database 2018]

From another, very different perspective, the SMERU (Social Monitoring and Early Response Unit) reported a decline in student learning from their study of Indonesia's learning profile from 2000 to 2014 (Beatty et al. 2021). The study used Family Life Survey data which included simple Mathematics and Reading questions. The finding was that across all subgroups the average Grade 7 child in 2014 achieved at about the same level as a Grade 4 child in 2000.

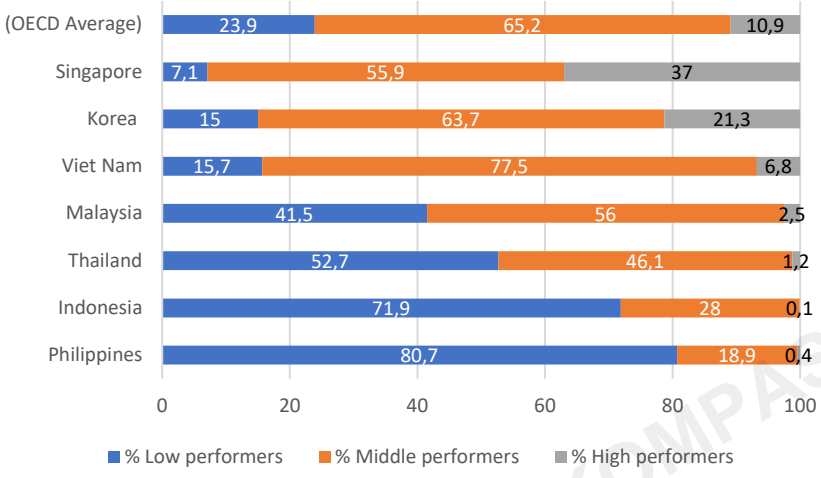
The cost of continued low performance in the basic skills

The cost to the government of the continued low performance is, in the short term, the inefficiency of the massive investment in teacher salaries and certification which was intended to ensure an improvement in the basic skills. The inefficiency of the education budget significantly reduced the opportunity to direct funding to other key issues such as initiatives to support equity and quality initiatives for remote or disadvantaged students. Furthermore, investment in increasing access would be pointless if students are not learning. The issue of inefficiency in spending the education budget is explored in detail in Chapter 2.

In addition, the cost of students not learning is also borne by families who have struggled to invest in their children's schooling. For the students themselves, the immediate costs may include lack of enjoyment and fulfilment in learning and in the long term the limitations of a poor education on their opportunities for further education, employment, well-being, and economic security.

The longer-term cost to government and the national economy of low academic performance is the poor quality of the workforce and the missed opportunities for economic competitiveness and leadership in the region. Figure 20 shows the differences between neighbouring countries in the percentage of their lowest and highest performing students in Mathematics. Indonesia's big challenge is to move more students out of levels 1 and 2. Ensuring that more students attain minimum competence by age 15 years will require a two-track approach: establishing the foundational skills in the early grades and very specific remedial education for students already in upper primary and junior high school.

Figure 20. PISA 2018 - Comparing Indonesian and other regional students' performance in Mathematics, showing percentage share of low performers (below level 2), middle performers and high performers (levels 5 and 6).



Source: OECD data base: PISA 2018.

The relationship between poverty and learning.

The impact of poverty and disadvantaged home background on learning are critical issues and there is no quick fix. Even though the poverty rate may be decreasing, the impacts of poverty tend to persist over time. It has been shown that Indonesian students whose families are poor and suffered through the 1997 financial crisis are still the most likely to be in the lowest quintile of performance, unable to break through the cycle of inter-generational poverty (Idzalika and Lo Bue 2020). It is noteworthy that students who were in the 2018 cohort for PISA were just starting their education at the time of the 2008 global financial crisis which also impacted Indonesia.

Since 2006 the OECD has undertaken analyses of the impacts of socio-economic disadvantage on performance by collecting information about students' home and family background with a survey at the time of testing. Among other outputs, the information is used to generate the 'economic, social and cultural status' (ESCS) score and has been further used to calculate the percentage of academically 'resilient' students. In 2018, the criteria for academic resilience were adjusted (OECD 2018, Agasisti et al. 2018) to include

performance at or above Level 3 in *each* test domain (Mathematics, Reading and Science). The resilience score is therefore the percentage of students in the bottom quartile of their country's ESCS who achieved level 3 or above in each of the three tests.

Indonesia's very low academic resilience score (1.1%) (See Table 11) means that students from a poor background have almost zero chance of scoring above minimum competence. This finding is very disappointing in the light of successful poverty reduction programs from which overall poverty declined from 13.3% in 2010 to 7% in 2018 (BPS 2018: 84). In its 2020 report on the state of children in Indonesia, UNICEF (UNICEF 2020) draws attention to the positive impacts of many programs in health, sanitation, and livelihoods. (UNICEF 2017: 37). Improvement in these indicators will in time, contribute to improved learning outcomes. The challenge for educators is how to accelerate the change.

Table 11. Academic Resilience of selected countries calculated from PISA ESCS scores 2018.

Student academic resilience in selected countries, derived from the percentage of students in the bottom quartile of ESCS who scored at or above level 3 in each of the three domains of PISA – Mathematics, Reading and Science.							
Indonesia	Thailand	Malaysia	Viet Nam	Singapore	USA	Japan	OECD av.
1.1	4.4	8.12	30.6	43.4	22.3	40.4	25.2
Per capita expenditure expressed as the cumulative spend per student over 9 years of basic education, USD							
14,717	27,717	60,899	Not available. *	112,608	121,919	98.030	89,092

* Viet Nam data on per capita expenditure were not available at the time of PISA 2018 publication of results.

[*Source:* Agasisti et al. 2018; data on per capita expenditure from OECD Vol II data base 2019.]

The comparisons of per capita expenditure for nine years of basic education also highlight the issues of sufficiency and efficiency of budget for education in Indonesia which have been explored in Chapter 2. Two key questions are:

- To what extent are the current programs for disadvantaged children and disadvantaged schools making a difference?
- Can Indonesia break out of the learning crisis with the current level of expenditure?

The PISA analyses of variation in the resilience scores of countries suggest that resilience reflects both the degree of quality in the education system and equity. If children from poor backgrounds also have a low-quality school (with under-qualified teachers, low level of resources, weak leadership, negative school climate) then there is almost no chance they will achieve a high level. However, students from poor households in a high-quality school have a much better chance to achieve at a high level. It should be encouraging that drawing on comparisons of policies in participating countries, the OECD Working Paper advised that policies that improve at least one of these dimensions (quality or equity) without negatively affecting the other, can be expected to raise the percentage of resilient students (OECD 2018). School-level factors identified by OECD as being positively associated with academic resilience include:

- De-segregating schools so that students with low ESCS can have the opportunity of a good school – to avoid the 'double jeopardy' of poor home background and poor school.
- Ensuring teacher quality – qualified, certified (meaning well educated and competent in both content and pedagogy) and hired locally to match the learning requirements of the school.
- Adequate learning time at school – especially for disadvantaged students who may not be able to study at home, do not have the resources to learn independently, and who may need additional one-on-one coaching (noting that in Indonesia Grades 1 and 2 students may spend only three hours per day at school).
- A strong positive climate, at class and school level – along with low truancy level, and a small number of discipline cases.

The urgency for improving learning.

An educated and skilled workforce is a matter of national interest: contributing directly to economic growth and regional competitiveness; decreasing inequity and household poverty; and supporting national well-being. The relationship between education and economic growth has been investigated by many economists, foremostly Hanushek and Woessmann, using PISA and other assessment data for modelling increases in gross domestic product (GDP) with education indicators. An overview of this work (Hanushek & Woessmann 2020) makes the point that the education

indicators must be learning outcomes, not years of schooling completed. This is an important issue for Indonesia where in the past, policies and targets for universal basic education, followed quickly by targets for universal twelve years education, were given a high priority.

Some key points from Hanushek's modelling are especially relevant for Indonesia –

- increasing quality at the current levels of access would have a far greater impact on GDP than ensuring full access to education at the current level of quality outcomes.
- the gains to be expected in GDP from quality outcomes far outstrip the costs of improvement in the short-run business-cycle management – which in this case is the cost of upskilling the workforce.
- even small improvements in the skills of a nation's labour force (as little as 25 PISA score points over a decade) can have a significant impact on future well-being.

The importance of improving teachers' knowledge and skills in the classroom is a massive challenge. One of the conclusions of the World Bank's review of the certification process in 2015 was that mastery of subject matter contributed significantly to effective teaching of Mathematics but that that many teachers lacked even the most basic mathematical skills themselves. (World Bank 2015). It is alarming to consider that this situation may not yet have improved significantly.

The new urgency – to recover from the impacts of the COVID-19 pandemic.

Globally, and in Indonesia, economists and education experts have been calculating the impact of the pandemic on children's learning and their future economic prospects. For Indonesia, the World Bank's revised projections for Indonesia were that the COVID-19 pandemic could result in a learning loss equivalent to approximately one year of schooling, a loss of 25-35 points on PISA reading scores and a reduction of between 408USD and 578USD per student in future annual earnings. (Afkar and Yarrow 2021).

Projections about learning loss, (both forgotten and forgone) contributed to the sense of urgency and the need for both short-term

and long-term action. In a very quick timeframe, development partners and researchers in Indonesia collaborated with each other and with government on short term strategies for responding to the pandemic and on the development of long-term strategies for remediation and improvements in teaching and learning. In a publication of guidelines for policymakers (Beatty et al. 2021) a key risk identified was the widening of the learning gap between the rich and the poor because of learning loss during the pandemic. This threat is also flagged in other reports. (Afkar and Yarrow 2021; World Bank, UNICEF, and UNESCO 2021). COVID-19 is expected to have a long-term influence on students' learning, especially those students who were already disadvantaged by poverty or living in remote locations.

To establish a baseline, INOVASI conducted a series of four studies which included a custom-designed Student Learning Assessment (SLA) in collaboration with the Ministry of Education and the Australian Council for Educational Research. The test incorporated TIMSS Numeracy and PIRLS Literacy frameworks, Indonesia K-13 curriculum expectations and locally developed items for the Sustainable Development Goals (SDGs).

The first learning gap study (Spink et al. 2022) determined a baseline which showed a significant proportion of Indonesian students in Grades 1, 2 and 3 were below expected learning levels as defined by both international standards and national grade level expectations as defined by K13 – see Table 12 and Table 13. It also identified the significant impacts of home background factors on achievement which led to a conclusion that COVID-19 would be expected to widen the learning gap, with a disproportionate effect on the most marginalised students.

Table 12. Literacy – percentage of students achieving at each level of competence.

Level	Description	Grade 1	Grade 2	Grade 3
Level 3	% Meeting, or exceeding, grade expectations	14%	39%	55%
Level 2	% At, or working towards, grade expectations	44%	44%	37%
Level 1	% Below grade expectations	42%	18%	8%

[*Source:* Spink et al 2022]

Table 13. Numeracy – percentage of students achieving at each level of competence.

Level	Description	Grade 1	Grade 2	Grade 3
Level 4	% Meeting or exceeding expectations	11%	16%	32%
Level 3	% At, or working towards, expectations	34%	40%	39%
Level 2	% Below grade expectations	27%	24%	19%
Level 1		28%	19%	10%

[*Source:* Spink et al 2022]

The second learning gap study (Randall et al. 2022) addressed the need for an improved curriculum, better quality instruction, and well-designed implementation to ensure that students across the breadth and diversity of Indonesia have improved opportunities to learn at school. The study highlighted the need to take account of the variation in teachers' skills and confidence and the importance of good diagnostic tools to ensure teaching is aligned with students' needs. It is a forward-looking study which contributes to both the short-term remedial phase and long-term recovery.

The third learning gap study (Pascoe et al. 2022) drew attention to the uneven impacts of the pandemic, especially with factors associated with location, in other words, for students living in rural and remote areas. The issues include underqualified teachers and limited resources, amplification of learning disabilities that may be associated with individual students (including gender, language spoken at home) and socio-economic indicators including inadequate internet connection and devices to support learning. Analysis of the data collected in this study indicates that the greatest intersection of learning disadvantages in literacy was for male students with a disability in rural areas. Subsequent to a disability, the next pronounced intersection of disadvantage was for geographically isolated male students whose mother tongue is a local language, not Bahasa Indonesia. Learning ability was also associated with ease of access to internet connection and devices to augment learning, teachers' level of confidence to implement distance learning, parents' language, level of education and ability to support learning at home.

The impact of location and parental factors is underscored by the RISE Indonesia study in Bukittinggi, an urban area where families are generally well-off and educated. In this location most students experienced a positive impact on their learning during COVID-19, primarily as a result of effective parental support. (Lim et al. 2022). The impacts were less beneficial for high achieving students, a pertinent reminder of the risks of generalising the effects of the pandemic.

INOVASI's fourth study (Sukoco et al. 2023) investigated learning loss and recovery in a sub-sample of 69 schools, 4,103 students and 360 teachers. The study used an assessment of these students in literacy and numeracy undertaken just prior to the pandemic in early 2020, as a baseline (January 2020), and similar measures taken one year into the pandemic (May 2021) and two years on (August 2022). The results show a learning loss equivalent to six months for literacy and five months for numeracy after one year of COVID-19 and school closures, with an average learning recovery of two months after two years. Importantly, the study identified factors associated with faster learning recovery. When teachers used a simplified curriculum focusing on foundational skills of literacy and numeracy, recovery was twice as fast (four months). Other factors associated with faster learning recovery included use of diagnostic assessment and differentiated learning, strong school leadership and parent engagement.

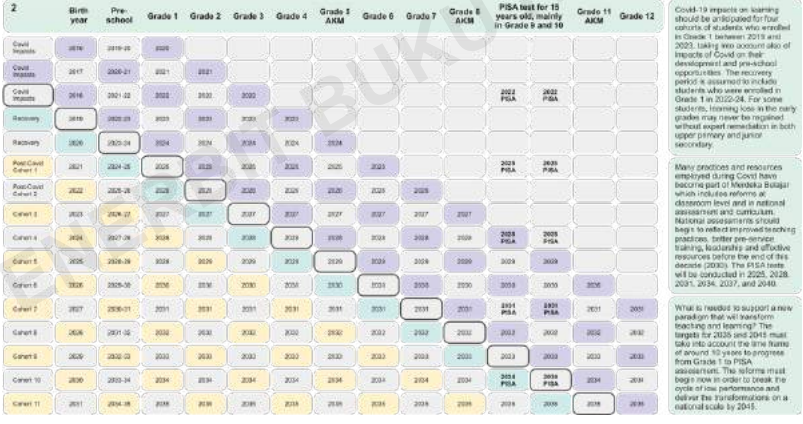
Lessons from the pandemic

Among the many lessons derived from the COVID-19 disruption is the need to "build back better", recognising that schools must be better than they were before the pandemic to make up from the losses. (Hanushek and Woessmann 2020). For this to be achieved, a long-term vision is required which will transcend politics and electoral cycles, by securing the commitment of a broad range of stakeholders beyond the current ministry's advisors and senior officers.

Remediation combined with long-term re-orientation, as modelled by Kaffenberger (2020), and well-illustrated in the second learning gap study (Randall 2021) is essential. Without a long-term commitment to the vision, the risk of long-term loss is real.

Turning around the learning trajectory of both teachers and students will require a very systematic approach to improvement, year by year, at each school and at each teacher training institute. At a practical level this could be expressed as a commitment to action and resources to ensure that the students who enter Grade 1 each year will have a much better chance than is currently the case, to achieve minimum competence in basic skills by the time they finish basic education at Grade 9. Such a commitment requires a very targeted and unrelenting focus, continuing systematically for at least a decade – the time it takes to move through from Grade 1 to the end of junior secondary. The following cohort diagram (Table 14) draws attention to the need to understand the entire learning trajectory of students who may be included in a PISA sample. For example, the students who may be in the PISA sample in 2028 were in Grades 1 and 2 during a period of major disruption in their education.

Table 14. Cohorts of students moving through schooling.



What kinds of solutions might be considered in Indonesia?

Minister Nadiem Makarim (Tempo.co 2022) called for "extraordinary solutions" to the learning crisis. For the purposes of this study, extraordinary solutions would be approaches that are, until now, not evident in Indonesian education, or that exist but are weak and could be strengthened significantly in order to support a transformation in teaching and learning.

Providing stability in key policy directions

A prominent feature of Indonesian education in the last two decades has been the frequent changes in key areas - curriculum, assessment, and teacher development, with minimal consultation with, and feedback from, classroom teachers. Deviations in direction, associated with changes in ministerial appointments, may be a contributing factor in the persistent low education outcomes in Indonesia. Other countries in the region (such as Singapore, Hong Kong and Viet Nam) have experienced greater continuity in leadership which has potentially provided continuity for educators and the reform programs of government. (McLaughlin and Ruby 2021).

A decade-long timeframe with opportunity for continuous review and refinement in an ongoing, iterative process with extensive teacher input has not happened in Indonesia this century. This present decade, post-COVID-19, could be the opportunity for the government to consolidate policies and focus on the support needed by teachers to achieve transformations in their classrooms. This must include a strong emphasis on pre-service education and in-service development, resources, and support for teachers.

Partnership across ministries and with provinces

A high-level national task force may be needed across ministries and with representation from the provinces which dominate in low performance to identify what changes would be needed and can be made across government to achieve a breakthrough in the current situation – see Table 15. Focus areas might include school resourcing and accountability; health and welfare support; teacher pre-service training, employment and conditions, management of the workforce; the nature of additional services and resources for low performing schools (e.g., special programs, information technology and connectivity); and the budget and timeframe required.

An effective national-subnational approach would need to engage several ministries. For example, the Ministry of Villages and Development of Disadvantaged Regions is already supporting the use of village grants for reading materials and the establishment of early childhood services. Planning for and action to achieve Sustainable Development Goals has demonstrated the value of collaborative activity to make this possible. Given the scale of action

required, there is potential for coordinating ministries to provide the leverage required to b significant changes in resourcing, support, and accountability.

Table 15. Current configuration of Coordinating Ministries and Ministries of direct relevance to education.

Coordinating Ministry	Relevant Ministries	Examples of support for learning in disadvantaged regions
Human Development and Cultural Affairs	Education	Planning, Research. Policy development, support and monitoring.
	Religious Affairs	Responsible for policy and management of public and private madrasah. Collaboration with local level MoRA officials.
	Villages & Development of Disadvantaged Regions	Equity programs. Support for ECDE programs; Adult and community literacy programs. Reading centres and books.
	Health	Nutrition support for mothers and babies to support brain development. Nutrition supplements for teenage girls.
Political, Legal & Security Affairs	Home Affairs	All aspects of regional governance and finance. Accountability of officials in the Dinas. Eradication of corruption. Minimum Service Standards.
	State Apparatus Utilisation and Bureaucratic Reform	Civil service teachers – recruitment, number, distribution, conditions, development.
Economic Affairs	Finance. Manpower.	Budget allocation. Fiscal transfers.

Examples of such partnerships or taskforces are evident in responses to previous crises. The Financial Crisis in Indonesia (1997), the tsunami response (2004), the Global Financial Crisis (2007-08) and the COVID-19 pandemic (2019-21) each triggered Joint Decrees or Regulations for collaborative planning and action across ministries. Such taskforces should have clear objectives and be time-limited so as to not interfere in line responsibilities.

Widening the scope of accountability at local level – both the 'short route' and the 'long route'

A feature of democracy is that, via the ballot box, citizens hold their government accountable for the quality of public services such as

education. After the first decade of decentralisation, a stocktake of the impact of decentralisation on education (Lewis 2010) concluded that even though the decentralisation of government did not appear to have resulted in an improvement in public services (in this case, learning outputs), the public did not seem to be concerned. A possible explanation being that weak demand for quality services could be a factor in the sub-standard level of services being provided.

This observation raises many issues to be explored: who is ultimately responsible for the quality of education? To what extent are teachers and principals responsible for the quality of education under the current regulations and laws? What is the role of school committees and school-based management in relation to quality?

The World Bank pilot program, KIAT Guru (2016-2019), found that citizens' engagement had a statistically significant positive impact on teacher behaviour *and* student learning outcomes (World Bank 2020). This pilot was a test of the efficacy of direct parental involvement – the 'short route'. The 'long route' builds the capacity and accountability of key actors in local government to improve education. As might be expected, a two-pronged effort, strengthening both the long and the short route is likely to be more effective (Dewachter et al. 2018).

The politics of local government and the level of capability within district education offices impact on many decisions about education, not least of which is the hiring and promotion of teachers and principals. A single decision about hiring or promotion of a principal can have long-term effects, either positive or negative, on the life chances of potentially thousands of students. For this reason, it is critically important that personnel decisions are learning-oriented rather than politically oriented. In situations where the bureaucracy may have become accustomed to politically oriented decision-making in a previous regime, the leadership of the mayor or regent is critical in re-orienting the bureaucracy to focus on quality education (Beatty et al. 2018).

Reviewing the amount of time for learning

The OECD study of academic resilience identified that the amount of learning time is a significant factor for disadvantaged students (Agasisti et al. 2021). Instruction time in Indonesian schools

appears to be lower than in many other countries. In 2014, the total hours of instruction mandated by K13 for primary schools in Indonesia was 15% lower than the OECD average. In *K13*, Grades 1 and 2 required 555 hours a year, compared with the OECD average of 774 hours per year and the Vietnam average of 787 hours per year. The cumulative effect of this for Indonesian students was estimated to be that almost two years less time in school than the average OECD student (Al-Samarrai 2014).

Although learning time has been extended with the introduction of the *Merdeka Belajar* it is still below the OECD average. For Grade 1, 1080 lessons per annum are mandated, equivalent to 630 hours for the year and for Grade 2, 672 hours is mandated. While these are expressed as the minimum hours, there may be benefits in providing more time for Mathematics and remedial literacy in schools where learning levels are low.

Extending learning time alone may not make a difference. A challenge for Indonesia is that in many of the most disadvantaged areas, for reasons not of their own making, teacher quality and school leadership are so low that an increase in instruction time might be of little or no value. Some insight into the importance of how teachers use the instruction time can be gained from the TIMSS Video Studies undertaken in Indonesia in 2007 and 2011 (World Bank 2015). Observations revealed lessons to be teacher-dominated, with around 60% of time being taken up by exposition and lecturing, and large amounts of time being used for Mathematics organisation and non-learning activities. This study pre-dates the K13 curriculum and some changes in teacher behaviour could be expected as *Merdeka Belajar* emphasises the need to free teachers from administrative tasks and high-stakes exams and to focus teachers' efforts on the learning needs of their students.

What level of improvement could Indonesia aspire to achieve in the next decade?

Viet Nam joined the OECD PISA assessment program in 2012 and has surprised many observers with its high-level performance on PISA. Viet Nam has a decentralised system of governance and a population of approximately 100 million. Since the decentralisation reforms of the 80's the country has experienced significant economic gains, attaining lower middle-income status in 2010. Like

Indonesia, Viet Nam still faces a significant equity problem arising from the difference in living conditions and education participation of the rural poor and, like Indonesia, it has been reforming its education system over the past decade.

The relevance of Viet Nam in this chapter is the potential for very real change in performance in a lower middle-income country through building academic resilience: focussing on improving the achievement of the poor. In the most recently published PISA results (2018) (see Table 16) the average score of Vietnamese students was above the OECD average. It was similar to advanced economies such as Japan and Korea, and higher than many developed countries in the OECD, as well as being significantly higher than some of its neighbouring countries. Furthermore, on the PISA resilience calculations in 2012, almost 17% of Vietnam's poorest 15-year-old students were among the 25% top-performing students across all participants in the PISA tests. The average across OECD countries was 6%.

Table 16. PISA 2018 mean scores for selected countries.

	Indonesia	Thailand	Malaysia	Viet Nam	Japan	Korea	OECD Av.
Reading	371	393	415	505	504	514	487
Mathematics	379	419	440	496	527	526	489
Science	396	426	438	543	529	519	489

[*Source:* PISA 2018 database]

After the initial scores in 2012, Viet Nam's overall results declined slightly and then rose again, except for Mathematics which did not show an increase. These data points are possibly not sufficient to describe a trend and the next PISA data set will be of great interest. The important point from the current data though is that a poor country such as Viet Nam is scoring well above the OECD Average and more than 100 points higher than some neighbouring countries of similar economic status - Thailand, Malaysia, and Indonesia.

In an interview following the 2015 'stunning results' Andreas Schleicher, OECD Director of Education and Skills, suggested three clusters of factors in the education system were relevant to the high achievement of Viet Nam:

- A long-term plan, high-level commitment and high spending on quality; [by comparison, the 12 years access plan is proceeding more slowly than is the case in Indonesia].
- Not just rote learning – students learn to apply mathematics concepts and thinking to a range of unfamiliar contexts; the curriculum is deep rather than wide.
- Teachers are highly respected and have extensive professional development; teachers create a positive learning environment. (Schleicher 2015).

In addition to the observations from the OECD, there have been many studies and analyses of factors which might explain, or are at least associated with, the achievements of Viet Nam. In a recent literature review (Boman 2022), identified key changes which had occurred -

- *At the Input level* – strong and sustained economic growth over the past decade contributed to poverty reduction and enhanced cognitive development.
- *At the process level* – schools were improved, deep learning was built into the new curriculum; the role of principals was strengthened; increased learning time (access to full-day school instead of previous half day model).
- *Values* – Confucian cultural values prioritise discipline and perseverance; high family expectations of education; most students spent an additional two hours per day on 'supplementary' education which could be homework or coaching for those whose parents can afford it.

Aspirations for improved learning outcomes in Indonesia

The legacy of the pandemic for both students and teachers, and the current uncertainly around Indonesia's projected economic growth, are significant factors which will likely have an impact on the pace of change. On the positive side, there is an opportunity now to build on current reforms and what has been learned from INOVASI and other development programs.

Building on current efforts to transform teaching and learning in the elementary grades will have an impact and this will be enhanced where there is constant, consistent, and high-quality analysis and monitoring of assessment data. Resources for assessment in the early years of schooling will be helpful for identifying key areas for focused attention in the early and middle grades of school. A comprehensive and reliable assessment program will enable tracking of student cohorts in each district and sub-district.

In districts with low learning achievement, more time, effort, and resources focussed on the foundational skills of Reading and Mathematics in the early grades will bring about change. Targeting schools where students are already socio-economically disadvantaged will help ensure that they are not further disadvantaged by low quality teaching. One of the principles of *Kurikulum Merdeka* piloted in INOVASI schools is differentiated learning (sometimes referred to as TaRL – teaching at the right level) which encourages school and class level decisions in response to student needs. In some cases, this might mean that students need more learning time for specific subjects. In addition, there are already examples (such as Reading Camp and Maths Emergency) of school and local community service organisations providing after-school and extra-curricular activities and remediation in Mathematics and Reading for underperforming students.

Teachers will benefit from support that helps them make the change from teaching by rote methods to diagnostic assessment and teaching that establishes what students currently know and can do, followed by instruction that builds on this in a structured and engaging manner.

Teachers will also benefit from instructional leadership and guidance provided by school principals and supervisors. In addition to supporting teachers to be more effective in their classrooms, leaders can also facilitate the development of a learning community within the school, to lead whole school improvement and to mobilise parents and community to support the school and the learning process. Appointment and tenure for school leaders could usefully take account of evidence of such leadership capabilities.

Transforming teaching and learning to the degree that is required to address the learning crisis in Indonesia will benefit from policy

makers and leaders reflecting on current beliefs and practices and making changes that will improve the system. Drawing on the work of Pritchett et al. (2023) attention might usefully be directed to a set of actions to improve teaching and learning such as:

- committing to universal high quality foundational learning.
- undertaking frequent, reliable, and relevant assessment.
- aligning all aspects of the system with the commitment to learning.
- supporting teaching.
- ensuring that teachers and systems can be flexible and able to adapt what they do, as they implement the curriculum.

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CHAPTER V
MERDEKA BELAJAR

CHAPTER V: MERDEKA BELAJAR

Joanne Dowling

Abstract

This chapter describes the origins of the *Merdeka Belajar* paradigm and its provision of philosophical and strategic guidance to education reforms in Indonesia. It reflects on changes to policy and practice since 2019 and how *Merdeka Belajar* encourages a system perspective on changes in five policy areas – access to quality schooling, curriculum, assessment, education standards, and teacher management. The systems perspective reinforces the importance of common themes within each area, as well how the opportunity and value afforded by interdependencies can be realised across the five areas. Discussion in each area of policy and practice provides background to current activity, highlights progress that is being achieved and draws attention to opportunities and barriers that will need to be addressed if the improvement agenda is to be sustained.

Introduction - The *Merdeka Belajar* paradigm

> *"...hanya dengan kemerdekaan kelembagaan unit Pendidikan, hanya dengan kemerdekaan kreativitas dan inovasi daripada guru, hanya dengan itulah pembelajaran di kelas bisa terjadi secara sungguh."*
>
> *(...only with emancipation of the school unit, only with emancipation of teacher creativity and*

> *innovation, only with those things will learning in the classroom genuinely take place.)*
>
> Nadiem Makarim, Merdeka Belajar Episode 1 Launch Video (Kemendikbudristek 2019)

Merdeka Belajar or 'emancipated learning' was introduced in December 2019 as a paradigm that encapsulates the changes required in the Indonesian education system to accelerate improved learning and non-cognitive outcomes for Indonesian students. *Merdeka* meaning emancipated, and *Belajar* meaning learning, refers to a mindset or way of thinking by teachers, principals, parents, government, and the wider community about the delivery of education, one that empowers students to be independent, self-regulated learners and teachers to be pro-active and autonomous leaders of student learning (Ministry of Education 2020-24 Strategic Plan). *Merdeka Belajar* is described as the 'spirit' that gives 'soul' to the overall direction. The term 'paradigm' is used in this chapter to describe *Merdeka Belajar*, in the sense of a philosophical and theoretical framework within which policies and programs are formulated.

First introduced by Minister Nadiem Anwar Makarim at the beginning of the second term of Joko Widodo's presidency (2019-24), *Merdeka Belajar* aligned neatly with the 'mental revolution' espoused by President Joko Widodo as part of the nine priorities for his first term of government, or the *Nawa Cita*, and signalled in his priorities for his second term in government. Like *Merdeka Belajar*, the mental revolution describes a philosophy; a national 'movement' to change mindsets, attitudes and behaviours that were seen to be holding Indonesia back from becoming a progressive, modern, and competitive nation. Also described as 'positivism' (*Kementerian Komunikasi dan Informatika* 2023), the mental revolution encourages values of integrity, a strong work ethic, collaboration, honesty, discipline, and perseverance as key determinants to achieving progress through development and modernization (Ministry of Education 2020-24 Strategic Plan,). In this context, *Merdeka Belajar* embodies the concept of mental revolution and gives the education system a framework to realise it.

Origins of Merdeka Belajar

As described in the opening chapter of this volume, *Merdeka Belajar* has its origins in the philosophy of the 'father' of Indonesian education, Ki Hadjar Dewantara. Dewantara was a leading Indonesian independence activist and pioneer of Indonesian education who founded the *Taman Siswa* school that provided education for Indonesians at a time when only Dutch citizens and the Javanese aristocracy could access education. Dewantara's writings on education were influenced by European education theorists of the late 1900s, such as Friedrich Froebel and Maria Montessori, as well as the Indonesian independence movement. His education paradigm emphasized *kemerdekaan* (emancipation) and *kemandirian* (autonomy). Dewantara wrote that the purpose of education is to support students to become emancipated, independent young people – not to produce people who just obey and carry out orders as experienced under the Dutch schooling system. According to Dewantara, independence is an educational goal as well as a principle underlying the strategy to achieve the goal (Anggraena et al. 2022).

In his most well-known writing on education, adopted in part as the motto of the Ministry of Education, Dewantara describes education as an empowering process: of teachers leading by example, building student motivation to learn, and encouraging and supporting from behind; that is, encouraging independence. The most well-known quotation attributed to Dewantara, "*Ing ngarso sung tulodo, ing madyo mangun karso, tut wuri handayani,* translates as "those in front should set an example, those in the middle should raise the spirit, and those behind should give encouragement". In drawing on these key concepts of empowerment, independence, and student-centredness, *Merdeka Belajar* encourages teachers, principals, students, parents, government, and the wider community to take responsibility for the quality of learning. Of note is the expectation that implementation of policy will vary at local levels in response to local needs and context, and indeed emphasises needs-based approaches in policy development and implementation (which the Ministry of Education refers to as an 'asymmetric and consultative' approach). *Merdeka Belajar* as a movement inspires this autonomy and empowerment to spread throughout the entire education 'ecosystem' to enable quality learning to occur. It is deliberately set in contrast to past, highly regulated and controlled policies and

practices that drove uniformity, one-size-fits-all approaches and compliance with rules, but which failed to deliver improved learning outcomes or the development of desired values and behaviours in Indonesia's young people (Ministry of Education 2020-24 Strategic Plan). Whereas, in the past, accountability in education equated compliance with rules and regulations, *Merdeka Belajar* urges accountability for learning outcomes across the education system: through the actions of teachers, principals, and supervisors; the leadership of district and provincial governments; and the policy directions and goal setting by national government.

Merdeka Belajar in policy, plans and strategies

As a paradigm, *Merdeka Belajar* informs national policies and programs and is expected to increasingly inform and drive locally led decisions at school, district, and province level. At the national level, Minister Makarim issued several policy decisions and programmatic announcements informed by *Merdeka Belajar*. The first, issued in December 2019, announced that the national examinations were to be replaced by the minimum competency assessment and character survey (*asesmen kompetensi minimum* and *survei karakter*) for grades 5, 8 and 11; replaced the USBN (national standard school assessment) with school autonomy in determining the format of end of school assessment; removed prescriptive requirements for lesson plan formats to allow teachers more time for planning, teaching, and evaluation; and gave schools more flexibility in school enrolment policies. This first set of reforms was aimed at freeing up some of the previous policies and practices which were seen to have constrained teaching and limited student learning.

Since December 2019, Minister Makarim has made a further 23 *Merdeka Belajar* related policy and program announcements. Those most relevant to basic education and the scope of this study are outlined in Table 17. Many of the reforms related to teachers, in terms of initial teacher education and teacher standards and reforms to the national education standards, have been initiated through issuance of regulations. For the purposes of this chapter the *Merdeka Belajar* reforms are described under thematic headings: access including financing, teacher quality, curriculum, assessment, and standards and school improvement.

Table 17. Merdeka Belajar policy and program announcements (as pertaining to basic education)

Date	Policy/program	Brief description
December 2019	National assessment School based assessment Lesson plans Enrolment (zoning)	Elimination of national exams (from 2021) and replacement with the sample based national assessment of competency in literacy, numeracy and character. Empowerment of schools to determine summative and end-of level assessments. Reduction in administrative burden on teachers for lesson planning, with encouragement to focus on teaching and learning. More flexible implementation of school enrolment policy (zoning).
January 2020	*Kampus Merdeka* *(Emancipated Campus)*	Higher education reforms, enabled students to enrol for up to two semesters of study outside of their institution; redefinition of learning hours to include internships, work experience, research, projects, practicums, exchanges, and teaching in schools.
February 2020	*School Operational Grants* *(BOS)*	Payment directly to schools reducing BOS administrative responsibility. Greater flexibility in use of BOS particularly in relation to teacher salaries
March 2020	*Program Organisasi Penggerak* *(Change Agent Organisations)*	Grant funding to non-government organisations, generating an effective interventions evidence base that could be scaled up/out.
July 2020	*Guru Penggerak* *(Change Agent Teachers)*	Development of future school leaders; encouraging teachers to take responsibility for their own learning and development (growth mindset).
February 2021	*Sekolah Penggerak* *(Change Agent Schools)*	Development of 'change agent' schools as catalyst for transforming Indonesian education; developing cadre of principals and teachers focused on student learning outcomes.
April 2021	Expansion of LPDP (endowment fund) scholarship program	More flexible and workplace-relevant offerings including short courses and micro credentials, certified internships and semester-length, credit-bearing teaching placements for students (of all disciplines)

		focused on improving literacy and numeracy.
February 2022	*Kurikulum Merdeka* and *Platform Merdeka Mengajar*	Simplified, flexible curriculum; focus on essential content. Provision of the platform as a source of resources for teaching and teacher development to support *Kurikulum Merdeka*.
February 2022	*Revitalisasi Bahasa Daerah* (Revitalising Regional Languages)	Revitalising local languages through their teaching in schools.
April 2022	*Rapor Pendidikan* *Education Scorecards*	Report card for schools and districts integrating national assessment and other education data; tool for schools and districts supporting self-evaluation and improvement.
June 2022	*Praktisi Mengajar* *(Practitioners Teach)*	Flexibility for universities to involve practitioners, e.g., as guest lecturers in teacher education programs; aiming to develop more work-ready skills in university graduates.
February 2023	*Buku Bacaan Bermutu untuk Literasi Indonesia* *(Quality reading books for literacy)*	Promotion of children's story books to encourage a reading culture and to improve literacy outcomes.
March 2024	*Transisi PAUD ke SD yang Menyenangkan* *(Early childhood – primary transition)*	Establishing a smooth transition from early childhood to primary schooling, with alignment of learning expectations (cognitive and non-cognitive), ensuring primary schools do not test students for literacy and numeracy skill development in their enrolment processes, and acknowledging importance of play-based learning in early childhood and early primary.

Common themes across these *Merdeka Belajar* policy and programs include:

- encouragement of independence and autonomy for teachers, principals and, implicitly, local government
- a strong focus on student learning and the foundational skills of literacy, numeracy, and character

- an emphasis on equity
- deregulation, flexibility and administrative burden reduction for teachers, principals, and schools (in intent, if not yet realised).

Critically, the reforms, as issued progressively, recognise interdependencies across the education system. For example, reforms in curriculum aimed at improving student learning outcomes are supported by reforms in initial teacher education that support student-centred pedagogies; the national assessment and *Rapor Pendidikan* provide schools and districts with student performance data that can be used to target interventions in classrooms (using the new curriculum and associated pedagogies) to improve learning. All the reforms have the same goal: improved student learning. This 'systems thinking' represents a change from previous reform attempts.

While the *Merdeka Belajar* reforms were initiated by the Ministry of Education, in the main, the Ministry of Religious Affairs has agreed to adopt the reforms, where the legal basis requires or allows it to do so. For example, the Ministry of Religious Affairs agreed to adopt *Kurikulum Merdeka* with its issuance in the form of a ministerial regulation with application to the entire schooling sector, including madrasah, even though at the time of writing the curriculum is still optional. Reforms such as the *Rapor Pendidikan* as a 'product' do not require a legal foundation, and therefore while the Ministry of Religious Affairs agrees in principle to the use of the *Rapor Pendidikan* in the Islamic sub-sector, it has not promoted its use to the extent it has *Kurikulum Merdeka*. Similarly, the Ministry of Religious Affairs is interested in the concept of the *Penggerak* programs but does not participate, nor has it developed its own programs of a similar nature, with no regulation required by the Ministry of Education for their implementation in schools and by districts that would then apply them across the entire education system, including madrasah.

The reforms translate the 2020-2024 RPJMN's goal of improving equitable access to a quality education, through improved teaching and learning. The RPJMN outlined eight strategies to achieve this goal (Ministry of the State Secretariat 2020: IV-29):

1. Strengthening the teaching of Mathematics, literacy and Science at all levels
2. Strengthening early grade literacy and new forms of literacy (digital, data, and social literacy)
3. Developing the competency and professionalism of educators
4. Strengthening the quality of student assessment, particularly classroom assessment and use of assessment data to improve the learning process
5. Advancing the use of technology in teaching and learning, particularly in distance and online learning
6. Integrating softs skills into teaching and learning
7. Improving the quality of character, religious, and civics education
8. Improving the quality of informal and [adult] literacy education

The 2020-24 RPJMN also set targets for learning for the first time – see Table 18. Importantly, the RPJMN's learning targets, while modest, aimed to improve equity by tracking the proportion of students achieving above minimum competency PISA benchmarks in Reading, Mathematics and Science, along with the minimum competency benchmarks in literacy and numeracy in an Indonesian competency assessment. This established the foundation for a nation-wide focus on equitable learning outcomes, which has been widely adopted under *Merdeka Belajar*. For example, the national assessment reports student attainment by performance quartiles and by socioeconomic status, geographic location (urban/rural) and gender.

Table 18. 2020-24 RPJMN learning targets.

Indicator	**Baseline 2019**	**Target 2024**
Average PISA scores: a. Reading b. Mathematics c. Science	 371 379 396	 396 388 402
Proportion of students above minimum competency standards in PISA (%): a. Reading b. Mathematics c. Science	 30.1 28.1 40.0	 34.1 30.9 44.0

Proportion of students above minimum competency in competency assessment (%): a. Literacy b. Numeracy	 53.2 22.9	 61.2 30.1

The Ministry of Education's 2020-24 Strategic Plan sets similar targets for student performance in PISA and the competency assessment. The approaches described in the ministry's strategic plan and in this chapter have the potential to contribute to the achievement of the RPJMN and Ministry Strategic Plan targets. Both plans endorse the importance of literacy and numeracy in improving educational outcomes and overcoming the learning crisis described in Chapter 4.

Access to quality schooling

Equitable access to schooling

As described in Chapters 2 and 3, Indonesia has been successful in improving access to schooling through a combination of public and private provision, but there are still issues to be addressed in relation to equitable access to quality education. Lower income families continue to bear disproportionate costs for their children's education, many having no choice but to enrol in low quality private schools and madrasah, with entrance to public schools often dependent on academic performance, which advantages children from higher income families (Kompas.com 2020). This situation has contributed to widening the learning outcome gap between children from low- and high-income families. (RISE 2021). School Operational Funding (BOS) allocation on a per student basis had left small, rural, and remote schools with insufficient funding for spending on education quality. BOS funds were only sufficient to pay for day-to-day operational costs (such as electricity and water and casual (honorary) teacher salaries), and strict criteria on spending of BOS funds constrained schools in spending according to need. The two key reforms under *Merdeka Belajar* are an attempt to address this by improving equitable access to quality schooling, providing increased funding to schools with higher operating costs, and giving greater flexibility to schools to determine how BOS funding is spent.

In an endeavour to redress inequity in access in 2018, the government established a school 'zoning' policy (Ministerial Regulation 14/2018) that required public schools to accept a minimum of 90% of students from the school's local catchment area. The policy's implementation was mixed, and indeed exposed the reality that the good performance in some public schools was more due to enrolments of children from families with higher income levels and socio-educational advantage, than the quality of the teachers in the public schools (RISE 2018). The mixed success of the policy led to Minister Makarim amending the policy in 2019, giving districts (and provinces) more discretion as to the proportion of places allocated to students: from a school's catchment area (at least 50%); from disadvantaged families (at least 15%); and those who had recently moved into the school's catchment area (up to 5% of places). After these quotas have been fulfilled, the school could allocate up to 30% of the remaining places for students outside of a school's catchment area showing high academic potential. According to Minister Makarim, this flexibility retained the policy focus on equity while allowing districts and provinces to accommodate variations in local context. He also encouraged districts and provinces to redistribute teachers equitably to account for the changes in enrolments that would result in public schools.

School operational funding (BOS)

At the time of the *Merdeka Belajar* reforms, the school operational funds (BOS) were a fixed feature of education financing, despite several changes in the way funds were transferred to schools and rules around categories of expenditure. Transfers of BOS to district and provincial governments (and then on to schools) resulted in delays in schools receiving funding, which impacted on their ability to provide the basic inputs that support student learning, such as books and other learning resources, and payment of school-hired teacher salaries, which affect teacher attendance. One of the early *Merdeka Belajar* reforms in 2020 was to return BOS to a direct transfer from the national budget to schools, and to give schools more flexibility in use of BOS funds to meet local needs (Ministerial Regulation 8/2020). These changes now also apply to the BOS transferred by the Ministry of Religious Affairs to madrasah.

Other changes to BOS also supported equity and encouraged spending on quality. In 2020 the Ministry of Education adjusted the school operational funds (BOS) formula resulting in 51,000 schools

in regions, highly impacted by the COVID-19 pandemic, each receiving an additional IDR 60 million (which for some small schools could comprise nearly 50% of their annual budget). This extra funding, amounting to a total of IDR 3.06 trillion, was directed at supporting the costs of learning from home during school closures and meeting school hygiene requirements for face-to-face teaching as it occurred. More fundamental changes to BOS were subsequently made to increasingly provide needs-based funding. In 2021 (Ministerial Regulation 6/2021), the Ministry of Education announced a new funding formula for BOS that differentiates the per capita amount provided to schools based on the costs of delivering education services in different regions. This change was particularly expected to benefit small, rural, and remote schools where economies of scale are lower than average, or the costs of goods and services are higher. As of 2023 the Ministry of Religious Affairs also applies the same formula for calculation of BOS provided to madrasah.

Teacher quality

Teacher quality is a significant element of the *Merdeka Belajar* reforms, some of which have been progressed outside of major announcements. The aim of teacher quality reforms since 2019 has been to create quality, student-centred teachers with an enduring commitment to their own learning and growth through:

- reforms to initial teacher education.
- assisting teachers to take ownership of their own learning and development through the provision of a range of webinars, microlearning and micro credentials and online teaching resources (taking advantage of the increase in online learning provided during the pandemic).
- encouraging teachers to form local learning communities to appraise new approaches and collaborate with each other using inquiry and problem-solving strategies.
- creating a new generation of school leaders with strong instructional leadership and problem-solving capabilities.
- supporting the development of local ecosystems where schools, local government, teacher education institutions and local organisations collaborate to improve the quality of teaching and learning in schools.

As indicated, a key aspect of these reforms is teachers assuming responsibility for their learning and development, individually and in local learning communities, by making teacher learning readily accessible online. This emphasis on teacher ownership reflects the ministry's support for teachers to set up their own local learning communities; a deliberate departure from the long established, government-led teacher and principal working group system (KKG, MGMP, KKKS and KKKM) which had mixed success in improving teaching quality (Sopantini 2014; Akrom 2017). The significant investment in online learning has the potential to reach large numbers of teachers at scale and at quality and responds to lessons from past studies globally and in Indonesia on the ineffectiveness of large, government-led training often employing cascade approaches in which scale is limited and quality difficult to assure (Popova et al. 2016). Access for teachers without reliable internet infrastructure or digital skills remains an issue to be resolved.

Teacher standards

Most education systems, globally, issue clear expectations of the quality standards required of teachers including projections of how their practice should develop and grow over time. One of the more fundamental *Merdeka Belajar* reforms that is perhaps the least known is the redefining of the capabilities expected of teachers. Previously, teacher standards were issued by the National Education Standards Board (*Badan Standar Nasional Pendidikan*, *BSNP*) but were not well understood nor used by teachers for learning and development and did not clearly describe the capabilities shown in Indonesian and international studies to improve student learning outcomes (Dawson 2013). In 2020, the Ministry of Education issued a new teacher competency framework that drew strongly on evidence of effective teacher practice and provides a model of continuous improvement (Regulation of the Director General for Teachers and Education Personnel No. 6565/2020). The competencies, arranged over four levels from 'developing' through to 'expert', are intended to underpin all aspects of teacher development and management, from initial teacher education to learning and development, performance appraisal and career progression. At the time of their development in 2020, the Standards Board (which had, at that time, legal responsibility for issuing national education standards) was developing its own revision to the previous teacher standards, and thus the Ministry of Education was only able to issue the new competency framework at

the level of a Director-General regulation. Subsequent changes in regulation brought the responsibility for standards into the Ministry of Education. Since then, the ministry has been working to integrate the competencies and levels within the civil service framework that similarly defines standards and performance indicators for civil service teachers. Once this work is complete, it is expected that the ministry will issue the competencies as the new national education standards for teachers. The Ministry of Religious Affairs has expressed intent to adopt the new competencies once this occurs. Likewise, work is underway to identify standards for principals with a stronger focus on instructional leadership, as well as for supervisors to support the transformation of their role from inspection and compliance to coaching and mentoring.

Initial teacher education

The Ministry of Education is investing in reforming initial teacher education to ensure that the next generation of teachers are professional, student oriented, empowered and 'independent' (*mandiri*) in the sense of having strong problem-solving capabilities and habits of reflection and continuous improvement. Indonesia's 2005 Teacher and Lecturer Law mandates that teachers must complete a one-year, university delivered Teacher Professional Education program (Pendidikan Profesi Guru, PPG) to achieve certification. The Ministry of Education has chosen to invest in this one-year program as both a short route to improving the supply of quality teachers (with the pre-service PPG program aiming to graduate up to 80,000 teachers annually), and a long-term solution to ensuring the future pipeline of new teachers have the skills and qualities needed to turn around persistently low student learning outcomes. The PPG is not a new program, but the course has been redesigned in the spirit of *Merdeka Belajar* to improve the quality of graduates, incorporating lengthened school-based practicums, strengthened course content to develop student-centred and inclusive pedagogical practice including literacy and numeracy, and more rigorous entrance and exit requirements. Employment of teachers prior to the PPG will allow the PPG to serve as an induction program for teachers, with recruited teachers completing it in the school where they will be working. The ministry has initiated support to universities to improve quality of delivery, including establishing partnerships and capacity building with foreign universities.

School and instructional leadership

Improving 20 years of persistently low student learning outcomes requires a new generation of skilled principals who can lead improvement, innovation and change within the school and their teachers. The main initiative introduced under *Merdeka Belajar,* the *Guru Penggerak* or change agent program, aims to produce instructional leaders – teachers and principals – who encourage the holistic development of their students; actively and proactively support the development of other teachers in using student-centred learning approaches; and who act as role models and 'agents of transformation' within their local ecosystems to support the emergence of a movement of student-centred educators and leaders (Kemendikbudristek 2023). *Guru Penggerak* are selected through a competitive process and participate in a six-month long development program. An initial intended outcome of the program, to better position *Guru Penggerak* for future school leadership roles (either as principals or supervisors), became more deliberate over time, with conscious efforts made by the Ministry of Education to encourage districts and provinces to hire *Guru Penggerak* in these roles. This culminated in Ministry of Education Regulation 40/2021 which required principal candidates to have graduated from the *Guru Penggerak* program, and Ministry of Education Regulation 26/2022 which states that a Guru Penggerak completion certificate can be used to fulfil part of supervisor selection requirements. The strong focus on instructional leadership in the *Guru Penggerak* program contrasts with previous efforts to improve principal capacity and the 2007 principal standards which had a greater focus on management of schools rather than leading for quality teaching and learning.

Emerging evidence from evaluations of the program (Kemendikbudristek 2023a) show that participating teachers are changing classroom practices to be more student centred, with greater use of assessment and evaluation in planning and execution of lessons. Examples are also emerging of teachers initiating within-school and cross-school teacher meetings for reflection and problem solving, and greater collaboration with parents. Graduates who have since become principals are starting to:

- demonstrate participative and distributed leadership practices.

- encourage a positive school environment that rewards innovation, reflection, and experimentation.
- share their knowledge gained through *Guru Penggerak* with other teachers in their school or within teaching working groups (KKG, MGMP and teacher-led learning communities).
- support and actively facilitate their teachers' participation in learning opportunities.

Challenges include developing the depth of teacher ability to support the wide diversity of learners in their classrooms, the tendency to fall back to teacher and textbook centred approaches, and cultural-related gaps in age and mindset between the often-younger *Penggerak* principals and older teachers which can inhibit change within schools.

In service teacher development

Under the 2005 Teacher and Lecturer Law, both the central and regional governments (provinces and districts) have responsibility for improving teacher quality. The Ministry of Education was able to take advantage of the advancement in use of online and digital technologies by teachers during the COVID-19 pandemic to switch from predominantly face-to-face, cascade training approaches, which have inadequate reach (with studies showing limited effectiveness -as described in Volume 2, Chapter 4), to predominantly online delivery. Data from the Ministry of Education platforms show participation in online professional learning is high, with at least 2.6 million teachers accessing learning through the ministry's two main platforms: *Guru Belajar dan Berbagi* and Platform *Merdeka Mengajar* (Kemendikbudristek 2023b). In contrast, in 2019 the ministry's face-to-face delivery model reached 382,135 teachers (Ministry of Education, Culture, Research and Technology 2021). Online learning alone is of course insufficient to transform teacher practice and will need to be combined with strategies such as coaching, mentoring and peer observation. Strategies to reach teachers who have no, or intermittent, internet access or technology skills will also need to be developed.

Guru Belajar dan Berbagi

In response to the urgent need to rapidly deliver skills to teachers to support remote learning, including online learning, in 2020 the Ministry of Education set up an online platform for teachers, *Guru*

Belajar dan Berbagi (Teacher Learning and Sharing). The platform, a collaboration between the ministry, teachers, and the wider education community provided a place for teachers to meet, learn and share good practice for quality student learning. The platform, which has been superseded by the later Platform *Merdeka Mengajar*, is still accessible to teachers, with 1.3 million, or over a third of teachers in Indonesia, having accessed the platform to participate in learning or to share practice. Through the platform, significant numbers of teachers have participated in learning opportunities, such as: literacy and numeracy (70,000 teachers); inclusive education (almost 180,000 teachers); use of technology in teaching (almost 130,000 teachers), remote learning approaches (231,000 teachers) and *Merdeka Belajar* (140,000 teachers), with 670,000 posts by teachers sharing lesson plans (Kemendikbudristek 2021). An evaluation of face-to-face and online teacher development delivered by the Ministry of Education in 2020 showed that teachers viewed online delivery positively, as well as evidence of teacher behaviour change in both face-to-face and online learning (Kemendikbudristek 2020).

Platform *Merdeka Mengajar* (PMM)

The PMM was designed as a resource for the purpose of teaching, teacher learning, and teacher-led content creation ("*Mengajar, Belajar, dan Berkarya*"). Other than housing resources for teachers to support implementation of *Kurikulum Merdeka* (such as teaching modules, assessment tools and textbooks) the *Merdeka Mengajar* Platform or PMM has become a key source of learning for teachers with around 150 micro-learning units and routine webinars offered. Topics relate primarily to concepts associated with *Merdeka Belajar* and the skills required of teachers to implement *Kurikulum Merdeka* and reflect the move from rote learning to active learning. Through the '*latihan mandiri*' (independent learning) function teachers follow units of online learning and upload evidence of implementation of learning in the classroom (to encourage application of learning). Like *Guru Belajar dan Berbagi*, teachers can upload self-developed resources to share with other teachers, and the platform's communities of practice feature provides a forum for organisations, teacher working groups and peer networks to share information and discuss issues, challenges and potential solutions.

The PMM is a work in progress, with content continually developed for classroom use and teacher learning. Solutions for teachers without internet access or electricity, with poor internet speeds, or poor technology skills need further attention. Part-time and non-civil servant teachers are yet to have logins for the platform, and while teachers in madrasah have the opportunity to log in, limited socialisation means many are not aware they can access the PMM or may choose to use content from the online learning platform developed for the Ministry of Religious Affairs, PINTAR. Teachers report navigability as an area for improvement. Evaluation data are not yet available in relation to content quality and whether teacher skills have improved resulting from access to teaching resources and participation in independent learning. The PMM has not explicitly linked units of learning to the teacher competency framework, which may make it more challenging in the future for teachers to develop and demonstrate acquisition of the skills and competencies expected of them in later performance appraisals and for career progression.

Reforms in relation to teachers under *Merdeka Belajar* have been wide ranging, comprehensive, and systemic. The emphasis on empowerment, autonomy, and placing students at the centre – encouraging a belief that all students can learn – as well as the resources developed and under development to support this transformation in mindset and practice has significant potential to turn around the traditional, didactic, textbook-driven approach to curriculum and teaching that has failed to produce quality learning outcomes.

The coherency in the reforms in teachers, curriculum, assessment, and use of data for improvement will help to change the status quo. However, overcoming the prevailing culture and climate that values conservatism, tradition and replication of past practice will take time, persistence and an even greater dedication of effort and resources for teacher development (Carter 2021).

Curriculum

It is recognised globally that good teaching and learning are greatly enhanced by the quality, relevance, and effectiveness of the curriculum (UNESCO 2016). Evaluations of the Indonesian 2013 Curriculum (K13) by the Ministry of Education and development

partners reported on the curriculum's dense content, excessively fast pace, inflexibility, and reliance on prescriptive textbooks, which resulted in a greater focus on delivery of curriculum content than on student learning and progress (Moyle et al. 2016, Randall et al. 2022).

Prior to the introduction of *Kurikulum Merdeka*, previous curricula did not have an explicit focus on the foundational skills in literacy such as reading and comprehension. A recent review of the 2013 Mathematics curriculum showed that expectations of student learning were much higher, with a required learning pace exceeding that of curriculums in other countries as well as the Global Proficiency Framework, a "global consensus of the minimum skills and competencies learners should be able to demonstrate at key points along their learning trajectory" (UNESCO 2019:1; Randall et al. 2022). Other international studies such as Beatty and Pritchett's 2015 study of curriculum in developing countries showed that curricula often move faster than the pace of student learning, and that a simplification of curriculum content and slowing down of the expected pace of learning could do much to improve student learning (Beatty and Pritchett 2015). This gap between the curriculum and students' pace of learning was exacerbated by the COVID-19 pandemic when students were denied substantial learning opportunities, particularly in the critical early years of primary school when the foundational skills in literacy and numeracy are established. Data from Ministry of Education and INOVASI studies, described in Chapter 4, show that, one year into the pandemic, students in schools that persisted with the content-heavy and fast-paced 2013 curriculum lost on average six months' of learning in literacy and five months' of learning in numeracy, compared to schools that applied a simplified curriculum focused on core competencies in literacy and numeracy with a learning loss of four months on average across both domains (Randall et al. 2022: 14).

Previous evaluations of the 2013 curriculum also noted the heavy administrative burden on teachers and rigid compliance requirements, with the effect that teachers spent significant effort fulfilling administrative and reporting requirements that left little time for teaching and learning. Documents such as lesson plans and school syllabi were produced to meet compliance requirements (often copied from other schools) and were not genuinely used to

inform planning nor reflect what actually occurred in the classroom. The rigidity of the curriculum framework (including the related National Education Standards: the graduate competency standard, content, process and assessment standards) also drove uniformity in implementation, with little authorised space for adjustments to account for the diversity of students and school capacities. Disadvantaged students, including students with disabilities and social-emotional and developmental challenges, were left behind.

Kurikulum Merdeka

Kurikulum Merdeka or the 'emancipation' curriculum was launched in February 2022 to respond to these findings and lessons and is the most significant of the reforms issued under *Merdeka Belajar*. *Kurikulum Merdeka's* design is explicit in terms of improving student learning and allowing teachers autonomy in the teaching process: it is simplified and flexible and focused on developing essential competencies in literacy, numeracy, character and 21st century skills (through the *Profil Pelajar Pancasila*). It also aims for a stronger alignment between the curriculum, pedagogy and assessment and is responsive to evidence and feedback (Anggraena et al. 2022).

A number of other key features of *Kurikulum Merdeka* that support the shift in focus to learning, teacher autonomy and student agency include:

- A 'lighter' curriculum framework with devolved responsibility to schools to develop operational curriculum aligned to local context, resources, capacities and pace of student progress.
- Less content density, and a strong focus on literacy and numeracy as well as character and 21st century skills through the *Profil Pelajar Pancasila*.
- Articulation of achievement expectations (*Capaian Pembelajaran*) in two-year phases, giving teachers and students the time and flexibility to achieve deeper learning of concepts, rather than pushing through the year-by-year curriculum. Phases are aligned with the stages of child and adolescent development.
- Promotion of student-centred pedagogical approaches that support teaching to students' current levels of attainment

and application of learning to real world contexts: differentiated instruction (or Teaching at the Right Level, TaRL), diagnostic and formative assessment, and inquiry and project-based learning approaches.

- Promoting understanding and skills in teachers to support students to be active, motivated and self-regulated participants in their learning, rather than passive recipients of information.
- Accommodation of the diversity of local contexts, capabilities and available support resources in the teaching and learning strategies schools elect to use to implement *Kurikulum Merdeka*, the speed with which they adopt the new curriculum, and the extent to which they will rely on government-developed resources such as teaching modules, textbooks and assessment tools, or source or develop their own resources (a marked change from the uniformity expected by the 2013 curriculum).
- A period of trialling, first through the *Sekolah Penggerak* program in 2021-22, then on an opt-in basis in 2022-23 and 2023-24, with strong monitoring and evaluation to gather data for continual improvement (as opposed to the 'big bang' approaches of past curriculum development).
(Anggraena et al. 2022)

Kurikulum Merdeka aims to support a major transformation in the quality of teaching in Indonesian classrooms and to assist Indonesian students to develop a deeper understanding of literacy, numeracy and the non-cognitive skills that are required for further learning and in the workplaces of the future. To realise the potential of this change, the Ministry of Education is also pursuing another major transformation, the devolution of responsibility for curriculum planning and instruction to teachers and schools:

> *"[Kurikulum Merdeka's]* flexibility relates to the autonomy and independence of teachers and students in controlling the learning process … A flexible curriculum will provide flexibility to schools and teachers to adapt, add to the wealth of subject matter, and align the curriculum with the characteristics of students, the vision and mission of the school, as well as local culture and wisdom. Such flexibility is needed so that the curriculum studied by students is always relevant to environmental dynamics, contemporary

issues, and the learning needs of students (Anggraena et al. 2022)".

Profil Pelajar Pancasila

Parents and educators share a common goal – to assist children and adolescents to grow and develop into confident, healthy, happy, and successful adults whose behaviour and attitudes reflect the endorsed values of their parents and local communities. Ultimately, this process is expected to contribute to national aspirations for increased productivity, well-being, peace, and prosperity (Cislowski 2019).

The *Profil Pelajar Pancasila* or *Pancasila* Student Profile released in 2021 sets out the values, beliefs and behaviours that students should develop through their education, "complementing the competencies in the graduate competency standards at each level of schooling (Satria et al. 2022: 1)". It marks a departure from previous approaches to the development of student character (values, beliefs and behaviours) that put greater emphasis on religion as a vehicle for developing character, and it simplifies the 18 Character Values described in Presidential Decree 87/2017 to six dimensions: faith and devotion to God Almighty and upholding of moral values, including belief in the unitary state of the Republic of Indonesia; collaboration; creativity; critical thinking; global diversity; and independence.

The six dimensions are conceived of as a whole, with each element integral to and reinforcing other elements. The dimensions are consistent with Indonesia's *Pancasila* ideology and reflect Law 20/2003 on the National Education system. This law states that the function of the national education system is to "develop the capability, character, and dignified development of the nation for enhancing its intellectual capacity and is aimed at developing learners' potential so that they become imbued with human values, faithful and pious to one and only God; possess morals and noble character; are healthy, knowledgeable, competent, creative, independent; and as citizens, are democratic and responsible". The *Pancasila* profile makes 21st century skills (the skills, abilities, and learning dispositions that have been identified as being required for success in 21st century society) explicit while integrating core national values within them.

At a school level, the profile is expected to be developed holistically through the culture of the school, subject matter teaching, extracurricular activities, and the *Pancasila* profile project, which is an interdisciplinary inquiry-based project that students undertake that contributes to them developing the six dimensions in the profile.

Teaching of the profile's competencies through subject matter teaching may appear, on the surface, to be relatively simple for teachers to adopt, given that such integration was a practice in recent versions of curriculum. Early feedback on the *Pancasila* profile project, however, indicates that the project approach will prove significantly more challenging for teachers, most of whom are unlikely to be familiar with, or have the skills needed for inquiry approaches. Teachers will need to assess the nature and extent of progress and learning of relevant capabilities and then plan to build on this learning through the project. This will be a significant pedagogical challenge for *Kurikulum Merdeka*: for teachers to sustain a focus on teaching key subject-based knowledge and skills (using explicit teaching) alongside and complemented by teaching the *Pancasila* capabilities (using a project-based, inquiry approach) which has been allocated around 20% of annual teaching hours – see Figure 21.

Figure 21: Teacher directed and inquiry-based practice.

McKinsey & Company (2017) analysed PISA 2015 data and found that while high levels of 'inquiry-based' teaching with little provision of 'teacher-directed' teaching practices resulted in low student science scores, students had the highest achievement when they experienced teacher-directed teaching in most or almost all lessons, with inquiry-based teaching practices in some lessons.'

NSW Department of Education, 2020. What Works Best: 2020 Update, p.14.

Implementation strategies and supporting resources.

The Ministry launched *Kurikulum Merdeka* in February 2022 as an optional curriculum that schools could sign up to on a voluntary basis. This was in recognition of:

i. the challenge of providing training required to implement a new curriculum within a short timeframe for Indonesia's 397,000 schools and madrasah and over 4.2 million teachers,

ii. the diverse capabilities of the teaching workforce,
iii. the desire to 'test' the new curriculum before taking it to national scale.

Upon completing a readiness survey, schools nominated which of three implementation options they wished to adopt:

1. *Mandiri belajar* (independent learning): continue to use the 2013 curriculum, while learning about *Kurikulum Merdeka* and trialling aspects of it
2. *Mandiri berubah* (independent change): Adopt *Kurikulum Merdeka*, using or adapting teaching modules and textbooks provided by the Ministry of Education.
3. *Mandiri berbagi* (independent sharing): Adopt *Kurikulum Merdeka*, developing own teaching materials and sharing with other teachers through the PMM.

Over time schools are expected to transition from the 'learning' option to the 'change' option, and from 'change' to 'sharing', although there is recognition that this evolution will take time and may be evident in some but not all aspects of curriculum implementation. For example, some schools supported by INOVASI have elected to retain the 2013 curriculum but use the *Kurikulum Merdeka* for teaching of Bahasa Indonesia due to their greater confidence and expertise in teaching language through earlier support provided by INOVASI. This emphasis on a highly contextual approach, decided by the school, based on their level of readiness, contrasts with earlier approaches to new curriculum roll-out (such as the 2004 competency-based curriculum, the 2006 school based curriculum, and the 2013 curriculum) in which new curricula were expected to be uniformly adopted in a short period of time without adequate training and understanding of teachers to be able to do so.

Further support has been provided to teachers through six implementation support strategies which encourage teachers to draw on locally available resources and expertise (much more than in roll outs of previous curricula). The six strategies are:

1. Platform *Merdeka Mengajar* (PMM): micro-learning videos for teachers, teaching modules and lesson plans, sample sequences of learning that teachers can use, adapt or adopt, textbooks (as mentioned under Teacher Quality)
2. Webinar series for teachers

3. Local learning communities for teachers to learn from each other, share expertise and resources
4. Local expertise (such as *Guru Penggerak*, BPMP and BGP facilitators, universities).
5. Centralised help desk support (email/WhatsApp/phone)
6. Collaboration with development partners who have both presence and expertise regionally.

The Ministry of Religious Affairs has also issued a suite of online learning for teachers, principals, and supervisors on implementing *Kurikulum Merdeka*.

Books

The Ministry has acknowledged the important role of books for developing literacy skills. They have also acknowledged some of the factors that currently constrain access to books, such as the poor availability of quality books outside of major urban centres, and the lack of a reading culture in Indonesia. Since 2020, the Ministry of Education has accelerated efforts – such as those initiated by the 2015 Literacy Movement – to make high quality and affordable books accessible for all schools and families. This contrasts with the more traditional focus on textbooks, with the current emphasis on storybooks, picture books, and levelled readers for teaching Bahasa Indonesia. In 2022, the Ministry of Education procured and distributed 15 million books to 20,000 early childhood centres and primary schools in remote and disadvantaged districts, accompanied by training in how to use books to support development of reading and comprehension. (Due to budget constraints, training planned for teachers was redirected to districts which were expected to on-train teachers; this may have rendered training less effective.)

The Ministry of Education also published a guideline for levelled readers in 2021 to provide advice to writers and publishers on development of books appropriate for emerging through to experienced readers. Changes to book approval processes now make it much easier for publishers to have their books approved for use in schools and for schools to acquire quality books. Further solutions are also being sought in relation to publishing and distribution challenges which, in the long term, should benefit a thriving independent publishing industry and growth in community libraries. As described in Chapter 5 of Volume 2 in this series, an

increasing number of children's books are being made available through the school procurement application *Sistem Informasi Pengadaan Sekolah* (SIPLah) to make procurement of books easier and more affordable. Finally, textbooks and children's fiction are being made available online for free downloading and printing through a centralised platform, *Sistem Informasi Perbukuan Indonesia* (SIBI).

Assessment

Merdeka Belajar assessment policies are aimed at system level monitoring as well as encouraging quality assessment practices in schools.

System level monitoring

The National Assessment Program, first introduced in 2021 replaced the National Examination (and competency assessment - Asesmen Kompetensi Siswa Indonesia). It aims to improve the quality of education and improve student learning by taking a "snapshot of learning inputs, processes and outputs in all schools [and madrasah] and provide comprehensive and objective feedback to local government, schools and the national government" (Pusat Asesmen Pendidikan 2022). In line with *Merdeka Belajar*'s paradigm of transformation, the national assessment is oriented to improving learning and encouraging a culture of reflection and continual improvement. As described in chapters 3 and 4, this contrasts with the previous, high-stakes national examination (Ujian Nasional – UN) which was plagued by issues of poor reliability and validity.

The national assessment consists of three instruments: the minimum competency assessment in literacy and numeracy *(Asesmen Kompetensi Minimum*), a character survey, and a school climate survey. The minimum competency assessment is conducted online or partially online in all state and private schools (and madrasah and non-formal programs) in grades 5, 8 and 11 with a sample of students from those grades. This same student sample participates in the character survey which seeks to measure non-cognitive outcomes, based on the six elements of the *Profile Pelajar Pancasila*:

- Faith and devotion to God Almighty and the upholding of moral values, inclusive of the environment and a belief in the unitary state of the Republic of Indonesia
- collaboration
- creativity
- critical thinking
- global diversity
- independence.

Finally, sampled students and their teachers and principals complete the school climate survey which aims to measure factors that influence the quality of teaching and learning, either directly or indirectly, such as teacher practice, school leadership, school safety, and valuing diversity (Aditomo et al. 2021). The national assessment is designed as a low-stakes assessment with no ranking of school performance or consequences for student progression and graduation.

The first round of the national assessment in 2021 was implemented during the COVID-19 pandemic, during periods of school closures. Participation rates were relatively high given the pandemic context, with 259,000 schools, madrasah and non-formal education programs participating, covering 3.1 million teachers and 6.5 million students, although achieving a minimum participation benchmark of 85% of the minimum sample size in all schools was challenging (Kemendikbudristek 2022).

2021 results were consistent with other assessments such as the previous AKSI and PISA, showing that half of Indonesia's students fall below minimum competency standards in literacy, and two thirds of students in Mathematics (ibid). Significant regional disparity in performance was also evident, with the highest performing schools outside of Java achieving similar levels of performance to the lowest performing schools in Java. Primary schools showed the most concerning results, with close to 20% of all primary schools falling in the lowest performance band, compared to 8% of junior high schools and 6% of senior high schools, perhaps reflecting that the impact of absences from school and interruption to learning due to the COVID-19 pandemic were felt more severely in the primary grades. At the primary level, 53.42% of students sampled reached minimum competency in literacy, but only 30.66% in numeracy. Data from the character and school climate surveys

indicated that schools with higher performance in these two domains tended to have higher literacy and numeracy outcomes (ibid). Disaggregation of student performance by gender has not been made available.

2022 results show improvements in literacy and numeracy at all levels of schooling, except senior secondary where performance in literacy declined between 2021 and 2022. At the primary level, 61.53% of sampled students reached minimum competence, an increase of 8.11 points over 2021 results. In numeracy, 46.67% of sampled primary students met minimum competence, an increase of 16.01 points over 2021 results. Disaggregation by region, socioeconomic status and gender was not made available in 2022 reporting. While these results are encouraging, they also reveal the work needed to achieve basic literacy and numeracy skills – a task which is likely to be even more significant in the regions outside major metropolitan areas.

National Assessment data are provided to schools, districts, and provinces in the form of the '*Rapor Pendidikan*' or an education scorecard. This is discussed in more detail in the section on 'Standards and School Improvement', below.

The national assessment represents a major step towards a systematic approach to collecting student and school performance data for improvement purposes. Importantly, it will also enable Indonesia to track performance against the Sustainable Development Goals. A minor point for consideration is the requirement by the Sustainable Development Goals for countries to track student competency at the end of early primary (grades 2/3), end of primary, and end of lower secondary, whereas, the national assessment collects data on proficiency in literacy and numeracy in grades 5 and 8. Thus there is currently a gap in capturing data and reporting on proficiency at the end of early primary (grades 2/3) which is critical for early interventions to address gaps in learning before students become further behind in later grades.

School and classroom assessment

Persistently low learning outcomes, combined with troubling performance on the character and school climate surveys, reinforces the need for a renewed emphasis on literacy, numeracy, and character in *Kurikulum Merdeka*, particularly changes in classroom

and school-level assessment practices that support 'Teaching at the Right Level' (differentiation) and deeper learning of curriculum content that would lead to higher achievement of the *Capaian Pembelajaran*. In this regard, the Ministry of Education has encouraged schools to employ greater use of formative and diagnostic assessments, particularly for schools implementing *Kurikulum Merdeka*. The Ministry of Education has provided resources (such as teacher learning through the PMM, assessment tools and a guideline outlining principles of teaching, learning and assessment) that support teachers to move away from the perfunctory and rigid assessments required under the 2013 curriculum. Further to this, the Ministry of Education has encouraged use of classroom assessment for the purpose of understanding student progress, providing feedback to students on their learning, and adjusting teaching to address gaps in learning.

The Ministry of Education has also attempted to embed this paradigm and practice shift through making changes to key regulations related to educational assessment. The first policy announcement in 2019, for example, ended the National Examination (from 2021), gave flexibility to schools to determine the format of school-based assessment for graduation, and encouraged diversity in their form, including student portfolios, assignments, written tests, or "other forms determined by the school in line with the competencies to be measured in the National Education Standards" (Permendikbud No. 43/2019 Clause 5). This regulation also gave schools flexibility in determining when to hold final assessments – "in the first or second semester of the final year of schooling, taking [student] achievement against the graduate standards into account". This regulation has potential not only to drive quality assessment practices that better assess achievement of both cognitive and non-cognitive skills, but also reduce pressure on students.

The other key regulation, an update to the National Education Standard on educational assessment (Permendikbud No.21/2022) explicitly outlines that the purpose of formative assessment is to monitor and improve on the teaching and learning process; that it is carried out to collect information on students experiencing challenges or learning difficulties; as well as to measure overall student progress. It goes further in outlining that formative assessment serves as feedback *to students* to develop their ability to

monitor their learning process and progress, as part of the skills required for lifelong learning; and as feedback to teachers to reflect and improve on the effectiveness of teaching and learning. This detail provides clear direction to teachers on the importance of formative assessment, and in outlining how formative assessment not only provides feedback to students, but also reinforces the importance of metacognition strategies in supporting student learning.

Notably, the regulation doesn't prescribe how formative assessment should be undertaken, with general guidance provided through the 'Principles of Teaching, Learning and Assessment' guideline developed for the *Kurikulum Merdeka*. Teacher learning and assessment tools in the PMM also encourage but do not require compliance with recommended approaches to formative assessment, such as '*asesmen di awal pembelajaran*' (diagnostic assessments) that teachers may use at the beginning of each semester or when introducing new topics to understand what prior learning has been achieved and establishing a base for teaching at the right level.

The combination of regulations and supporting resources that are guiding in nature rather than prescriptive emphasises the freedom and flexibility *Merdeka Belajar* gives to teachers for ownership of the teaching and learning process. Highly competent teachers will value the autonomy given to them to determine their own assessment tools and approaches, while the supporting resources provided by the Ministry of Education support teachers who may not yet have the confidence and/or ability to do so. Further work is needed to support local governments to understand these changes in assessment purpose and practice: there is anecdotal evidence of districts requiring schools to report formative assessment data to district education offices, and districts still requiring schools to use district-developed test packages for annual and end-of-school exams.

Standards and school improvement

The development and implementation of a valid and reliable education quality assurance system is essential for developing and implementing strategies to maintain and improve the quality of an education system and the learning outcomes of its students.

Internationally, all high achieving education systems have established effective quality assurance systems linked to quality improvement strategies, although the term 'quality assurance' is no longer widely used (Dawson 2020).

As described in Chapter 3, Indonesia's education quality assurance system began in the mid-2000s, with key components the National Education Standards and the provincially located quality assurance institutions (*Lembaga Penjaminan Mutu Pendidikan*, LPMP) established in 2005 and 2006 respectively. Several revisions to the standards have been undertaken since then, with some of the standards reviewed and revised up to four times since their initial promulgation in 2005. The roles and responsibilities of the LPMP were also significantly revised in response to feedback from teachers, principals, and local governments; evaluations of the standards and LPMP effectiveness; accreditation outcomes; and "to accommodate evolution in knowledge, technology, societal demands and wider community expectations of educational outcomes" (Ulumudin et al. 2022: 8).

National Education Standards

An analysis of the education quality assurance system undertaken as an input to the 2019-24 RPJMN noted that compared to the statements of standards used in other education systems, the NES are complex, employ a 'one size fits all' approach despite the complex diversity of Indonesia's schools, and their presentation as separate regulations makes them difficult for teachers, principals, and education personnel in schools and districts to access and understand. It found that the main focus of implementing and reporting on the standards was compliance, and that insufficient valid and reliable information was collected about the quality of educational processes and the quality of learning outcomes, which is essential to enable the education system to develop policy and allocate resources in a manner which will drive improvements in educational quality (Dawson 2020: 10-12).

In response to this context and evidence, two major changes were made in 2022 in relation to the NES. These changes were intended to address the major transformations required in teaching and learning to respond to gaps in learning that have resulted from the COVID-19 pandemic and the persistent learning crisis. First, the responsibility for issuing the NES was returned from an

independent body reporting to the Minister, to the Ministry itself. This gave the Ministry of Education greater ability to achieve alignment between curriculum, assessment, and pedagogical expectations, and define the NES in a manner consistent with the flexibility and autonomy of *Merdeka Belajar* and global evidence on what works to improve learning. The new NES encourage a fundamental change through the development of standards that are more flexible and student-centred as outlined in the Ministry of Education's academic papers that provide the rationale for revised standards (Ulumudin et al. 2022, 2022a). The ministry's guiding principles on education standards state that the national standards should:

- Be inclusive of the diversity of contexts, capacities, and performance, and applicable to schools in a variety of circumstances.
- Empower rather than constrain.
- Focus on practice essential to improving the quality of teaching and learning.
- Reduce the administrative burden for teachers, by focusing on improving quality instead of administrative compliance.

This marks a significant shift away from the prescriptive and compliance focused standards of the previous decade, enacting *Merdeka Belajar*'s emphasis on teacher empowerment and autonomy. It also demonstrates a clear intent to 'deregulate' the delivery of education in line with Jokowi's focus on deregulation in his second term.

The second major development in relation to education standards was the 2022 revision of four of the eight national education standards, with a further two standards issued in 2023. The Ministry of Education prioritised the four revised standards – the graduate competency, content, process, and assessment standards – to enable wider implementation of *Kurikulum Merdeka* from the 2022/2023 school year, as well as to enact regulations which empowered schools and teachers to trial and adopt new practices that have been shown, nationally and internationally, to improve student learning.

As yet there is no evaluation or research on how the revised standards have been received by teachers and whether teachers understand and can apply the new standards. It will be important to

understand in the coming years whether the 'freedom' given to teachers and schools in the revised standards is seen positively, or whether it creates uncertainty for some teachers who are more familiar and perhaps comfortable with a rules-based, top-down, and compliance-driven approach.

Systems for accrediting schools, madrasah and early childhood centres against the national standards have likewise been revised to have a greater emphasis on the quality of standard implementation in schools. It will be important that accreditation assessors become familiar with the new standards and develop a good understanding of why they have been drafted, to minimise the likelihood that they will base judgements on the previous standards with which they are familiar and comfortable.

Education Quality Assurance Boards (Balai Penjaminan Mutu Pendidikan)

With the key national education standards embodying a stronger quality-improvement focus and a shift away from simple compliance, the Ministry of Education initiated reform of their provincially located education quality assurance institutions in March 2022, to better support school quality improvement. The former *Lembaga Penjaminan Mutu Pendidikan* (LPMP) was renamed the *Badan Penjaminan Mutu Pendidikan* (BPMP) with the change in name from 'institution' to 'board' enabling an upgrade to the civil service level of the board head, which was designed to encourage higher level, more strategic leadership of the boards (Permendikbudristek No. 11/2022).

Symbolically, the change also represented an intentional break from the LPMP's past focus on quality 'mapping', training at school level and relaying ministry policy to districts (often as directives, in contradiction to the autonomy given to provincial and district governments in the decentralised education system). A key role of the new BPMPs is to work in partnership with the provincial and district governments to support quality improvement, primarily through the use of national assessment data – the *Rapor Pendidikan* – to inform priority setting, planning and budgeting for improved teaching and learning (Kemendikbudristek 2022a). The BPMPs are expected to play a leadership role in improving school outcomes, working in a consultative manner with provincial and district governments and other local stakeholders within local education

ecosystems to facilitate dialogue and agreement on priorities for improved learning. This implies a major change to the skills required of BPMP personnel, an area that requires significant effort in training and development.

The other significant change introduced in 2022 was to remove the teacher development function of LPMPs and create a new Ministry of Education unit focused on teacher quality improvement: The *Balai Guru Penggerak* (BGP), province-level centres for teacher excellence. This was designed both to reinforce the change in BPMP function, but also to create a professional body that can support development and empowerment of teachers, principals, supervisors, and other personnel including through training and development of classroom resources. Inclusion of a role for the BGP in facilitating teacher learning and development (by other organisations) signals a change in thinking on how teacher learning and development is delivered, recognising that other actors within local education ecosystems such as universities, civil society organisations, professional teacher organisations and teachers, principals and supervisors themselves (including *Sekolah Penggerak* and *Guru Penggerak* graduates) have capacities that can be leveraged to build the skill and capacity of teachers and principals.

This significant change in expectations for the BPMP will take time to embed itself in the aptitudes and skills of BPMP leaders and personnel, and in the expectations and practices of district, province and school personnel. Anecdotal evidence suggests the BPMP are still primarily focused on encouraging adoption of major national initiatives such as *Guru Penggerak*, *Sekolah Penggerak*, and *Kurikulum Merdeka*, and meeting targets related to the PMM - and are still adjusting to being facilitators instead of agents of national authority located in the regions. The BGP, as new institutions, are at various stages of taking up their new role. A key challenge for BGP will be achieving reach within each province and ensuring that they work collaboratively with provincial and district governments (and indeed the wider education ecosystem) to synergise efforts to improve teacher capacity.

Rapor Pendidikan and data-based planning

The *Rapor Pendidikan* or education scorecard, first released in April 2022, is intended to be used by schools and district and provincial

governments to "identify problems, reflect on their causes, and take action to improve education quality" (Kemendikbudristek 2022b). The report draws on data collected through the national assessment program and the national education management information system, *Dapodik*, to assist schools, districts, and provinces to undertake data-based planning, with the 2021 national assessment set as a baseline against which government and schools can measure improvement over time. The scorecard also reports on equity dimensions, presenting disaggregated data (for provinces and districts) in relation to student performance by urban-rural location, and socioeconomic status. BPMP have been tasked with familiarising provinces and districts with the *Rapor Pendidikan* and supporting them to use the report in priority setting, planning, and budgeting. As part of their role to support development and empowerment of teachers, principals, supervisors, and other personnel, the newly established BGPs may focus professional development for teachers and others on areas of need as identified in the *Rapor Pendidikan*.

The establishment of the *Rapor Pendidikan* is significant in three ways:

- first, it represents the first time that comprehensive student and school performance data have been collected and reported in an accessible format and linked to a major effort to support utilisation of the data for school improvement.

- second, it sharpens school and district focus on student performance in literacy and numeracy and on non-cognitive aspects of student learning, personal development, and wellbeing, with a particular emphasis on equity – raising the performance of the lowest achieving students will contribute to raising achievement overall.

- third, data collected through the school climate survey, such as on instructional leadership, the quality of teacher practices, and whether students feel safe and valued, should provide schools with a solid basis on which to improve the school-level variables that contribute to student engagement and achievement.

However, this will only occur if provincial and district governments as well as schools understand the *Rapor Pendidikan* and how to use it to inform improvement. A snapshot survey conducted by

INOVASI in 2022 of 28 principals, supervisors, teachers, district and BPMP staff in four provinces sought to understand the extent to which districts were using the *Rapor Pendidikan* data as an evaluative tool to understand and improve performance, and what evidence there was of changes to plans or budgets as a result of utilising the *Rapor Pendidikan (*INOVASI 2022*)*. The survey indicated that 'socialisation' of the report, including training on how to read and interpret the data and then use it in planning (*rencana tindak lanjut*) was still limited. Respondents reported that the socialisation enabled them to understand the *Rapor Pendidikan*, but not yet how to use it in planning and priority setting, or to inform classroom teaching. In part, this was due to the timing of the report's release not aligning with the annual planning and budgeting cycle at district and school levels. This suggests a need to revisit and strengthen socialisation and training, including how the *Rapor Pendidikan* links to other planning and resourcing processes.

In its first iteration, the report provides limited information to schools on literacy and numeracy performance that can help teachers to pinpoint where further support or re-teaching of specific curriculum content is required. More detailed reporting on numeracy and literacy performance in future reports will better support schools to develop specific, actionable strategies to improve student learning, and can also inform teacher professional development by the ministry, BGP, provincial and district governments and other providers. Disaggregated data on performance by disadvantaged groups (e.g., by poverty, gender, disability status) will support districts and provinces to better understand which groups of students are falling behind the most and work with schools to understand why this is occurring, and design and fund interventions aimed at raising their performance.

Program *Sekolah Penggerak*

Program *Sekolah Penggerak* aims to improve both the low quality of education and address significant disparities in the provision of quality education across Indonesia. It aims to empower schools to transform teaching and learning, and work with other schools as a catalyst for positive change (Zamjani et al. 2020). It commenced in 2021, and as of May 2023 the program has been implemented in over 14,000 schools with the goal to reach at least 40,000 schools by 2024, with the ultimate objective that all schools exhibit the behaviours of a *Sekolah Penggerak* (Kemendikbudristek 2023c).

Different from previous school improvement initiatives such as reference and model schools, the *Sekolah Penggerak* program deliberately targets lower performing schools to demonstrate that change is possible in low resource and lower capacity settings, providing more realistic learning for other schools. *Sekolah Penggerak* interventions (training, coaching and mentoring) target multiple aspects of improving school quality, from evaluation and data-based planning through to changing mindsets and technical capacity building for teachers and principals. *Sekolah Penggerak* also use the new *Kurikulum Merdeka*, with the first intake in 2021 trialling the curriculum before it was made available for all schools on an opt-in basis in 2022. Schools are supported for three academic years.

An evaluation of *Program Sekolah Penggerak* that follows a sample of 2021 intake schools over three academic years will document the change process undergone by *Penggerak* schools. The study's midline (2022) shows that *Penggerak* schools are at four different stages of 'transformation' – defined as "initiating, developing, progressive and transformative" (Kemendikbudristek 2022c). Despite variation in the schools' 'transformation journey', common changes in student behaviour were evident in all the sample schools; students were observed to be more disciplined, have a more positive attitude to learning, to interact more with their peers in class, and have a more open relationship with their teachers. Of significance, the study also showed that schools with low quality infrastructure and gaps in teacher provision could still demonstrate improved performance (at 'progressive' level). For *Sekolah Penggerak* to have wider impact on school quality, the program's focus on quality school improvement must be supported at sub-district, district and provincial levels of administration. Initial perceptions by districts of *Sekolah Penggerak* as a central government initiative that they had been asked to support have evolved over time, with the majority of districts now viewing the program positively and desiring more involvement in the program (Kemendikbudristek 2022d). A greater level of local government buy-in to the program could also support efforts to share learning on improvement strategies with other schools within the district and province, and indeed inform their own quality improvement strategies for greater impact.

Overcoming prevailing beliefs about what constitutes effective teaching and learning as well as a climate that values conservatism,

tradition, and replication of past practice will be key to sustaining a shift from embedded practices. The *Sekolah Penggerak program*'s timeline is ambitious; research indicates that the embedding of education reform requires a timeline of five years or even a decade or more (Carter 2021).

Program *Organisasi Penggerak*

Like *Program Sekolah Penggerak*, the *Organisasi Penggerak* program aims to improve the quality of education and address significant disparities in the provision of quality education across Indonesia, through involving Indonesia's significant non-government sector in provision of training, coaching and mentoring to schools. *Program Organisasi Penggerak* invited non-government organisations with an established track record of delivering training and capacity building for teachers and principals to submit proposals for funding to implement their own interventions (focused on literacy, numeracy, and character in line with other *Merdeka Belajar* reforms). The ultimate goal of Program *Organisasi Penggerak* is to encourage the emergence of thousands of '*sekolah penggerak*' as well as to inform scaling up and/or integration of successful interventions into government led programs. Decisions on scaling up are informed by program evaluations that consider changes in teacher behaviour and school leadership, classroom and school climate, and student outcomes data.

The ultimate purpose of school improvement is to improve student learning outcomes. The suite of *Merdeka Belajar* reforms designed to facilitate school improvement – the revised national education standards, quality assurance processes, the *Rapor Pendidikan*, and specific interventions *Program Sekolah Penggerak* and *Program Organisasi Penggerak* - have a consistent and clear focus on improving student outcomes in literacy, numeracy, and character, through setting clear expectations of practice and modelling practice in key areas that matter most to improving student outcomes. Efforts to achieve improved practice and outcomes on a national scale could be supported through issuance of an overarching school quality or school excellence framework that describes stages of improvement on the journey to being a 'great' Indonesian school and drives support to teachers, principals, supervisors, and local government leaders to work progressively towards a desired future state.

Conclusion

This chapter has provided an overview of Indonesia's comprehensive *Merdeka Belajar* reforms. This ambitious reform program, which commenced with the second term of President Jokowo Widodo in 2019, encompasses changes to policy and practice in curriculum, assessment, education standards, and teacher management, including teacher education, recruitment, professional development, and in-service training. As described, this suite of reforms has the potential to transform the Indonesian education system, and to accelerate improvements to learning outcomes. Emerging evidence from government and development partner evaluations indicates that changes in teacher practice and mindset are starting to be seen. However, major challenges remain to implement the reforms and realise the promise of *Merdeka Belajar*.

These challenges are discussed in the final chapter of this volume, which follows.

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Regulations

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CHAPTER VI
CONCLUSION

CHAPTER VI: CONCLUSION

Mark Heyward & Joanne Dowling

Introduction

In Volume 1 of this Education policy study, we have traced the reform of Indonesia's basic education system since decentralisation and 'reformasi' in the early 2000s, through to the comprehensive *Merdeka Belajar* reforms that commenced in 2020.

We have argued that there is a consistency in the direction of reform over this twenty-year period. This is in part a return to the values of Ki Hadjar Dewantara, and in part a concerted effort to address the 'learning crisis' and improve learning outcomes for Indonesian children. Since decentralisation and the first National Education Law (Sisdiknas 2003), Indonesia has worked to create an education system that supports a democratic, open, and tolerant society; that supports a growing and competitive economy and a prosperous and peaceful nation; and that is relevant and effective across the diversity of this vast nation.

With the benefit of hindsight, some of the reforms in this period may appear to have been misplaced or ineffective in the short term, and some have had unintended consequences, introducing perverse incentives, but it is our view that all have contributed to the achievement of these broad aims.

Change takes time. Many of the earlier reforms were not given the time needed for implementation, before being superseded by new policies and new curricula. Some, such as the introduction of teacher

certification and associated incentives, will take more time to realise the objective of improving quality of teaching and learning outcomes. This is a generational change. Other reforms in this period have come and gone, an iterative process to achieve the desired end. The *Merdeka Belajar* reforms described in the previous chapter, while building on the earlier reforms, represent in many ways a different order or level of change. As argued in the previous chapter, this is the first time that the Indonesian government has attempted a reform agenda as comprehensive and integrated as *Merdeka Belajar*. This reform has the potential to transform the system and to radically improve learning outcomes, but the challenges facing government in the implementation of the reforms are great.

In addition to time, change also requires an alignment of political, cultural, and technical conditions (House and McQuillan 1998), the creation of 'space' for change. Without this alignment, change is unlikely to 'stick', to sustain, or to scale-out. Put another way, successful interventions require ownership, depth, and quality of implementation to succeed (Coburn 2003). These necessary conditions are similar to the three A's in the triple-A framework: Authority (or Authorisation), Acceptance and Ability (Andrews et al. 2017). In the absence of these three conditions, policy implementation is unlikely to succeed, and scale-out and sustainability are also not likely. The history of education policy reform in Indonesia, and more broadly in Southeast Asia, is littered with examples of well-intentioned policies promulgated at national level, which have failed due to lack of local ownership, limited or poor implementation and training efforts, and lack of understanding and acceptance on the part of teachers and local administrators (Hallinger 2005).

In this chapter, the conclusion to *Insights from INOVASI: Indonesia's twenty-year reform journey*, we briefly analyse the implementation of Indonesia's education reforms, and assess the potential for sustainability and ongoing implementation of the reforms after 2023.

Figure 22. The Triple A Framework

The three conditions of Authority, Acceptance and Ability intersect to create space for change. The Triple A framework, illustrated in Figure 22, is presented in Table 19 with a description of the three conditions, together with some discussion about the strategies used to implement Indonesia's reforms, based on analysis and evidence of this study.

Table 19. Necessary conditions for successful policy implementation, scale-out and sustainability

Conditions	Description	Strategies used in Indonesia - discussion
Authorisation Ownership, the political dimension	*National and sub-national actors and practitioners 'own' the reform.* This requires national and local governments to provide authority and resources for the innovation. Change needs to be codified within institutional structures, and as result, changes the 'rules of the game'.	The *Merdeka Belajar* reforms are authorised by national government, through policy and regulation. It is critical for the success of the reforms that Indonesia's post-Jokowi administration continues to support the key policies, where evidence continues to show their effectiveness. Renewed efforts to have the *Merdeka Belajar* reforms incorporated into a revised National Education Law could go a long way to ensuring the sustainability of the reforms. The reforms also need to be understood and supported by all related ministries, at all levels in the bureaucracy, including the Ministry of Education, Ministry of Religious Affairs, and *Bappenas*. The national reforms need to be locally understood and owned to succeed. In Indonesia's vast and decentralised education system, authorisation is

Conditions	Description	Strategies used in Indonesia - discussion
		required at the local level, particularly the province and district, to succeed.
Ability Quality of implementation, the technical dimension	*National and sub-national actors and practitioners have the technical ability to implement and sustain the reform.* This usually requires technical training, capacity building.	Changes to practice required by the new curriculum, assessment and other aspects of *Merdeka Belajar* need to be feasible for local partners to implement, scale and sustain. Successful innovations must be 'SASSY' (simple, affordable, sustainable, scalable – yes!) Implementation of *Kurikulum Merdeka* and the new approaches to assessment and differentiated learning need to be supported by well-designed pre-service teacher education and continuous professional development, accessible and user-friendly online platforms such as Platform *Merdeka Mengajar* and PINTAR, local communities of practice such as learning communities, KKG and MGMP, and local facilitators and leaders (including supervisors and principals) supported by BGP and BPMP. The continuous monitoring of program assumptions, approaches, and inputs is essential to inform the management of activities known to contribute to sustainability and reduce the risk of failure. Continuous engagement with feedback from monitoring is essential.
Acceptance Depth, the cultural dimension	*National and sub-national actors and practitioners understand and value the reform.* Depth is a change in attitudes, mindsets, and	The *Merdeka Belajar* reforms need to be accepted by teachers and the wider education community, including teacher unions. Depth and acceptance have two dimensions, cultural and political. 1) High quality technical assistance and continuous professional

Conditions	Description	Strategies used in Indonesia - discussion
	understanding of educational principles and processes. It implies change in organisational cultures, and sometimes change in the deep beliefs about how children learn, the role of the teacher and the school, that underpin the innovation.	development (CPD) or mentoring is needed to ensure teachers achieve a deep understanding of the principles and theory underpinning the practices and processes being taught. Long-term engagement with local partners, builds trust, understanding and attitudes – a 'growth mindset'. 2) The reforms will fail if not accepted and supported by those who need to implement them. In addition to a deep understanding – the cultural dimension - teachers and district personnel need to believe that they can implement the new approaches, and that change is in their interests – personally and professionally.

Adapted from INOVASI's Sustainability and Scale-out Strategy Update (December 2021)

Implications for successfully implementing the *Merdeka Belajar* reforms in schools.

The *Merdeka Belajar* reforms emphasise autonomy, flexibility, and 'freeing up' of past regulatory and administrative constraints to good teaching and school leadership practices. The reforms require teachers, principals, supervisors, and government administrators to change entrenched ways of thinking about teaching practice, how learning occurs, and the behaviours that are rewarded by the education system.

School practices have been "recognized as remarkably impervious to, and self-protective against, fluctuating external policies and agendas" (Masters 2012:1). As Bjork writes in his 2004 case study of school-based curriculum reform in Indonesia, the "…process of interpreting, translating and reshaping policies drafted by central authorities plays a crucial role in the success or failure of educational reform efforts (Bjork 2004: 248)". Bjork's case study revealed that a long history of central state control over the education system had encouraged a culture that valued obedience and conforming to norms over teaching excellence and innovation. When given the

independence and authority to design locally relevant curriculum and introduce new and innovative teaching approaches, teachers, who were unaccustomed to taking initiative and acting independently, chose to wait for directions and instructions rather than take up the autonomy given to them by the central government. While almost two decades have passed since Bjork's seminal study was published, and since the post-New Order reformasi period began, the study's description of political and cultural factors that affect teacher behaviour is still relevant in today's context where a culture of passivity and waiting for direction "*dari atas*" (from above) still persists in schools and local governments.

Bjork's study suggests that *Merdeka Belajar* must put effort into changing the way teachers, principals and local government administrators view their roles, their accountabilities, and their intrinsic motivations for the reforms to succeed in transforming teaching and learning. The Ministry of Education's 2020-2024 Strategic Plan states that *Merdeka Belajar* aligns with national policy directions in relation to regional autonomy and school-based management, by encouraging autonomy of all education stakeholders to "achieve national education goals in ways that are relevant to individual school and regional contexts (Ministry of Education 2020-24 Strategic Plan: 43)".

To a large extent, key reforms such as *Kurikulum Merdeka*, *Guru Penggerak*, *Sekolah Penggerak*, the 2020 Teacher Competency Framework, and the revised National Education Standards do consistently encourage a change in mindset: from teacher-centred to student centred, from passive to proactive, and from compliance to empowered decision making (within established corridors). This is done, for example, through teaching the philosophy of Ki Hadjar Dewantara, and training for teachers and principals on developing a growth mindset and culture of reflection and improvement, student-centred pedagogy, student-centred school leadership and decision making, and developing a positive and inclusive school culture. Emerging evidence from *Program Guru Penggerak* and *Program Sekolah Penggerak* cited in Chapter 6 indicate that changes in teacher mindset are possible, particularly when principals are supported to develop similar perspectives. Achieving this kind of empowerment at a wider scale is a challenge that the current and future administrations must embrace – particularly in madrasah, which are only now being exposed to the new paradigm through

taking up *Kurikulum Merdeka* and which at present is being trialled by around 1,000 of Indonesia's 90,000 madrasah.

While not explicitly referenced in the Ministry of Education Strategic Plan for 2020-2024, *Merdeka Belajar* also implies a similar paradigm shift for district and provincial governments, and a shared responsibility for the quality of student learning. Under decentralisation arrangements, subnational strategic plans for education should be aligned with the national strategic plan. Notwithstanding this, the Ministry of Education has limited influence on the policy priorities of subnational governments. While the Ministry has made efforts to engage with district and provincial governments, it is not in their remit to build sub-national capacity in this regard, other than any incidental capacity or improved understanding that may be result from engagement between the ministry and provinces and districts in relation to national priorities such as the *Rapor Pendidikan*, implementation of *Kurikulum Merdeka*, employment of teachers and principals including *Guru Penggerak* graduates, and communications and socialisation of revised National Education Standards.

Accountability for the quality of education service delivery through implementation of the minimum service standards in education is, however, one area where *Merdeka Belajar*'s focus on learning has been able to be integrated into province and district agendas. In 2022 an updated set of minimum service standards in education was issued by the Ministry of Education (*Permendikbud* No. 32/2022). The standards provide guidance to local governments on the fulfilment of basic student needs and emphasise achieving quality outcomes in literacy and numeracy. Particular attention is also paid to disparities both in learning achievement and in relation to participation. Districts and provinces are required to report to the Ministry of Home Affairs annually on their achievement against these minimum service standards.

The 'missing link' at the district and province level could present a major risk to the success of the *Merdeka Belajar* reforms. Under Indonesia's model of decentralisation, schools belong to districts and provinces. Efforts to influence teacher and principal behaviour by the national government can be readily undone should a district, a province or a school supervisor not share the same outlook or level of understanding or have other priorities. In the case of madrasah,

the focus on religious affairs in district and provincial offices of the Ministry of Religious Affairs indicates that education is not always the highest priority, and the highly independent nature of the madrasah sector means achieving a common vision and goal is more challenging to achieve than in the school system (madrasah are 90% private, with many of the largest 'providers' having a strong tradition of independence from government). Yet international research shows that alignment of vision (and performance targets) between school, local government and national ministries is essential to achieving improved student outcomes (Schleicher 2018: 64).

Future prospects

Schleicher's 2018 study on top-performing school systems, based on OECD research on PISA, identified several key features that have contributed to their success (Schleicher 2018). Schleicher summarises that high-performing systems:

- have moved from administrative control and accountability to professional forms of work organisation that enable learning at all levels of an education system.
- have created a culture of collaboration and strong networks of innovation with teachers and school leaders within and beyond their school to improve quality teaching and student outcomes.
- have set ambitious goals, are clear about what students should be able to do and at what stage and provide the professional support for school leaders and teachers to deliver against these goals.
- have encouraged their teachers to be innovative, to improve their own performance and that of their colleagues, and to pursue professional development that leads to better practice against professional standards.

Benchmarked against these global practices, the *Merdeka Belajar* reforms compare well, at least in their design and intention. The deregulation agenda shifts the system away from its historically strong compliance culture, and evidence is now emerging that the principles of empowerment and flexibility are starting to be understood and owned by teachers and principals. Practice is starting to become student-centred, and new forms of organic, teacher-led and cross-school collaboration have been initiated. *Kurikulum Merdeka*'s framework does provide a clearer articulation

of what students should know and be able to do and at what stage than previous curricula, and support is growing in quality and volume to support achievement of expected learning outcomes.

The *Merdeka Belajar* reforms also acknowledge the very significant disparities that exist in Indonesia – not least in the capacity of teachers and principals for quality practice that facilitates student learning. The 2010 McKinsey report (Mourshed et al. 2010), *How the world's most improved school systems keep getting better*, proposes a continuum of improvement from poor to fair, from good to great. Mourshed et al. argue that systems at the four different levels of quality improvement implemented an integrated set of actions from a 'menu' of interventions appropriate to their level of performance. A challenge for Indonesia with its very high levels of disparity and inequity is that schools are at very different starting points on their journey to improvement – see Figure 23.

Figure 23. Tight-lose control

Systems on the journey from poor to fair, in general characterized by less skilled educators, tightly control teaching and learning processes from the center because minimizing variation across classrooms and schools is the core driver of performance improvement at this level. In contrast, the systems moving from good to great, characterized by more highly skilled educators, provide only loose guidelines on teaching and learning processes because peer-led creativity and innovation inside schools becomes the core driver for raising performance at this level.

(Mourshed et al. 2010: 20)

Merdeka Belajar has attempted to deal with this disparity through differentiating support, with autonomy given to schools and teachers to decide how to implement many of the reforms. For example, *Kurikulum Merdeka* provides a range of supporting resources for teachers, such as 'off the shelf', prescriptive lesson plans for new, inexperienced, or lower capacity teachers while giving more experienced, higher capacity teachers the authority to modify these or develop their own resources. Similarly, schools which opted to trial *Kurikulum Merdeka* in 2022 and 2023 could choose to adopt it in its entirety or continue using previous curricula, either the 2013 curriculum or the simplified 'emergency curriculum' issued during the period of COVID-19 school closures.

Ultimately, *Merdeka Belajar* will have to break through the prevailing culture and climate that values conservatism, tradition, and replication of past practice – at all levels of the system from the Ministry of Education and Ministry of Religious Affairs' directorates through to classrooms. The culture of education, assumptions, and beliefs about what constitutes effective teaching, learning and what are considered appropriate outcomes, combined with social and bureaucratic norms of behaviour, are major challenges to the shifting of embedded practices. As Schleicher (2018: 204) notes:

"*The laws, regulations, structures and institutions on which policy makers tend to focus when reforming education are just like the small, visible tip of an iceberg. The reason why it is so hard to move education systems is that there is a much larger, invisible part under the waterline. This invisible part is composed of the interests, beliefs, motivations and fears of the people who are involved. This is where unexpected collisions occur, because this part tends to evade the radar of public policy. Policy makers are rarely successful with education reform unless they help people recognise what needs to change, and build a shared understanding and collective ownership for change; unless they focus resources, build capacity, and create the right policy climate with accountability measures designed to encourage innovation and development, rather than compliance; and unless they tackle institutional structures that too often are built around the interests and habits of educators and administrators rather than learners.*"

What is Next?

It is beyond the scope of this study to make detailed recommendations to government, beyond those offered in previous chapters. However, based on the analysis presented in this report, there are some things we can conclude about what needs to occur to realise the promise of Indonesia's twenty-year education reform journey, for the transformational *Merdeka Belajar* to be successfully and sustainably implemented, and for Indonesia to achieve its ambitions of accelerating improvements to learning outcomes. There are four elements to this – time, and three conditions necessary to create the space for change discussed earlier in this chapter, authority, ability, and acceptance.

Time: As described in the introduction to this chapter, perhaps the key element that is potentially missing for the implementation of the *Kurikulum Merdeka* reforms is *time*. Curriculum change in well-established education systems is typically a six to ten-year process (Mourshed 2010). Meanwhile, while *Kurikulum Merdeka* is the centrepiece, Indonesia's *Merdeka Belajar* reform agenda is much broader than this and encompasses assessment, teacher standards and competencies, training and development, and changes to pedagogy, through introducing differentiated teaching, as described in the previous chapter. Such a comprehensive reform package needs time to implement. Moreover, changing curriculum and teaching practices now is not likely to show up in improved results in benchmark tests like PISA and the government's own national assessment for some years. Impacts of the recent COVID-19 pandemic on learning loss only serve to increase the time required to achieve measurable improvements in learning outcomes. It is critical that time is allowed for the reforms to be fully implemented and to bear fruit in improved learning outcomes – while evidence continues to show their effectiveness.

The introduction of *Merdeka Belajar* reforms began in 2020 and coincided with the pandemic and school closures. The new approach to assessment was introduced in 2021, with the first reports issued in March 2022 and the second reports in May 2023. The *Organisasi Penggerak* program was launched in 2020 and the *Sekolah Penggerak* program for teacher development in 2021; the Platform *Merdeka Mengajar* was launched with *Kurikulum Merdeka*, in February 2022, following a period of piloting and experimenting with the *Guru Berbagi*-*Guru Belajar* platforms. The reforms are thus barely three years old and are only partially implemented, at best. With President Widodo's term of office due to end mid-2024, there is no guarantee that a future administration and a future education minister will continue to support all the reforms. The key point to make here is that, regardless of the *branding* of the reform package and whether or not the '*merdeka*' label persists, support for the *substance* of the reforms must continue for a *substantial period of time for these reforms to have a chance of success.*

Kurikulum Merdeka was initially conceived as a *process* more than a *product*. Recognising and reacting to the problem of lack of stability in curriculum reform (described in Chapter 4), the government envisaged that the new curriculum would be first

piloted and then rolled out to all schools: a prototype was introduced in 2021; schools were given the option to opt into a national pilot in 2022; and the national rollout is planned for 2024. Beyond this, it was envisaged that the curriculum will be routinely reviewed and updated in a continuous improvement process, so as to avoid what has been referred to as the 'big bang' approach to curriculum, which saw a completely new curriculum introduced around every ten years or so – with four new curricula in the last twenty years. The evidence of this study suggests that an incremental continuous improvement approach to curriculum and assessment, based on evidence from implementation, would be far more effective and far more likely to lead to overcoming learning loss and improved learning outcomes, than the former 'big bang' approach.

Authority. Core elements of the *Merdeka Belajar* reforms are authorised at the highest level, by the President, the ministers for education and religious affairs, and senior officials in those ministries. While support for the reforms is evident at the next levels in the two implementing ministries, it is not so clear at lower levels in the bureaucracy, or in key ministries, including Bappenas and Ministry of Home Affairs. Efforts to address this concern, through consultations and engagement are taking place, but will need to be strengthened and continued for the reforms to succeed.

Authorisation for the reforms is also critical at the subnational level. The passing of a revised National Education System law could support the continuation of the reforms however, this now seems unlikely within the term of the current administration. The Ministry of Education's efforts to engage districts through the newly established BGP and BPMP using a facilitation approach, rather than a top-down instruction approach, are likely to help, but the new approach will need more time to implement than is available under the term of the current administration. The proposed role for the BPMP requires a change of mindset for the province-level body, which is accustomed to a top-down approach (under the previous LPMP), for the newly established BGP, and for the districts, which are accustomed to independence and are not directly accountable to the Ministry of Education for education performance.

A key element to address when considering the authority for reform is the decentralisation arrangements that were introduced in the 2000s. As explained in Chapter 5 of this volume, the 2005 Teacher

and Lecturer Law gives central and regional governments (provinces and districts) shared responsibility for improving teacher quality, and districts are accountable to the Ministry of Home Affairs for implementation of education minimum service standards. However, the current arrangements for decentralisation described in Chapter 2 of this volume create challenges for implementation of the reforms. Chapter 2 of Volume 2 explains how 'incoherent accountability relationships' arise when the implementing personnel are not answerable to the authority delegating the responsibility (Pritchett 2015). Under current arrangements, district education offices and teachers are accountable to the district head and not to the Ministry of Education. Districts are not accountable for their performance on education to the technical ministry and are not guaranteed to implement the national government's reforms unless those reforms are endorsed and prioritised by the local government. Data on educational performance (such as the school climate) and literacy and numeracy outcomes are not typically collected or analysed by the districts. Districts are not required to prioritise or fund efforts to improve learning outcomes. Recent efforts to better align minimum service standards (for which the districts are accountable to the Ministry of Home Affairs) with education standards promulgated by the Ministry of Education may prove effective in driving reform at district level.

Funding for education is provided to the districts by the national government, but most of it is earmarked for teacher salaries and other routine costs, leaving very little for discretionary spending, such as for quality improvement. Moreover, as described in chapter 2, political leaders in the districts are perversely incentivised to inflate the number of teachers required, as they gain in terms funding transfers by recruiting more teachers. There is no incentive to rationalise teacher deployment through implementing multigrade policies in primary schools and multisubject teaching in junior secondary. Such rationalisation could improve service delivery and free up funds for quality improvement. Teachers and principals are commonly appointed and deployed as a political exercise to reward supporters and provide jobs for close allies – rather than on a merit basis.

The Ministry of Education aims to work *with* the districts, employing the province-level BGP and BPMP institutions as

facilitators to build local ownership and capacity for reform. However, without changes which incentivise districts to shift their focus to learning, to recruit teachers on a merit basis, and to increase the efficiency of the system through rational teacher deployment, it is difficult to see how the *Merdeka Belajar* reforms can be effectively implemented.

Ability: The upskilling required to enable Indonesia's 3.4 million teachers (and those in the pipeline in universities) to meet the standards set out in the 2020 Teacher Competency Framework and the revised National Education Standards, to effectively implement the new curriculum, and to adopt new approaches to diagnostic assessment and differentiated learning, represents a massive challenge. Ensuring that district officials, school supervisors and school leaders can interpret and use the *Rapor Pendidikan*, and to lead change, is another challenge.

Teachers typically learn best in communities of practice. The government has recognised this in its approach to in-service training, encouraging teachers to form learning communities, which may be the existing KKG and MGMP, may be school based, or may be independent groups of teachers with a shared interest in subject areas, or aspects of practice and reform. The accelerated introduction of virtual online communication triggered by the COVID-19 pandemic has made it possible and normal for teachers and administrators to learn online, to attend online webinars and other training events, and to form professional groups through WhatsApp, Zoom and similar applications. These two elements, online learning and communities of practice, address the previously insurmountable problem of how to scale out training to such a huge national workforce. The two elements form the basis of the government's approach to upskilling of teachers for *Merdeka Belajar*.

As described in the previous chapter, *Platform Merdeka Mengajar* is the keystone of this approach for government schools (and PINTAR for madrasah). Teachers can access the materials and training required to build their ability to implement the new approaches. However, as described, the platform is a work in progress. Much more needs to be done to evaluate the platform, its structure, user-friendliness, and content, and to improve it. An improved platform will mean that all teachers can easily find what

they need, when they need it, that they can easily gain credit for time spent on professional development, and that they can effectively use online materials on an individual basis or within communities of practice to increase the effectiveness of the training and improve their ability to implement the new approaches and the new curriculum. In addition, strategies to make these resources accessible to teachers excluded from technology require urgent development.

The Ministry of Education's *Penggerak* programs have met with mixed success. Lack of engagement with the districts has meant that the districts generally have little sense of ownership for the three programs: *Sekolah Penggerak*, *Guru Penggerak* and the *Organisasi Penggerak,* although as described, this is changing. Evaluations of the *Organisasi Penggerak* program are mixed, but at a minimum the programs have introduced local and national NGOs to districts, creating opportunity for ongoing partnerships. Meanwhile, the *Guru Penggerak* and *Sekolah Penggerak* programs are showing signs of success in upskilling and changing mindsets of teachers, as shown in the previous chapter. However, there is a common perception that, because the programs belong to the central government, and because the schools receive extra funding and extra training, the changes observed in these schools cannot be easily scaled out to other schools. This is a case of a diminished 'change space' due to lack of ownership (authority) on the part of the districts. The *Guru Penggerak*, and the *Sekolah Penggerak* in which they are based represent an asset for districts, which can be utilised to support implementation of the new curriculum and related reforms. For this to happen, districts need to 'own' the asset, to recognise the value these schools and teachers hold for them as change agents, and to deploy them as facilitators and models. This is happening in some districts, with good early results. The lessons from these cases could usefully be learned and shared with others.

The recently established province-level BGP and BPMP bodies are expected to play a key role, representing the national government and facilitating reform in the districts. For the bodies to effectively adopt this role, however, they will need time and support – as the new role involves a change of mindset and a new set of skills for their leaders and team members. The Ministry of Education could continue to look to programs like INOVASI to help them transition to the new role. Ultimately, the districts need to own the

responsibility for teacher professional development, and need to budget and plan for that, using the resources provided by the national government. School supervisors are in a key position to facilitate change, given authority, professional development and support, both logistical and technical. Similarly, the Ministry of Religious Affairs' training centres can play an important role, supporting province-level ministry offices to work with civil society organisations such as NU Ma'arif and Muhammadiyah to scale out in-service training for teachers.

Acceptance: The third of the Triple-As, acceptance, is equally challenging. Without acceptance of the new approaches at district, school and individual teacher level, the changes are unlikely to be fully implemented or sustained. This entails a change of mind-set; cultural change involving new ways of thinking about knowledge, about the process of learning and the proper role of the teacher, require time and professional development. Acceptance will be built over time, as teachers try the new approaches, find that they work, and begin to feel comfortable implementing them. The alignment of curriculum, assessment, teacher standards and teacher development policies will also help build acceptance. As discussed in Chapter 3, previous efforts to introduce active learning and curriculum reform were often undermined by the high-stakes national examination system which was not aligned with the new approaches.

To increase the acceptance in the general population and in the wider educational community, the Ministry of Education has begun to develop and implement a media campaign, based on 'proof of concept'. The idea of proof of concept goes beyond data collection, analysis and sharing of evidence that the *Merdeka Belajar* reforms work to change teaching practices and to improve learning outcomes. It includes the sharing of stories and images to reinforce the message in ways that touch the audience, that build acceptance and support for the reforms. To achieve the objective, this campaign needs strengthening, it needs further funding and ongoing collaboration with media actors. A broad campaign, led by the government through collaboration with development partners and non-government actors, is more likely to succeed than a single player acting alone. Ultimately, however, it will not be media campaigns that build acceptance, but the success of the reforms

themselves – evident in improved learning outcomes. For this, we need to be patient. As described above, change takes time.

Finally, to support implementation of the reforms and increase the likelihood of success scaling out and sustaining new approaches, the national government will need to actively monitor and evaluate the process, collecting information from schools and districts, analysing that information, and acting on it to adjust policies and to inform the alignment of systems and programs as implementation proceeds.

Conclusion

This set of reflections, *Insights from INOVASI,* aim to answer three questions:

Inquiry 1: What does the *Merdeka Belajar* agenda distinctively contribute to the trajectory of education reform since decentralisation; and what are its implications for transforming teaching and learning at local levels?

Inquiry 2: Are the present policy agenda and extent of progress towards implementation sufficient to meet the objectives of the government's reforms?

Inquiry 3: What part have the development approaches of INOVASI and TASS played in their contribution to policy development and policy fitness for implementation?

This volume, *Insights from INOVASI, Indonesia's twenty-year reform journey,* has provided an answer to the first two questions. As described in the introduction to the volume, the stakes are high. The potential for Indonesia's *Merdeka Belajar* reforms to transform teaching and learning is real. Improved learning outcomes for Indonesian children can, potentially, support Indonesia's transition, which began with decentralisation and *reformasi*, to an advanced democracy, and to realise the country's ambitions of becoming a politically stable and economically competitive nation. The *Merdeka Belajar* reforms build on twenty years of reform. They are rooted in the educational philosophy of Ki Hajar Dewantara. The democratic goal of empowering individuals is clear. The potential to accelerate improvements to learning outcomes for Indonesian children is real.

In short, the *Merdeka Belajar* agenda makes a distinctive contribution to the trajectory of education reform since decentralisation, it is comprehensive and integrated across the system, it is focused on learning and addressing the 'learning crisis,' and it is generally well-informed by what is known to impact on improving learning outcomes. It has potential to address inequalities in the system and to transform teaching and learning at local levels, empowering teachers and local actors to adapt the curriculum to the local context and the needs of individual children, and it focuses on the critical foundational skills of literacy and numeracy, along with the 21st century skills and attitudes associated with character education and outlined in the *Pelajar Pancasila Profile.*

Are the teachers and is the Indonesian education system ready for *Merdeka Belajar,* and what will it take to fully implement and sustain the reforms? The answer to these questions has been summarised in this concluding chapter. The government's policy agenda and progress towards implementation have created momentum, early monitoring and evaluation is encouraging – teachers are able to implement the reforms – but this progress is insufficient as yet to meet the objectives of the government's reforms. More work is required. The essential requirements for success are for government to allow time for implementation, while continuing to monitor and evaluate that implementation and continually adjusting the curriculum, assessment and teacher development policies, to avoid the risk of 'big bang' policy changes putting the comprehensive reform package at risk. To ensure success, attention needs to be given to (1) working within and across the ministries, and with districts, to build understanding and ownership of the reforms, (2) strengthening efforts to upskill teachers and education administrators to implement the reforms, and (3) building acceptance of the reforms, through coordination, training, and media campaigns.

The third question, what part have the development approaches of INOVASI and TASS played in their contribution to policy development and policy fitness for implementation, is answered in the second volume of this two-part series. INOVASI and similar programs can play an important role, supporting the government in these tasks, helping to monitor and evaluate implementation, advising on policy adjustments, including adjustments to

curriculum and assessment instruments, as implementation proceeds, and acting as a critical friend to government. The role that INOVASI has played over eight years, and the contribution the program has made to Indonesia's reform program outlined in this volume is explored in Volume 2 of this series.

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INOVASI

Innovation for Indonesia's School Children
Australia Indonesia Partnership

Education reforms have successfully transformed the trajectory of education in Indonesia, shifting from expanding access to delivering quality, changing mindsets from teacher-centred to student centred, from passive to active, and from compliance to empowered decision making.

Insights from INOVASI describes the progress of education reforms over the past two decades in four key aspects of education management: improving the qualifications and management of the teaching workforce; school quality assurance; curriculum; and national assessment of learning. This culminates in the current comprehensive and integrated reform agenda that builds on 20 years of reform and is rooted in the educational philosophy of Ki Hajar Dewantara.

The new national curriculum was launched in 2022 and conceived both as a means of addressing COVID-19 pandemic learning loss in the intermediate term and improving educational outcomes in the longer term. It was designed to free up the teaching and learning process, provide resources for less-skilled teachers, and enable teachers to make decisions about how to best design and deliver the curriculum at the school level.