

Laying the Foundations of Systemic Change in Education: Reflections on Indonesia's *Merdeka Belajar* Reform



Ministry of Education, Culture, Research, and Technology
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Introduction

In late 2019 Indonesia launched an Education reform called *Merdeka Belajar* or “Emancipated Learning.” Led by the Ministry of Education, Culture, Research, and Technology (“the Ministry”), the reform sought to improve learning for all students. At the K-12 level, this goal was translated as improving students’ reading and math literacy, as well as a number of socio-emotional dispositions which are essential for lifelong learning¹.

Merdeka Belajar was designed to be a systemic reform. The reform initiators acknowledged the complexity of the education system, i.e. that it is composed of many interrelated elements which act together to serve its functions. There is a coherence between these elements which gives it a certain inertia - a tendency to self-perpetuate its current course. Changing a system which serves to provide access to schooling to one which facilitates high quality learning requires a reconfiguration that takes into account the interrelationships between many elements of the system. Tinkering with one or another element of the education system in a piecemeal fashion will neither be effective nor sustainable.

In this sense, *Merdeka Belajar* is rather ambitious. It seeks to reconfigure many elements in the education system so that they work together towards a new goal: improving student learning. The intention is to lay the foundations of self-sustaining change, one that will survive its initial reformers and different political regimes.

This paper is my account of the *Merdeka Belajar* reform, after more than four years of involvement in its design and implementation. In my current position, I am tasked with leading the design of the “soft infrastructure” which forms the instructional core of *Merdeka Belajar* at the K-12 level. These include regulations, guidelines, models, and tools on curriculum, teaching-and-learning, standardized assessments, school accreditation, program evaluation, and strategic planning. Hence my account focuses on these aspects, and less so on other equally important aspects of the reform such as technological infrastructure, funding mechanisms and budget structure, the school-to-work link, and the subnational political dynamics which influence school and teacher management.

¹ The *Merdeka Belajar* policies are a collective product of the Ministry leadership and key partners. The articulation of *Merdeka Belajar*’s rationale and logic in this paper is inevitably colored by my personal vantage point as one among many architects of the reform.



The education system in Indonesia at a glance

The Indonesian education system houses more than 50 million students and 3.3 million teachers in more than 430 thousand general schools from early childhood to the upper secondary level². In addition, there are 10 million students and 870 thousand teachers in 86 thousand *madrasah* or religious schools. These *madrasah* follows the national curriculum but complements it with additional religious teaching³.

Around the early 2000s, Indonesia decentralized the management of general education to subnational governments. Public schools became units of subnational governments⁴ led by publicly elected mayors and governors. All public school personnel, including principals and teachers, became employees of these subnational governments. Subnational governments also issue permits for and supervise the operation of private schools in their regions. These private schools represent approximately 13% of primary schools, 44% of lower secondary schools, 51% of upper secondary schools, and 74% of vocational secondary schools.

The Ministry devolved its more than 3000 education offices across Indonesia. To replace their function, each subnational government had to establish new departments to manage education (the *dinas pendidikan*). At present, there

are 38 provincial governments that are responsible for special education and upper secondary schools (Year 10-12), and 514 cities/municipalities that are responsible for early childhood, primary, and lower secondary schools (up to Year 9). The central government via the Ministry retains control over education standards and the national curriculum, monitoring and evaluation of the system, as well as school accreditation.

Meanwhile, the public *madrasah*/religious schools are still run by the Ministry of Religious Affairs. However, the vast majority of *madrasah* (more than 92%) are independently managed by communities and private foundations.

Massive expansion of the education system over the past decades has significantly increased student enrolment, especially at the primary level. School participation for children at the ages of 7-12 years rose from around 63% in 1960, to 96% in 2000 and more than 99% in 2020. For children who are 13-15 years old, school participation also rose from around 50% in 1960, to 81% in 2000 and more than 95% in 2020. Meanwhile for those in the 16-18 years age bracket, school participation increased from around 24% in 1960, to 66% in 2000 and 71% in 2020⁵.

2 Source: <https://dapo.kemdikbud.go.id/>

3 Source: <https://emis.kemenag.go.id/>

4 For an indepth discussion of why and how Indonesia decentralized its education system, see Zamjani, I. (2022). *The Politics of Educational Decentralisation in Indonesia*. Palgrave.

5 “Publikasi Statistik 70 Tahun Indonesia Merdeka” and “Angka Partisipasi Sekolah (APS) Penduduk Umur 7-18 Tahun, 2009-2023” published by Badan Pusat Statistik.

The expansion of schooling was successful in equipping most students with basic literacy, in the sense of being able to read aloud words and sentences. Basic literacy rates increased from around 42% in 1960, to almost 90% in 2000 and 96% in 2020. This is not a trivial achievement. Not all developing countries have managed to significantly increase both school enrolment and basic literacy. Indeed, there is evidence that school expansion in South Asia and sub-Saharan Africa was often accompanied by a decline in quality. In many of those countries, primary school enrolment increased but conditional literacy rates (conditional upon completing 5 years of primary school) either stagnated or declined over the period of 1950 to 2000. Moreover, this pattern cannot be fully explained by students' family socio-economic background, further indicating that the school quality itself declined as enrolment expanded⁶.

Of course, schooling should not only be about the acquisition of basic literacy. Schools should be a place for higher level learning which empower students to become lifelong learners. Here we need to acknowledge that the education system in Indonesia falls short. Indonesia's PISA results from 2000 to 2018 show a largely flat learning profile in reading, math, and science literacy⁷. In 2018, only 30 to 40% of 15 year olds in Indonesia met the minimum literacy standards in PISA. Using a lower benchmark, our own 2021 national assessment estimates that around 50% of students exhibited a minimum level of reading literacy. The number is around 30% for math literacy.

In short, the Indonesian education system has fallen short in facilitating high quality learning - a situation that has been exacerbated by the recent COVID pandemic.

6 Le Nestour, A., Moscoviz, L., & Sandefur, J. (2022). *The long-run decline of education quality in the developing world*. Center for Global Development.

7 Although math and science actually improved if the trend scores are adjusted for expansion of enrollment which increases the number of students from lower socio-economic backgrounds. See Country Note for Indonesia for PISA

3

Understanding the causes of low performance

3.1. Lessons from past reform efforts

Why has Indonesia's education system failed to improve student learning? The answer is not due to lack of effort. Over the past two decades, the government has enacted a number of sometimes large and costly reforms. These previous reforms include⁸:

- Constitutional mandate to allocate at least 20% of state budget for education
- Devolution of authority from national to sub-national governments.
- Stipulation of a uniform and relatively ambitious national education standards.
- Introduction of school-based management, including the establishment of school boards.
- Increasing the compulsory school age from 6 to 9 years, thereby expanding access to lower secondary school.
- Increasing school subsidies, including for private schools.
- Teacher certification along with provision of allowances, including for non-government teachers.

- National curriculum revisions along with teacher retraining programs.

In addition to these large-scale reforms, there are numerous smaller scale initiatives. Taken together, these reforms and initiatives sought to increase education financing, expand access to schooling, and improve teaching and learning quality. The first two goals were achieved. But teaching and learning quality did not improve significantly, as indicated by international test results (e.g. PISA) and our own national data. Why haven't these reforms improved student learning, despite their huge cost and scale of implementation?

A "commonsense" explanation is that key actors lack the capacity and/or motivation to implement the reforms. Key actors in this context would include bureaucrats in the Ministry, officials and staff at the education offices of the subnational governments, to principals and teachers at the frontline. The assumption is that many of them do not have adequate understanding of the policies and programs, or have vested interests which are misaligned with the reform goals. These cause distortions in the implementation of the reforms, and ultimately undermine the probability of obtaining the intended outcomes.

⁸ In addition, there are many smaller scale programs which never reached the national level.

This line of reasoning underlies many “technical assistance” programs funded by development partners. And in many cases, the assumptions might be true. But this explanation only touches on proximal determinants of student learning. It does not tell us why these key actors have low competencies. It does not tell us why their capabilities do not seem to improve over time, despite the training and technical assistance they have received. It does not tell us why even teachers and principals who are competent and motivated still experience difficulty in improving student learning in their schools. Perhaps this is partly because teachers and principals do not have access to high quality teaching resources. Again, this might be true to some extent. But it does not explain why the teaching resources are of poor quality, despite the significant increase in education budget over the past two decades.

Another explanation - one which the Ministry subscribes to - is that past reforms addressed specific issues without taking into account other crucial elements of the education system.

To illustrate, consider one of Indonesia's most expensive education reforms in the last two decades: teacher certification. Introduced around 2005, it intended to motivate teachers to improve their competencies by providing them with a significant salary increase. Teachers had to meet a certain qualification criteria to be certified, before receiving the special allowance. The process of obtaining this qualification was assumed to improve teachers' professional competence. Teachers who have received the allowance were required to use some of the money to take part in further professional development. This

was assumed to develop teacher competencies in a continuous manner - and ultimately improve teaching and learning quality. Unfortunately, these assumptions proved to be wrong: the additional teacher allowance made no difference to student learning⁹.

In hindsight, if we take a systems view it is quite clear why teacher certification did not improve student learning. The reform provided teachers with more financial resources, but did not change other elements in the system. Teacher performance was still evaluated using the same criteria, instrument, and mechanism which were unrelated to student learning. Teacher training was not adjusted to help teachers implement better teaching practices. The curriculum was still jam-packed with content mandated by the government, encouraging the use of one way lectures to “finish” the syllabus. Standardized exit exams for students still measured superficial understanding of vast amounts of information - giving incentives for teaching for memorization and test taking skills.

So for the certified teachers, little else changed apart from having to regularly submit training or seminar certificates. Teacher certification improved many teachers' livelihoods, but did little to motivate or enable them to improve their teaching practices. It is unsurprising that the reform had no measurable impact on student learning.

3.2. Historical roots

To have a shot at improving student learning, education reform needs to address deeper, systemic roots of low performance. A good starting point would be to take a historical look and try to understand what the current system was designed to

9 De Ree, J., Muralidharan, K., Pradhan, M., & Rogers, H. (2018). Double for nothing? Experimental evidence on an unconditional teacher salary increase in Indonesia. *The Quarterly Journal of Economics*, 133(2), 993-1039.

achieve. As perhaps is the case with many postcolonial countries, Indonesia's education system was initially designed as a nation building project. During the revolution and first few decades of independence (circa 1945 to 1960s), this meant building primary schools to spread the Indonesian language and develop a sense of national identity among the culturally and linguistically diverse groups across the archipelago. After the chaotic first two decades of independence, the "New Order" regime under President Soeharto sought to establish political stability and lay the foundations of a modern economy through a top down and centralized approach to governance.

The New Order era lasted for 32 years, from 1965 to 1997. The New Order's zeal for political stability meant that education was seen as a vehicle of indoctrination, especially of the state ideology¹⁰. The official interpretation of the state ideology was drilled down through curricular materials in key subjects, co- and extracurricular activities such as "penataran" (intensive workshops) and "cerdas cermat" (contests which quizzes rote memorization of the state ideology), and frequent rituals such as flag ceremonies¹¹. More generally, schools were expected to cultivate family values which support social harmony such as respect for elders, obedience, and conformity¹². Discussions of issues related to interreligious, interracial, and interethnic relations ("*suku, agama, ras, dan antargolongan*" or SARA) were strictly banned.

With regards to the economic goals of the New Order, education seemed to

have served a dual purpose. The first was to create a mass of workers who had basic skills of reading and writing. This was fulfilled by vastly expanding access to primary schooling. The second purpose was to supply the need for professionals as well as managers and leaders in government and the private sector. This was fulfilled by sorting mechanisms which identify the most talented students and provide them with access to higher levels of education. These goals were largely achieved, as indicated by statistics on enrolment and basic literacy presented in the preceding section. Meanwhile, a select few are channeled upwards to obtain higher education. These developments in education during the New Order coincided with a period of rapid economic growth, with GDP growing around 7% per year before the Asian financial crisis in 1997¹³.

Since the fall of the New Order, Indonesia experienced an era of democracy and decentralization. Nonetheless, key features of the New Order's centralized system still bear their marks in Indonesia's contemporary education system. In particular, the legacy of a legalistic culture is still well and alive in the education system. This culture is characterized by compliance to rules and orders from the upper ranks, and accountability based on documentary evidence. In many cases, decentralization has only resulted in local-level centers which perpetuate the legalistic culture of the previous centralized bureaucracy.

10 Paglayan, A. S. (2022). Education or indoctrination? The violent origins of public school systems in an era of state-building. *American Political Science Review*, 116(4), 1242-1257.

11 See, for example, Morfit, M. (1981). Pancasila: The Indonesian state ideology according to the new order government. *Asian Survey*, 21(8), 838-851.

12 Shiraishi, S. (1997). *Young heroes: The Indonesian family in politics* (Vol. 22). SEAP Publications.

13 Source: Publikasi Statistik 60 Tahun Indonesia Merdeka, Badan Pusat Statistik.

3.3. The legacy of a legalistic culture

The legalistic culture legacy manifested in many ways which significantly impacted teaching and learning. For example, teachers and school principals are seen primarily as bureaucrats whose main task is to implement government policies, as opposed to professional educators with a knowledge-base that grants them autonomy in performing their day to day jobs. Until today, teachers and principals in public schools are put in the same category as all other government officials. They must adhere to the same personnel regulations as clerks and administrators whose job has little resemblance to teaching.

The positioning of teachers as bureaucrats with little autonomy is reflected in curriculum policies prior to the *Merdeka Belajar* reform. The previous national curriculum (“Kurikulum 2013”) was designed as a detailed prescription for teachers to implement. Jam packed with mandated content, the curriculum expected teachers to deliver all topics according to a prescribed speed and sequence. The curriculum policy even mandated the frequency and timing of classroom assessment to be performed (which must be reported to the government), as well as the formula to calculate the final grades based on those assessments. Lesson planning documents were also standardized, with the Ministry determining the exact format to be used. It is little wonder if teachers came to see teaching as the delivery of (mandated) content.

The legalistic culture is also evident in how the education system is monitored and evaluated. The typical focus of school inspectors - who monitor schools on behalf of the sub-national governments - is on

whether teachers can show that they have the necessary documents in the correct formats. There is little discussion of student learning or teaching practices. Similarly, mandatory school accreditation done by the National Accreditation Body used to also focus on administrative compliance. The accreditation is supposed to assess quality indicators such as graduate competencies and teaching practices. But these were reduced to superficial proxies such as the number of students graduating on time and the completeness of instructional planning documents. In line with this, the district-level monitoring was also based on easy to measure input variables such as teacher qualification, teacher-student ratio, and physical infrastructure of schools. In short, before *Merdeka Belajar*, neither schools nor sub-national governments were held accountable for the quality of student learning.

It should be acknowledged that student learning was not entirely absent in Indonesia’s education policy prior to *Merdeka Belajar*. Curriculum reform documents since 2004 often used language reflecting higher level learning. The 2004 national curriculum was labeled a “competency based” curriculum and intended to communicate a shift from content coverage to student learning and development. The 2006 curriculum reform wanted to give schools greater autonomy to contextualize and implement the national framework. The 2013 curriculum unfortunately scaled back school autonomy by using a much more prescriptive approach. Nonetheless, the 2013 national curriculum introduced 21st century skills and social, emotional and moral competencies as important goals of learning. These initiatives indicated the intention of policy makers to

shift teaching from content delivery towards facilitating higher level learning.

This intention was also reflected in policies on assessment. Participation in international tests, especially PISA since 2000, has increased visibility of the issue of poor learning. The Ministry also has a long history of administering standardized tests to measure student learning at the final grade of each education level. These tests were high-stakes for the students, as the results were used for certification and selection purposes. The latest version of these tests (prior to *Merdeka Belajar*) was called *Ujian Nasional* or National Examination. Mandatory for students in grades 9 and 12, the *Ujian Nasional* measured knowledge of curriculum content in the Indonesian language, English, math, science, and social sciences (plus religion for students in religious schools). In 2018 the Ministry began to incorporate PISA-like items in the *Ujian Nasional*, with the goal of pressuring schools to cultivate reasoning and higher order thinking¹⁴. This prompted a backlash from some who felt it was unfair to test students for something they were never taught at school¹⁵.

Thus, there has been awareness among some policy makers and other stakeholders in Indonesia that education should not only be

about expanding access and acquiring basic literacy. However, prior to *Merdeka Belajar*, efforts to prioritize learning targeted specific elements of the system in a fragmented manner. With regards to curriculum and instruction policies, higher level learning was stated as intended learning goals, but the national curriculum still mandated a vast amount of content. Also, teachers were provided with little support to enact a radical shift in pedagogy. With regards to assessment policies, student learning was never used as criteria to measure the system quality or government performance. The government's overarching goal in their long term development planning in relation to education was to increase years of schooling and participation rates. The quality of student learning was also absent at the ministerial level strategic planning and yearly performance indicators. In these documents, the only proxy to quality was school accreditation, which reflected administrative compliance rather than teaching and learning quality. In other words, before *Merdeka Belajar*, schools and the government (both central and subnational) were not formally held accountable for students' lack of learning.

Are system element ...		Coherent?	
		Yes	No
Aligned toward learning:	Yes	<i>High performance:</i> Systems well organized to promote learning Examples: High performers at each level (Shanghai [China], Finland, Vietnam)	<i>Incoherent strivers:</i> Systems incoherently oriented toward learning Examples: Countries that borrow learning-oriented "best practice" elements but do not ensure that the various elements are coherent with each other
	No	<i>Coherent nonlearners:</i> Systems well organized to promote a different goal Examples: Totalitarian or authoritarian systems focused on promoting loyalty to the state or nation building (Stalin-era USSR, Suharto-era Indonesia); systems that focus on school attainment rather than learning (many systems)	<i>Failed systems:</i> Systems that are not trying to achieve learning are anything else in a coherent way Examples: Systems in failed states

14 <https://www.antaraneews.com/berita/708147/kemendikbud-40-persen-siswa-kesulitan-jawab-soal-hots>

<https://tirto.id/kemendikbud-akan-tingkatkan-soal-hots-pada-un-tahun-depan-dtTw>

15 <https://tirto.id/kpai-kecam-penggunaan-tingkat-nalar-tinggi-atau-hots-di-un-2018-cHVT>

To use the World Bank's World Development framework¹⁶, Indonesia can be construed as a system that is shifting from the “coherent towards non-learning goals” quadrant to become one that is incoherent but somewhat aligned to learning. The challenge taken on by the *Merdeka Belajar* reformers was to complete the alignment towards learning in a coherent manner.

¹⁶ World Bank (2018). Learning to realize education's promise. *World Development Report*. The World Bank. [The image is taken from Table 01, page 14, of the report.]



The Merdeka Belajar reform

The first Merdeka Belajar policy package was announced on 11 December 2019, a couple of months after President Joko Widodo appointed Nadiem Makarim as the new minister of education. That announcement became known as the first episode of many Merdeka Belajar Episodes, or launches of major policies. Up to March 2024, the Ministry has launched 27 episodes of Merdeka Belajar. In addition, the Ministry has issued or revised other regulations and more specific programs to support the major policies. The design of these policies and programs followed an underlying logic which seeks to align the system towards improving student learning. One way of describing this logic is by articulating the goal, theory of change, and programs and policies of the reform.

4.1. The goal

A clear statement of student learning was formulated to further align the education system towards improving learning as a goal. This formulation of student learning drew upon the teachings of Ki Hajar Dewantara, a key figure in the formation of Indonesia's modern education system during the colonial era and early years of independence. According to Dewantara, education should be both a process of emancipation

and enculturation. Dewantara's teachings emphasized the unique and diverse potentials of individual students. Emancipating students means cultivating their different potentials, to help students grow to become intellectually and physically independent. The enculturation function of education means that students need to be taught to internalize values and habits which enable them to participate in society and contribute to the collective welfare.

In the present era of information and rapid change, the emancipating function of education can be translated into helping students to become lifelong learners. In Merdeka Belajar, this was specified as helping students to develop the foundational skills of reading literacy and numeracy (math literacy), along with the general capabilities of critical reasoning, creative thinking, and self-regulation. Meanwhile, the societal goal of education was translated as helping students to develop attitudes and values required to participate in Indonesia's plural and democratic society. These include tolerance and appreciation of diversity ("kebinekaan"); the willingness and ability to communicate and collaborate to solve social and community problems ("gotong royong"); and a strong moral compass stemming from the belief in God ("iman, takwa dan akhlak mulia").

Subelemen	Di Akhir Fase PAUD	Di Akhir Fase A (Kelas 1-II, usia 6-8 tahun)	Di Akhir Fase C (Kelas V-VI, usia 8-10 tahun)	Di Akhir Fase C (Kelas V-VI, usia 10-12 tahun)	Di Akhir Fase D (Kelas VII-IX, usia 13-15 tahun)	Di Akhir Fase E (Kelas X-XII, usia 16-18 tahun)
Elemen akhlak kepada alam						
Memahami Keterhubungan Ekosistem Bumi	Mengenal berbagai ciptaan Tuhan	Mengidentifikasi berbagai ciptaan Tuhan	Memahami keterhubungan antara satu ciptaan dengan ciptaan Tuhan yang lainnya	Memahami konsep harmoni dan mengidentifikasi adanya saling ketergantungan antara berbagai ciptaan Tuhan	Memahami konsep sebab-akibat di antara berbagai ciptaan Tuhan dan mengidentifikasi berbagai sebab yang mempunyai dampak baik atau buruk, langsung maupun tidak langsung terhadap alam semesta	Mengidentifikasi masalah lingkungan hidup di tempat ia tinggal dan melakukan langkah-langkah konkret yang bisa dilakukan untuk menghindari kerusakan dan menjaga keharmonisan ekosistem yang ada di lingkungannya
Menjaga Lingkungan Alam Sekitar	Membiasakan bersyukur atas karunia lingkungan alam sekitar dengan menjaga kebersihan dan merawat lingkungan alam sekitarnya	Membiasakan bersyukur atas lingkungan alam sekitar dan berlatih untuk menjaganya	Terbiasa memahami tindakan-tindakan yang ramah dan tidak ramah lingkungan serta membiasakan diri untuk berperilaku ramah lingkungan	Mewujudkan rasa syukur dengan terbiasa berperilaku ramah lingkungan dan memahami akibat perbuatan tidak ramah lingkungan dalam lingkup kecil maupun besar	Mewujudkan rasa syukur dengan berinisiatif untuk menyelesaikan permasalahan lingkungan alam sekitarnya dengan mengajukan alternatif solusi dan mulai menerapkan solusi tersebut	Mewujudkan rasa syukur dengan membangun kesadaran peduli lingkungan alam dengan menciptakan dan mengimplementasikan solusi dari permasalahan lingkungan yang ada

This set of learning goals is called the Pancasila student profile (“Profil Pelajar Pancasila”). The definitions of these goals were formally set through a ministerial decree as graduate learning outcomes for each level of schooling. More detailed definitions, aspects, and developmental stages of each learning goal are outlined in a document issued by the Center for Curriculum and Instruction - which was used to guide the development of the new curriculum¹⁷. The definitions, aspects, and proficiency levels of literacy and numeracy were directly incorporated in the curriculum framework as learning outcomes for the subjects of Bahasa Indonesia and mathematics, respectively. These were also used by the Center for Educational Assessment to develop literacy and numeracy tests administered in the new national assessment.

4.2. The theory of change

Having defined the (set of) learning outcomes as the goals of *Merdeka Belajar*, the next step was to articulate a theory of change which describes the processes and conditions that are needed to achieve those goals. The core of *Merdeka Belajar*'s theory of change is contextual school transformation: to improve their students' learning, each school must transform itself and develop solutions which fit its unique situation.

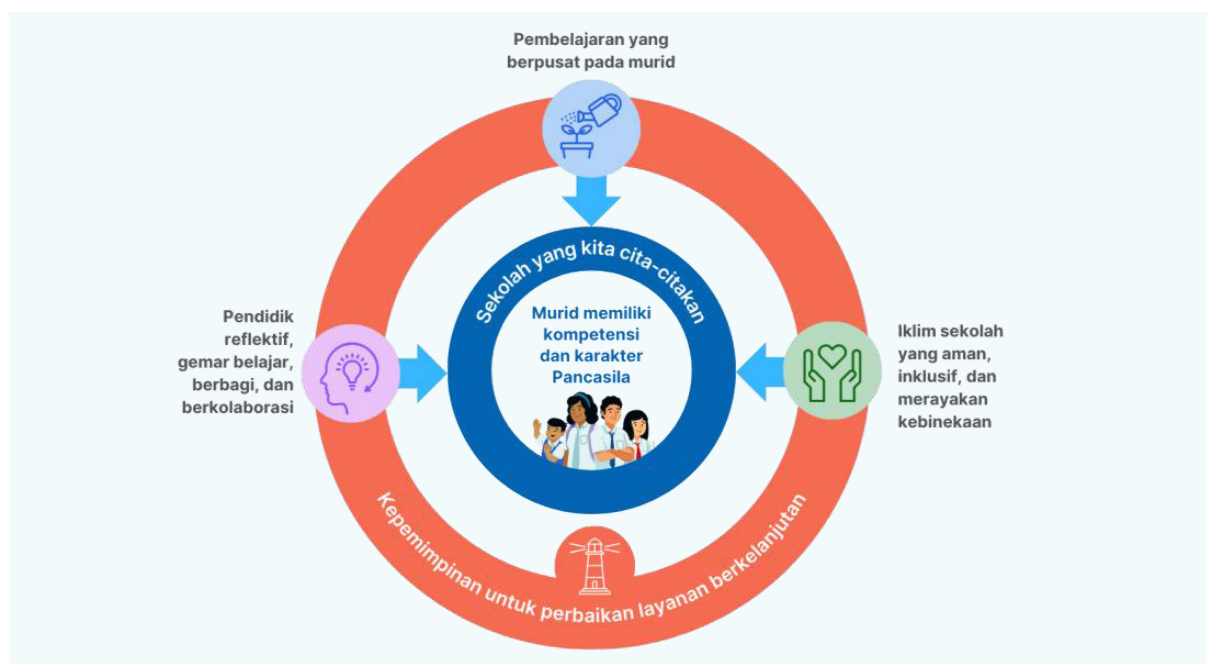
Merdeka Belajar's theory of change focuses on four generic elements of school transformation that are assumed to be essential and relevant for all schools. These elements were drawn from literature on school effectiveness and represent the proximal factors which influence student learning. They are:

17 <https://kurikulum.kemdikbud.go.id/wp-content/uploads/2022/07/V.2-Dimensi-elemen-subelemen-Profil-Pelajar-Pancasila-pada-Kurikulum-Merdeka.pdf>

1. A school climate that is safe and inclusive.
2. Teaching practices that are student-centered.
3. Teachers who are willing to collaboratively reflect on and improve their practices.
4. School leaders who are committed to creating a culture of learning for both teachers and students.

Again, the specific manifestation of each of these elements can and often should be different for each school. The profile of students' initial learning or competency levels is a contextual factor which should influence the design of school level curricula

and instruction. For example, teaching at the right level is a student-centered instructional practice that is assumed to be effective in general. But how to best implement teaching at the right level would depend on the learning profile of the students in each school. Consider a school catering for students with similar but low levels of literacy, and another school catering for students with a higher average but more diverse initial literacy levels. The first school may need to conduct remedial lessons in a more classical manner, using the same materials which are suitable for beginning readers. In the second school, teaching at the right level would require a more differentiated approach.



Social, cultural, and economic aspects of a school's context may also influence the manifestation of the generic school transformation elements. Issues that students in big cities find relevant and interesting might not be relevant for students from rural villages. Teaching methods which work with students coming from affluent families

may not be effective for students from poorer families. Strategies to foster teacher reflection may depend on the initial teaching culture and presence (or absence) of teachers who can become change agents within each school. Some schools may need to tackle issues such as bullying or violence, before they can start attending to students' literacy.

This theory of change assumes that school personnel, especially teachers and principals, are willing and able to take initiative in their school's transformation journey. From the Ministry's perspective, the main challenge of *Merdeka Belajar* is to establish the right constraints and enabling factors for school transformation to occur at a large scale.

4.3. The strategies, programs, and policies

Merdeka Belajar devised four main strategies to help schools transform and improve their students' learning. These strategies are:

1. Build consensus around student learning as the goal of reform.
2. Give more autonomy and provide resources which empower schools and subnational governments to improve student learning.
3. Hold schools and governments (subnational and national) accountable for student learning.
4. Identify and train teachers who show potential to become change agents and leaders at the school and district levels.

Each strategy was implemented through various policies and programs.

4.3.1. Building consensus around student learning

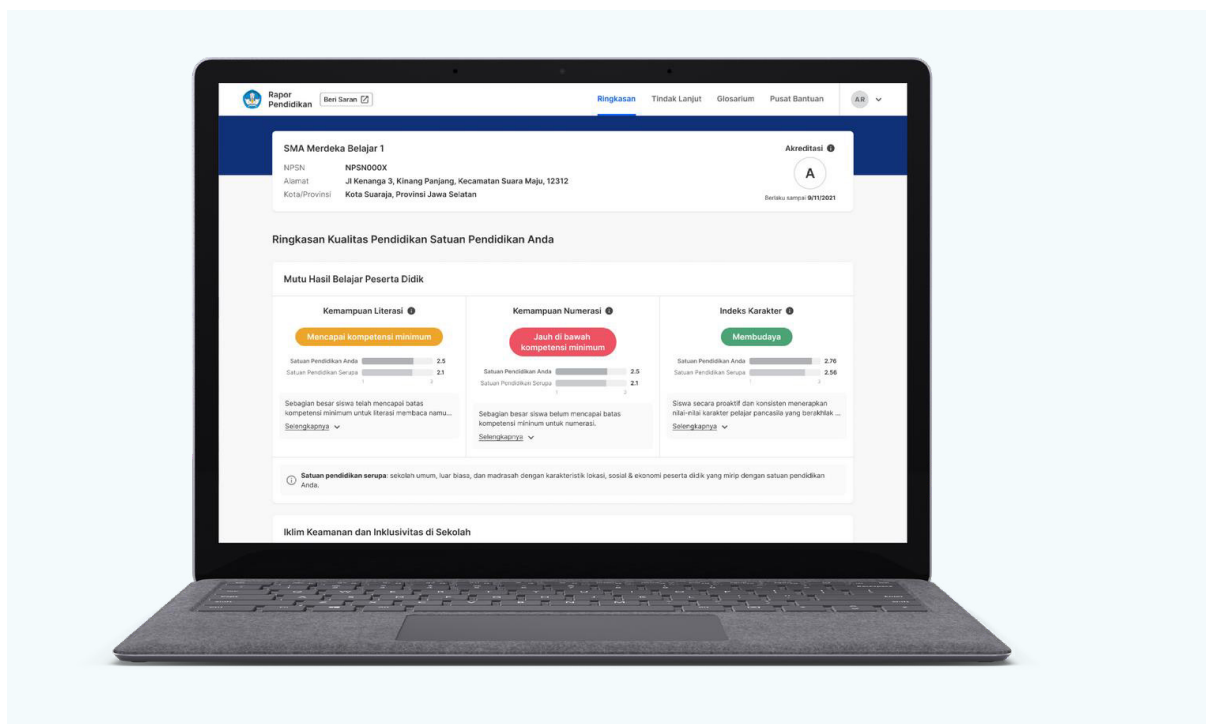
To build consensus around student learning, the Ministry developed a new national assessment which measures student learning outcomes (literacy, numeracy, and key dispositions which

make up the Pancasila Student Profile), as well as the essential elements of school transformation (teaching practices, school climate, teacher reflection and collaboration, and instructional leadership)¹⁸. The national assessment collects data every year from all teachers and principals, and a random sample of Grade 5, 8, and 11 students, from all schools in Indonesia. So far three assessment cycles have been implemented. In the latest cycle in 2023, almost 7 million students, along with more than 4.3 million teachers and principals from 483 thousand schools participated in the national assessment.

The National Assessment results, complemented by data from other sources (including a tracer study of vocational education graduates), are synthesized and presented in a digital education scorecard platform called *Rapor Pendidikan*¹⁹. Two different versions were developed, one for schools and the other for the subnational governments. Using the *Rapor Pendidikan* platform, teachers and principals are able to see how they are performing compared to other schools, and compared to their own performance in previous years, in terms of student learning outcomes and the core elements of school transformation. Schools are also required to print and display a poster version of their scorecard (which is automatically generated by the system).

18 <https://pusmendik.kemdikbud.go.id/an/>

19 https://merdekabelajar.kemdikbud.go.id/episode_19/web and *Rapor Pendidikan* (kemdikbud.go.id)



For the subnational governments, the platform presents the performance indicators at the regional level (aggregated from the individual student and teacher data), as well categories of performance levels for each school within their jurisdiction. The information is intentionally designed to prevent subnational governments from ranking individual schools. Rather, the design encourages them to identify a category of schools that need special attention and help with regards to specific indicators/ issues. The hope is that subnational governments can allocate their resources in a more targeted manner to address issues that have direct relevance for student learning.

A public version of the education scorecard is currently under development. It will allow the general public to access information at the national and regional levels. The

scorecard for individual schools is not made public to prevent the possibility of abuse (e.g. ranking or naming and shaming low performing schools). The hope is to generate public discourse on the issue of student learning outcomes and some pressure towards the subnational and central governments to improve the quality of education.

To build broader consensus around student learning, the Ministry also operates a public campaign program. The term “Merdeka Belajar” itself is a core part of this program. It is a slogan which is meant to communicate the ultimate goal of the reform, i.e. learning that emancipates. Every major policy initiative is launched through high profile events attended by the Minister and top leadership of the Ministry, along with the relevant stakeholders (most often with teachers, principals, and subnational government officials)²⁰.

20 <https://merdekabelajar.kemdikbud.go.id/>

In these events, the Minister does not only give an opening remark (as is typical in most government events), but delivers the main presentation to describe the rationale, objectives, and key features of the policy. Less high profile public events are routinely held to communicate specific initiatives and messages. In addition, the Ministry also runs programs to foster voluntary communities among parents and students.

4.3.2. Autonomy and empowerment

The *Merdeka Belajar* theory of change rests on the assumption that schools need to find local, contextual solutions to improve the quality of teaching and learning. This requires school personnel, especially teachers and principals, to be able and willing to enact change. However, the Ministry does not have the resources to provide training to all teachers or to conduct capacity building for all schools. (Under the current decentralized system, schools are managed by subnational governments and hence most of the education budget is transferred to the subnational governments and directly to schools). To help schools enact change, *Merdeka Belajar* relies on a strategy of increasing teacher and principal professional autonomy, and providing them with tools and resources for self improvement.

The first policy initiative intended to increase the professional autonomy of teachers is the abolishment of the National Examination for students in

grades 9 and 12, as well as Nationally Standardized School Examinations for students in grades 6, 9, and 12²¹. These examinations were meant to ensure the quality of assessment and comparability of graduate learning outcomes. The exam results determined or strongly influenced decisions on graduation and selection into schools at the upper level. Despite its good intentions, the exams effectively take responsibility away from teachers in evaluating their students. This deprives teachers from designing assessments and making decisions which should be part of their professional responsibility. The high stakes nature of the exams also drove teaching strategies, further undermining teachers' sense of agency as educators. By abolishing the exams, the Ministry has given back autonomy to teachers, especially regarding teaching and student evaluation.

The new national curriculum, *Kurikulum Merdeka*, is also designed with the intention to strengthen school autonomy in teaching and learning²². Mandatory content for each subject is streamlined/reduced so that teachers can have more time to build deeper understanding and to implement differentiated instruction methods. Learning objectives from the Ministry are set for every two to three years (instead of every year like before), to allow more flexibility in the pace and sequence of teaching. Time allocation for each subject is determined in bulk for each year (as opposed to for each week), and schools are

21 https://merdekabelajar.kemdikbud.go.id/episode_1/web

22 <https://kurikulum.kemdikbud.go.id/>

allowed to combine subjects, opening the possibility of different forms of organizing teaching. In addition, the Ministry no longer prescribes any detailed formats for instructional planning documents or the frequency and formulas to calculate students' final grades.

A revision on the regulation about school operational funding subsidy (Bantuan Operasional Sekolah, BOS) also gave schools more flexibility²³.

Previously, the regulation put a tight cap on how much of the money schools are allowed to spend on particular items. After the regulation change, these caps were relaxed so schools can allocate the subsidy money according to their needs. For example, one school may need to use more of the subsidy to pay contract teachers, while other schools may need it to purchase classroom equipment or to fund students' learning activities.



These new policies give teachers and principals more autonomy. To help teachers and principals take advantage of this newfound autonomy, the Ministry has developed various resources which are delivered mainly through a digital platform called Platform Merdeka Mengajar (PMM)²⁴. Through the platform, teachers and

principals can access teaching kits and materials (e.g. models of school curricula, textbooks, classroom assessments, teaching modules) to use in their teaching. Some of these materials are designed and issued by the Ministry, but many others are curated from a large pool of teacher generated content. The platform provides access to

23 https://merdekabelajar.kemdikbud.go.id/episode_3/web

24 <https://guru.kemdikbud.go.id/>

numerous training modules around the new curriculum (e.g. student centered teaching, differentiated instruction) and other topics that are selected based on Merdeka Belajar's school transformation model (e.g. addressing bullying to create safe environments). These training modules are developed by the Ministry, often in collaboration with external partners who already have existing materials. The PMM also enables teachers to interact and form online learning communities to encourage peer learning.

The Rapor Pendidikan Platform mentioned earlier also functions as a tool to help principals rally teachers, parents, and the wider community to improve student learning. The Rapor Pendidikan Platform is connected with the PMM in a "personalized" manner, highlighting training and teaching resources that are most relevant given a school's unique profile. For example, the scorecard platform will recommend a school safety module to a principal and teachers from a school that is indicated as experiencing a problem with bullying.

One other instructional resource is the provision of printed books (fictions). The non-textbooks that populate school libraries are often uninteresting to students. As an effort to give students access to books that prompt their curiosity and interest to read, the Ministry developed a graded reading framework, and published "model books" for each reading level²⁵. These books, along with books translated from other languages, were printed and

sent to primary schools who show poor performance in their students' literacy. Up to now, 16.8 million books from hundreds of titles have been sent to 57 thousand schools across Indonesia.

Yet another instructional resource was the provision of university students as tutors. The program, called Kampus Mengajar, is part of a larger reform at the higher education level (Merdeka Belajar Kampus Merdeka)²⁶. The program trains university students from various disciplines to become tutors in literacy and numeracy. They are then sent to help teachers in primary schools with poor performance in reading literacy. The university students receive credit for their study (equivalent to a semester's worth of coursework). The program is popular, with close to 1 million university students taking part.

Several other Merdeka Belajar programs are intended to empower schools with non-instructional resources. One of these is the BOS Majemuk program, which increased subsidies for schools in rural and remote areas. As a result, schools in around 75% of regions now receive between 15 to 50% more subsidy per student compared to before the program. The program also changed the transfer mechanism so that schools directly receive money from the central government (as opposed to having the subnational government acting as an intermediary in the transfer). Schools now receive the money much earlier in the year, around early February, giving them more time to plan and execute programs supported by the subsidy.

25 <https://buku.kemdikbud.go.id/katalog/buku-non-teks>

26 <https://kampusmerdeka.kemdikbud.go.id/program/mengajar>

The Ministry has also developed digital platforms to help schools manage their budget. The SIPLah platform provides a curated marketplace for government schools to make procurements²⁷. Local businesses can register their products and services on this platform. Schools can compare prices from different providers and then make cashless purchases, improving transparency and accountability. The SIPLah platform is linked to another platform called ARKAS that streamlines the reporting of school budget use, making the process more efficient²⁸.

Another relevant *Merdeka Belajar* program is the appointment of temporary contract teachers (guru honorer) as civil servants. In 2019, almost one million teachers in government schools were contracted directly by the schools. They were often appointed by schools, without proper recruitment and selection processes, as emergency measures to fill in for empty positions. As a result, many do not have the qualifications and/or competencies required to become teachers, and are paid substandard wages. Many have taught under these conditions for ten or even more years. This is a huge political issue, but also a significant factor that hinders any other initiative aimed at improving teaching quality. That is why the Ministry led a coordinated effort to secure funding and regulations to open enough government (civil servant) positions for these teachers. In the past 3 years, more than 700 thousand temporary contract teachers have been

formally appointed as government employees in their schools.

The last *Merdeka Belajar* program designed to empower local actors is the advocacy and technical assistance for subnational governments.

4.3.3. Accountability for student learning

As noted in the previous section, prior to *Merdeka Belajar* students had to undergo high-stakes testing administered by the government. Meanwhile, neither schools nor governments were held accountable for the quality of student learning. Instead, they were held accountable for administrative compliance. *Merdeka Belajar* changed this so that schools and governments' main accountability rests on the quality of student learning.

This was achieved by incorporating data on student learning in a number of key policies. First, student learning outcomes serve as a key metric or target in the central government's long term (20 year) and mid-term (5 year) development plans, which are currently being renewed for the 2025-2045 period. At the national level, the government intends to use the PISA literacy scores as targets. At the subnational levels, the targets will be measured using the Ministry's national assessment of reading literacy and numeracy.

Second, student learning outcomes from the national assessment are used as performance indicators in subnational governments' and the Ministry's own

27 <https://siplah.kemdikbud.go.id/>

28 <https://arkas.kemdikbud.go.id/>

yearly evaluation. The performance of subnational governments are evaluated by the Ministry of Interior Affairs according to a set of “minimum service standards”, including for education. Prior to *Merdeka Belajar*, fulfillment of these service standards were based only on participation rates and easily measured input variables (e.g. number of teachers with bachelor degree, number of schools with adequate textbooks). With *Merdeka Belajar*, student learning outcomes (as well as teaching quality and school safety and inclusion climate) complemented participation rates as indicators of the minimum service standards in education.

Third, *Merdeka Belajar*'s school transformation framework is used by the National Accreditation Body for Early Childhood, Primary, and Secondary Education to inform key decisions and policies. For example, trends in schools' literacy and numeracy data from the national assessment (over the past 3-5 years) are used to make decisions on extension of school accreditation status which expire every five years. Schools that exhibit a neutral trend, with no significant improvement or decline, are awarded with an automatic extension of their accreditation status. They do not need to undergo a two day school inspection as before, thereby saving time and resources. Schools that exhibit either significant increase or decline in student learning are inspected by the accreditation assessors to determine whether their accreditation status can be upgraded (or downgraded).

The accreditation body also uses *Merdeka Belajar*'s school transformation framework in redesigning its school

assessment instrument. The four generic elements of school transformation (safe and inclusive school climate, student oriented teaching practices, teacher collaborative reflection, and instructional leadership) are incorporated as the main dimensions of school accreditation. Thus, if schools want to maintain or improve their accreditation status, what they need to do is to engage in a process of school transformation using the tools provided by other elements of the *Merdeka Belajar* reform (the Rapor Pendidikan, the new curriculum, the set of teaching resources, etc.).

Another relevant policy is the changes made to the public university entrance examination. In a way, this exam is an accountability instrument targeting students. Prior to *Merdeka Belajar*, the examination measured content knowledge that university professors' deemed to be important prerequisites for first year university level courses. The assessment framework of the exams were not based on content or learning goals set by the high school curriculum. This created a situation where many students were pressured to study for an implicit curriculum set by the university entrance exam. The exams also covered a wide range of content, encouraging students to prioritize learning for broad coverage rather than reasoning or deep understanding. Now, the exam measures reading literacy and math reasoning, i.e. the same learning goals that are prioritized by *Merdeka Belajar*. In other words, students are held accountable using the same metrics as schools and governments.

In addition, teacher performance evaluation is being reformed so that teachers will be held accountable for their effort to improve teaching quality. Before *Merdeka Belajar*, teacher performance was evaluated based

on other teachers' and the principal's perception of "competencies". Although one dimension of competency was pedagogical, the evaluation was not based on any information about or process related to what teachers actually did in the classroom. In other words, teacher performance evaluation was divorced from teaching practices. This process has resulted in the vast majority of teachers being evaluated as exhibiting either good or very good performance.

With the *Merdeka Belajar* policy, performance evaluation is based on a cycle of self directed professional development. First, teachers must choose an indicator of teaching quality as an area of improvement. The set of teaching quality indicators is aligned with the teaching practice component in *Merdeka Belajar*'s school transformation model. In fact, these are the exact same indicators that are measured in the national assessment and reported back to schools and subnational governments via the *Rapor Pendidikan* platform. Teachers then need to participate in learning activities that are relevant to improve their competency regarding the chosen indicator. Teachers then invite other teachers and the principal to observe changes to their practice in relation to the chosen indicator. At the end of the semester, teachers and principals reflect on the process and agree on a level of performance that reflects the improvements made during the semester.

4.3.4. Training and appointing change agents as leaders

Recall that one of the main components of *Merdeka Belajar*'s theory of change is school leadership. In fact, the *Merdeka Belajar* architects believe that school leadership is the single most important factor in school

transformation. Because of that, reforming the selection and training of school principal candidates ranks high in the Ministry's priority. The program, called *Guru Penggerak* ("Change Agent Teachers"), is designed to populate the system with a new generation of school leaders (primarily principals, but also supervisors) who prioritize student learning above all other aspects of their job.

Before *Merdeka Belajar*, the main criteria to become a school principal was seniority. Age, experience, and rank weighted heavily in the selection of candidates and in their eventual appointment as principals. With the *Guru Penggerak* policy, selection of candidate principals is mainly based on a teacher's passion for student learning, and their potential to become change agents. The selection process for *Guru Penggerak* is quite extensive, combining portfolio assessments with structured behavioral interview techniques and teaching simulations. Even participating in the selection process itself required high levels of motivation.

Prior to *Merdeka Belajar*, the training curriculum for candidate principals emphasized administrative and managerial aspects of being a school principal. In contrast, the *Guru Penggerak* curriculum squarely focuses on instructional leadership. The goal is to cultivate a commitment to student learning, and a mindset that sees any obstacle towards improving learning as problems to be solved. The training curriculum also seeks to develop teachers' resourcefulness in solving the problem of (lack of) learning. This is

important because when these teachers become principals, they utilize resources that are available rather than rely on government directives or programs to provide those resources.

The Guru Penggerak training lasts 6 to 9 months, interleaving online, asynchronous modules with offsite sessions with national instructors and on-site (at school) periods of implementation. Currently the program has trained more than 50 thousand teachers in all regions in Indonesia. The policy mandates subnational governments to prioritize graduates of the Guru Penggerak program to fill in empty school principal and supervisor positions.

Two similar programs, called Sekolah Penggerak (Change Agent Schools) and SMK PK (Vocational High School Centers of Excellence) were deployed to train existing school principals and selected teachers in the participating schools. The training for Sekolah Penggerak and SMK PK principals follows a light version of the Guru Penggerak curriculum. It focuses on the importance of student learning and facilitating teacher community. The training for SMK PK principals also include skills related to building networks and collaboration with industry partners to improve the relevance of school curriculum. These programs have benefited more than 16 thousand schools across Indonesia.

The training of incoming (new) teachers is also being reformed. The teacher professional education curriculum now takes a more “clinical” orientation. Instead of having students

learn theories to be applied later, the curriculum asks students to become assistant teachers from the first semester. Those practical experiences are then reflected upon using theories and concepts in the university. To attract better talent into the profession, the Ministry has secured funding to give scholarships to all students in the program. The program intake is also linked to a mapping of future needs, so that graduates will have no difficulty in finding a teaching position. Note that pre-service teacher training reform has a longer term objective. It will not move the needle of student learning in the foreseeable future.



Challenges and reasons for hope

The Indonesian education system successfully expanded access to primary and secondary schooling in the last four to five decades. It has also committed a significant portion of the government budget for education to fund many costly reforms, some of which were intended to improve the quality of teaching and learning. However, beset by a deeply rooted legalistic culture, the education system has not been able to lift the level of learning for most students beyond basic literacy.

5.1. From policy design to program specification

The Merdeka Belajar reform seeks to align the system towards student learning through a number of policy packages. These policies were designed based on a clear set of key learning outcomes and a model of school transformation. Hence at the policy level, the reform has significantly strengthened coherence and alignment towards student learning. Most if not all of these policies have now been ratified in numerous government and ministerial regulations.

However, the journey from policy design to impact is a long and complex one. Even translating policy design to program specification is challenging. The

Merdeka Belajar policies were formulated by the Minister and the top echelons of the Ministry. The Ministry bureaucrats would then need to translate the policies into programs with specific objectives, timelines, activity scope and sequence, and budgets. This required a good enough understanding of the rationale of the policies among the bureaucrats. Furthermore, because many of the policies were multidimensional, they called for programs which cut across departments within and even beyond the Ministry.

For example, the process of designing the new National Assessment involved the Center for Educational Assessment (who developed the test content and delivery applications) the Center for Data and Information Technology (who was in charge of providing the central servers), with the Directorate General for Early Childhood, Primary, and Secondary Education (who had to ensure that there are enough schools in each sub-district with adequate infrastructure and proctors to serve as test centers), and with the Directorate General for Teachers and School Personnel (who needed to supply data on teachers and principals). That is just the data collection part. Analysis and reporting of the data to schools and subnational governments

required collaboration with other units such as the Center for Education Standards and Policy (who is responsible for the content and architecture of the Rapor Pendidikan), the GovTech team (who is responsible for developing the Rapor Pendidikan digital platform), as well as with other ministries such as the Ministry of Interior Affairs (who use the data to monitor and evaluate the performance of subnational governments).

Consequently, program design in *Merdeka Belajar* requires close collaboration between departments that rarely worked together to design and execute programs. This presented a challenge because prior to *Merdeka Belajar*, programs were designed and executed by separate departments. That is why the Ministry leadership was tasked with creating a more open and collaborative work environment, to cultivate shared ownership of the policies and programs across people from multiple departments. Indeed this task took a large part of the leadership's time and energy especially during earlier phases of the reform. It also required the help of external consultants/partners who were assigned to support different teams and departments.

5.2. From program specification to implementation and back

Implementation of the programs presented more challenges related to variation in commitment and capacity to understand and deliver the programs at the subnational and school levels. One well known implementation challenge is potential distortions in communication, because the messages need to be delivered through pre-existing channels and instruments, which are then interpreted in the context of a strong legalistic culture.

This is why the Ministry designed various monitoring and evaluation mechanisms to understand how the *Merdeka Belajar* policies and programs are interpreted and enacted by key actors. This provides a feedback loop which the Ministry uses to further revise and improve the policies and programs. To illustrate this process, here are several findings generated by our program monitoring/evaluation which triggered insights leading to policy/program changes and improvements:

1. One learning domain which was quite radically changed in the new curriculum was sport education. In the previous 2013 curriculum, sport education required students to memorize a large amount of information about various sports (e.g. the area of a football field according to FIFA standards). Kurikulum *Merdeka* wanted the subject to focus on getting students physically active and build more positive attitudes and habits around sport. To that end, the new curriculum purposefully replaced the student textbooks with teacher guide books for sport education. However, some schools responded by buying textbooks from private publishers. Some teachers even used the teacher guide books as student textbooks. This prompted the Ministry to develop student textbooks which are aligned with the new objectives of sport education.
2. To help teachers implement the new curriculum, the Ministry developed a rich collection of high quality teaching modules. These

number in the hundred, covering almost all levels and subjects in the curriculum. Intended as free resources to be used as inspiration or adapted according to teachers' specific needs, the modules are provided freely via the Merdeka Mengajar Platform. The Ministry never issued any regulation or directives which mandated the use of these modules. However, some schools and district superintendents came to believe that it was mandatory for teachers to create teaching modules. These modules became formal "evidence" that a school was implementing the new curriculum - an example of administrative compliance. To address this issue, the Ministry decided to revise the guidelines for curriculum implementation; to provide examples of simpler lesson plans (in addition to the elaborate teaching modules which are already developed); and work with regional offices to strengthen the message that curriculum implementation is about collaborative reflection about the impact of teaching practices on student learning.

3. Teacher training modules in Platform Merdeka Mengajar (PMM) provide high quality resources for professional development that could be widely accessed by teachers across Indonesia. As with the teaching modules, the training modules are not mandatory. They are meant to be used according to each teacher's specific needs. However, several subnational governments or

school superintendents reward schools based on the number of training modules completed by their teachers. This led to a perceived mandate to enroll in and complete the numerous training modules in a short time span, leading to "satisficing" behaviors rather than meaningful learning among teachers. To address this issue, the Ministry decided to drop "participation in PMM" as an indicator of performance in the Rapor Pendidikan; to further align teacher evaluation criteria and mechanism; and to strengthen the message that teacher training should be contextual as part of the process of improving student learning.

These examples reflect the challenges of implementation which are to be expected given the scale of the programs and diversity of the contexts. But the monitoring and evaluation of the Merdeka Belajar programs has also generated evidence of positive impact.

5.3. Evidence of initial impact

To gauge the impact of Merdeka Belajar programs, the Ministry collected data using various methods. Where possible, the Ministry engaged independent partners to conduct evaluation studies on specific programs, using more rigorous methods which could generate stronger causal claims such as randomized control trials and regression discontinuity designs.

However, these approaches to evaluation were not always possible nor desired from a policy making perspective. For example, requirements to do a randomized control trial could often constrain the scale

and scope of program implementation. Furthermore, isolating the impact of specific programs (e.g. the new curriculum) does not make sense because the basic assumption is that many of the programs are interrelated (e.g. impact of the new curriculum would depend on how the technology platforms are used, whether the subnational government is aware of changes in their performance evaluation, and so on). Even when RCTs are ethically and practically feasible in some settings, the results may not be generalizable to the many different contexts that exist in Indonesia.

Hence the Ministry employs a range of methods to evaluate the *Merdeka Belajar* programs. These range from in-depth case studies in several schools; qualitative interviews and focused group discussions with teachers, principals, and subnational government officials; phone and online surveys to collect data from a wider range of participants; and analysis of the national assessment data to obtain a sense of impact at the systems level. The design of these studies optimized for speed and utility of feedback for quick improvement. The following are several findings which illustrate the initial impact of *Merdeka Belajar* programs:

1. The case studies and interviews generated evidence that teachers, including those in remote schools, could see that the new textbooks covered less content and that this challenged them to use more interactive teaching methods (as opposed to relying only on one way lectures). Teachers were also able to implement project-based lessons designed to stimulate character values and dispositions described in the new curriculum's competency standards. In one remote area, a school's project-based lesson became a platform to engage cultural elders who came to better appreciate the relevance of school curriculum. This made it easier for teachers in the school to perform their duty (previously they had difficulty to juggle between cultural duties and teaching).
2. The qualitative studies also showed that a number of primary schools were able to administer school-wide diagnostic assessments of students' reading and math literacy. The exercise was an eye-opener for some teachers, as they realized that many students in the upper grades could not fluently read simple sentences. Such newfound awareness became a catalyst to align the school community's attention towards student learning. Some schools then provided remedial reading lessons for specific students, while others divided up the students into cross grade groups according to their reading level. These examples serve as proof of concept that "teaching at the right level" can be applied by teachers in schools with limited resources.
3. Surveys among teachers and principals generally show positive perceptions and attitudes towards the *Merdeka Belajar* programs. For example, in a survey of 164 thousand teachers, more than 97% agreed or strongly agreed that the new curriculum gives more flexibility for teachers to implement

differentiated instruction and that the project-based learning component of the curriculum encourages character development. Of course data on self reported perceptions need to be taken with a grain of salt, as they may reflect the legalistic culture which encourages obedience to regulations and suppresses explicit criticisms towards the government.

4. The surveys also included items measuring teaching practices. Responses to these items indicate that most teachers experience difficulty in implementing new pedagogical practices advocated by the new curriculum (e.g. teaching at the right level). Collectively, the survey findings indicate that most teachers know what are considered to be the norms and expected practices under the new policy - but still need support and time to incorporate those expectations in their actual teaching.
5. The national assessment, which measures students' reading and math literacy in almost all schools, provides data to examine the impact the Merdeka Belajar reform has on student learning outcomes at the system level. Analysis of the national assessment data reveal two main findings. First, schools with higher levels of literacy tend to be early adopters of the curriculum. Second, schools that have adopted the new curriculum also exhibited higher gains from 2021 to 2023 compared to schools that still used the previous curriculum. Furthermore, the data

also showed that the earlier a school adopts the new curriculum, the better their learning gains. Thus, the 140 thousand schools that have implemented the new curriculum for two years exhibited better gains than the 160 thousand schools that have implemented it for only one year (by around 0.14 standard deviations), and much better than the remainder of schools that still used the previous curriculum (by around 0.3 standard deviation). This pattern applied to both reading and math literacies in all levels of education.

The rather impressive learning gains among schools implementing the new curriculum should be interpreted as reflecting the overall impact of Merdeka Belajar's policies and programs. Adoption of Kurikulum Merdeka is one factor which interacts with other factors in different and complex ways. We are currently conducting more studies to better understand the underlying mechanisms that produced the superior learning gains among schools implementing Merdeka Belajar.

It is also important to note that these gains may reflect a low base. Going forward it may be more difficult to achieve similar gains. Furthermore, the remainder of schools not yet implementing the new curriculum tend to be lower performing schools in more rural and remote areas. It remains to be seen whether the adoption of Merdeka Belajar policies in those schools will generate the same impressive learning gains as the earlier adopters did.



6 Epilogue

After only four years since its conception, and less than three years since the implementation of most of its programs, it is too early to pass definitive judgements on the Merdeka Belajar reform. The available data points to a picture of both challenges and encouraging signs of hope. Systematic distortions stemming from the system's legalistic culture remain a barrier that needs to be addressed to improve quality of implementation. The policies and programs themselves also need to be continually evaluated and improved. These will inevitably take time and demand consistent effort by many stakeholders in different roles and at different levels of the system.

Nonetheless, the data provide encouraging signs of a stronger coherence between the various system elements and a clearer alignment towards learning. With the change of government in October 2024, the Merdeka Belajar reform will enter a new phase, one which must be ventured without the stewardship of its initial architects. A new political administration will want to make its mark with new initiatives that it can claim to own. But there are reasons to be optimistic that many of Merdeka Belajar's policies will endure the political change, if not in name and form (specific program), then at least in substance.

The first reason is that there was already strong political support for improving students' reading and math literacies, even before Merdeka Belajar. This political support will only become stronger with the inclusion of student literacy in the 2025-2045 development plan, and with Merdeka Belajar's success in incorporating literacy as the main component in the performance evaluation of subnational governments. Very few, if any, politicians or policy makers would argue against this goal.

Second, the Merdeka Belajar mission is currently being installed in the minds of future school leaders and supervisors via the Guru Penggerak training program. By the end of 2024, the number of Guru Penggerak graduates is projected to reach 100 thousand. If half of them are appointed as school principals, then around 15% of schools will be led by people who embody the Merdeka Belajar mindset of prioritizing student learning.

Third, unlike specific programs and projects, the Merdeka Belajar policies are governed by formal regulations. Collectively these regulations number in the dozens, or perhaps hundreds if echelon 1 level regulations are included. They form a web of interlocking regulations which means changes to one regulation may require

changes to other regulations to maintain legal consistency. And regulation changes are themselves governed by complex bureaucratic procedures. For instance, issuing ministerial decrees require the approval of all other related ministries (which in the case of education, is numerous). The requirement for issuing government regulations is even more stringent. The web of *Merdeka Belajar* regulation was not easy to establish - and consequently not easy to dismantle.

The fourth and possibly most important factor is that enacting major changes in education is politically costly because of the disruption they cause to a large segment of voters. This is especially the case for changes to two categories of policy: (a) those which are popular or benefit many; and (b) those

that the public feel as not being worth the cost of changing. Many of the digital platforms, resources, and teacher training in *Merdeka Belajar* would fall under the former category. Meanwhile the new curriculum, which will have been adopted by at least 80% of schools in Indonesia, ironically falls under the latter.

Given these reasons, rather than enacting fundamental policy changes, what will more likely happen is reprioritization of funding and consequently the scaling down of certain existing programs. If this reasoning has any weight, perhaps *Merdeka Belajar* will become a rare case of education reform that survives political changes to bring sustainable improvements in student learning. Only time will tell.

References

- Angka Partisipasi Sekolah (APS) Penduduk Umur 7-18 Tahun, 2009-2023. Source: <https://www.bps.go.id/id/statistics-table/1/MTYxMyMx/angka-partisipasi-sekolah--aps--penduduk-umur-7-18-tahun-menurut-klasifikasi-desa--jenis-kelamin--dan-kelompok-umur--2009-2023.html>
- Aplikasi Rencana Kegiatan dan Anggaran Sekolah (ARKAS). Source: <https://arkas.kemdikbud.go.id/>
- Asesmen Nasional. Source: <https://pusmendik.kemdikbud.go.id/an/>
- Central Bureau of Statistics Republic of Indonesia (BPS). (2015). Statistik 70 tahun Indonesia Merdeka. Jakarta: BPS.
- Central Bureau of Statistics Republic of Indonesia (BPS). (2015). Statistik 60 tahun Indonesia Merdeka. Jakarta: BPS.
- Country Note for Indonesia for PISA 2018. Source: https://www.oecd.org/pisa/publications/PISA2018_CN_IDN.pdf
- Data Pokok Pendidikan, Ministry of Education, Culture, Research, and Technology, Republic of Indonesia. Source: <https://dapo.kemdikbud.go.id/>
- De Ree, J., Muralidharan, K., Pradhan, M., & Rogers, H. (2018). Double for nothing? Experimental evidence on an unconditional teacher salary increase in Indonesia. *The Quarterly Journal of Economics*, 133(2), 993-1039.
- Dimensi, Elemen, dan Subelemen Profil Pelajar Pancasila pada Kurikulum Merdeka. Source: <https://kurikulum.kemdikbud.go.id/wp-content/uploads/2022/07/V.2-Dimensi-elemen-subelemen-Profil-Pelajar-Pancasila-pada-Kurikulum-Merdeka.pdf>
- Education Management Information System, Ministry of Religious Affairs Republic of Indonesia. Source: <https://emis.kemenag.go.id/>
- Kampus Mengajar. Source: <https://kampusmerdeka.kemdikbud.go.id/program/mengajar>
- Katalog Buku Nonteks. Source: <https://buku.kemdikbud.go.id/katalog/buku-non-tekst>
- Kemendikbud akan Tingkatkan Soal HOTS pada UN Tahun Depan. Source: <https://tirto.id/kemendikbud-akan-tingkatkan-soal-hots-pada-un-tahun-depan-dtTw>
- Kemendikbud: 40 persen siswa kesulitan jawab soal HOTS. Source: <https://www.antaranews.com/berita/708147/kemendikbud-40-persen-siswa-kesulitan-jawab-soal-hots>

- KPAI Kecam Penggunaan Tingkat Nalar Tinggi atau HOTS di UN 2018. Source: <https://tirto.id/kpai-kecam-penggunaan-tingkat-nalar-tinggi-atau-hots-di-un-2018-cHVT>
- Kurikulum Merdeka. Source: <https://kurikulum.kemdikbud.go.id/>
- Le Nestour, A., Moscoviz, L., & Sandefur, J. (2022). The long-run decline of education quality in the developing world. Center for Global Development.
- Merdeka Belajar Episode 1. Source: https://merdekabelajar.kemdikbud.go.id/episode_1/web
- Merdeka Belajar Episode 19, Rapor Pendidikan. Source: https://merdekabelajar.kemdikbud.go.id/episode_19/web
- Merdeka Belajar Episode 3. Source: https://merdekabelajar.kemdikbud.go.id/episode_3/web
- Merdeka Belajar. Source: <https://merdekabelajar.kemdikbud.go.id/>
- Morfit, M. (1981). Pancasila: The Indonesian state ideology according to the new order government. *Asian Survey*, 21(8), 838-851.
- Paglayan, A. S. (2022). Education or indoctrination? The violent origins of public school systems in an era of state-building. *American Political Science Review*, 116(4), 1242-1257.
- Platform Merdeka Mengajar. Source: <https://guru.kemdikbud.go.id/>
- Shiraishi, S. (1997). *Young heroes: The Indonesian family in politics* (Vol. 22). SEAP Publications.
- Sistem Informasi Pengadaan Sekolah (SIPLah). Source: <https://siplah.kemdikbud.go.id/>
- World Bank. (2018). Learning to realize education's promise. World Development Report. The World Bank.
- Zamjani, I. (2022). *The Politics of Educational Decentralisation in Indonesia*. Palgrave.



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