ECONSTOR
Make Your Publications Visible.

A Service of

ZBW Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Indrayadi, Sharfina; Alta, Aditya

Research Report

Harnessing student-centered learning for effective learning recovery

Policy Brief, No. 30

Provided in Cooperation with:
Center for Indonesian Policy Studies (CIPS), Jakarta

Suggested Citation: Indrayadi, Sharfina; Alta, Aditya (2025) : Harnessing student-centered learning for effective learning recovery, Policy Brief, No. 30, Center for Indonesian Policy Studies (CIPS), Jakarta

This Version is available at:
https://hdl.handle.net/10419/324486

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

CIPS
Center for Indonesian Policy Studies

POLICY BRIEF

July 2025

Policy Brief No. 30

Harnessing Student-Centered Learning for Effective Learning Recovery

by Sharfina Indrayadi and Aditya Alta

Key Messages

- The COVID-19 pandemic resulted in a learning crisis. The learning crisis makes clear the urgency of implementing personalized learning. Indonesia's rigid K–13 curriculum proved ill-equipped to address learning loss, since it provided little flexibility for teachers to address diverse student needs.
- The MOECRT's *Merdeka* Curriculum, adopted in 2024, is based on student-centered learning (SCL) principles. It has been effective for post-pandemic learning recovery and making up for learning loss that occurred before the pandemic. However, low performance in literacy and numeracy persists, especially in regions outside Java. This suggests that while the curriculum has merit in helping schools catch up after the pandemic, it is far from being a solution to Indonesia's deeply entrenched learning crisis across the archipelago.
- The *Merdeka Belajar* initiatives, a package of programs complementing the *Merdeka* curriculum, consist of programs to intervene in the realm of inputs (teacher and school readiness), processes (implementation of an SCL at the school level), and outcomes (evaluation of learning outcomes). The *Merdeka Belajar* have been criticized for their high costs and challenging implementation across regions.
- Learning disparities are most directly related to sub-standard teacher competencies. This highlights the need to revisit the quality of teacher training. While studies have emphasized the potential of input-focused initiatives such as *Sekolah Penggerak* (transformational schools) and *Guru Penggerak* (transformational teachers), they depend on the use of best practices across teachers and schools.
- The "agents-of-change" model employed in these initiatives should be complemented by a clear and meritocratic pathway for assigning the model teachers to leadership and administrative positions in schools. The Draft Bill on the National Education System must include a provision that promotes merit-based teacher appointments to ensure that model teachers—those who effectively apply student-centered learning—can be placed in positions where they can influence, mentor, and support broader adoption of the approach across schools.
- Addressing learning loss requires the implementation of a student-centered curriculum like the *Merdeka* curriculum. SCL relies on teachers as the primary drivers of educational transformation. Student-centered-learning-focused training programs such as *Pendidikan Guru Penggerak* are crucial for this effort and should be prioritized by the government to expand the implementation of student-centered learning.

Current State of Learning Loss in Indonesia

Indonesian school closures during the COVID-19 pandemic, beginning in March 2020 and lasting 21 months, were among the longest globally (World Bank, 2023a). Mandated remote learning and staggered reopening further disrupted education for approximately 60 million students (UNICEF, 2022). These policies caused immediate learning losses, but also exposed a deeper learning crisis in the education system.

Table 1 summarizes the symptoms of a deep learning crisis in Indonesia. International literacy assessments have shown a worrying decline in Indonesian student competencies. Programme for International Student Assessment (PISA) 2022 data shows an improvement in rankings[1] but still-declining competencies among Indonesian students, with scores for reading, mathematics, and science falling by 12–13 points since 2018 (OECD, 2023). Over the years, Indonesian student learning outcomes have consistently remained at the lower end of performance scales (Nadhiva & Syaputri, 2022).

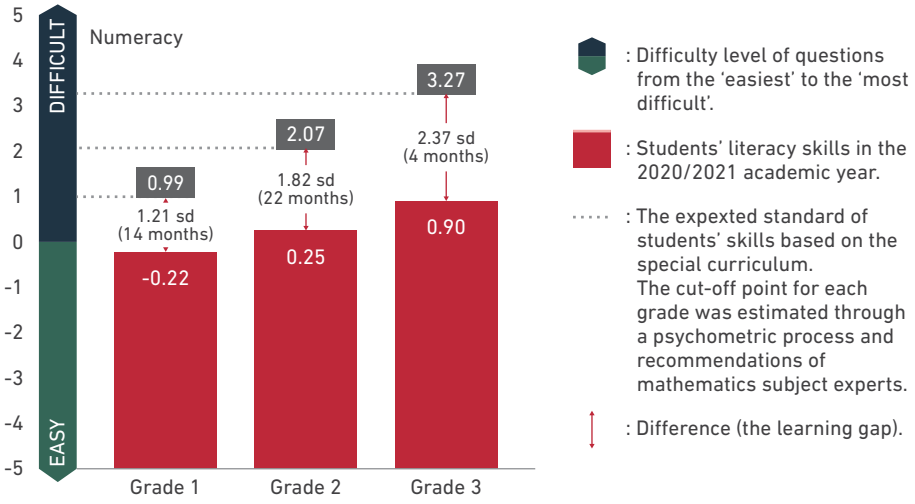
Table 1.
Metrics of Indonesia's Learning Crisis

	PISA Score	Number of School Dropouts (Primary Education Level)
2015	Reading (397), Mathematics (386), Science (403)	68,066
2018	Reading (371), Mathematics (379), Science (396)	33,268
2022	Reading (359), Mathematics (366), Science (383)	40,623

Compiled from multiple sources (Kusuma, 2017; Statistics Indonesia; UNESCO; OECD PISA Score; MOECRT database)

Primary students are the most vulnerable to learning loss. INOVASI's Build Back Stronger: Post-Pandemic Learning Recovery study in 2022 measured a decline in student learning outcomes among grades 1 to 3 as shown in Figure 1. A follow-up case study in 2023 revealed that fourth-grade students experienced a loss of 11.2 months in numeracy proficiency and 10.8 months in language proficiency (INOVASI, 2023). Both studies projected a severe impact of learning gaps, which tend to widen over time if not addressed promptly because they disrupt future learning.

Figure 1.
Loss of Learning Outcomes Grade 1–3



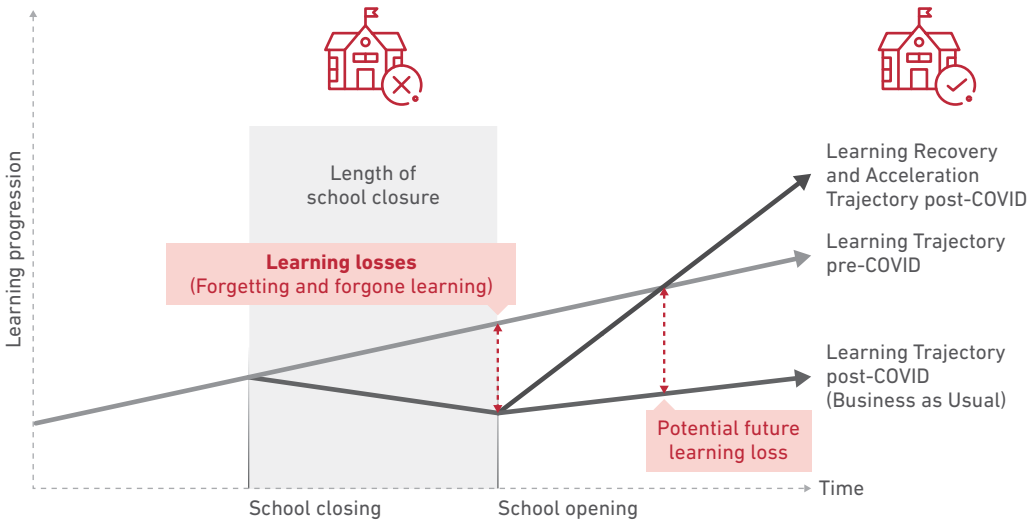
Source: INOVASI (2022)

[1] Rank increases in PISA 2022 reflect the resilience of the education system during COVID-19. Indonesia climbed five spots in reading and mathematics literacy rankings, and six spots in science literacy rankings compared to its performance in the previous PISA assessment (MOECRT, 2023a).

Foundational skills among Indonesian students were alarmingly low even before the pandemic. A learning profile study from the Indonesia Family Life Survey between 2000–2014 shows that primary students' probability of mastering numeracy is as low as 35% (Beatty et al., 2018). Low reading interest among Indonesians is another challenge. UNESCO highlights a critical issue of Indonesia's reading culture, reporting that only 0.001% of the population actively reads—equivalent to one in every 1,000 individuals (Nurhasanah, 2023). The lack of foundational skill mastery, combined with low reading interest, has become a major long-term driver of learning loss.

As the pandemic hit, the learning crisis was deepened by foregone learning opportunities during school closures and loss of previously acquired knowledge while out of school (World Bank, 2023b). Additionally, school closures during the pandemic directly contributed to increased school dropout rates (UNESCO, 2021). All of these hinder students' ability to build the foundational skills developed through primary education. Failure to establish these skills worsened the learning crisis even after students return to school as shown in Figure 2.

Figure 2.
Learning loss trajectories



Source: World Bank (2023)

The rigidity of Indonesia's Curriculum 2013 (K–13) further complicated recovery efforts and contributed to the learning crisis. Its one-size-fits-all approach limited the flexibility needed to address diverse student needs. Adaptability is critical for learning recovery (Rose, 2007; Roofe, 2014). Moreover, the curriculum appears to have prioritized strict thematic competency in each grade over personalized teaching methods (OECD, 2024). Already vulnerable primary students faced greater challenges in catching up.

Inflexibility in the curriculum restricts teachers from adapting to student readiness. Although this is always important, it is critical during the transition back to offline learning. Adaptive and personalized approaches are essential to close learning gaps and support students effectively.

Pre-pandemic disparities stemmed from structural inequalities, such as children missing learning opportunities due to limited school access. Post-pandemic learning gaps worsened as even students enrolled in school struggle to grasp lessons due to closures and ineffective home learning, risking further setbacks if recovery is slow (Figure 2). Without curriculum adjustments, pandemic-driven disparities will persist and slow educational recovery.

Other factors influencing learning loss or recovery include the access to information and communications technology (ICT) and internet connectivity (Perazzo et al., 2020; Martha et al., 2021). A World Bank study (2023) measuring pre- and post-pandemic learning outcomes found that students with frequent internet access

experienced smaller learning losses, losing 7.4 fewer months in math and 4.1 fewer months in language. In contrast, students without access to the internet faced learning losses as severe as 35 lost months in math and 57.7 lost months in language. These findings underscore the critical role of ICT in ensuring continuity of learning and mitigating educational disparities during disruptions.

Addressing learning loss requires addressing both systemic and local challenges. As schools recover from the effects of prolonged closures, the Indonesian education system must adjust to address this crisis and restore learning to its normal state (Stepanova, 2018; Page et al, 2021; Chanduvi et al, 2022). A flexible curriculum is essential to meet diverse student needs and support post-pandemic transitions (Harmey, 2023). This includes revising the curriculum, ensuring teacher and school readiness, and implementing appropriate assessment methods to measure students' basic competencies.

Long-term efforts to improve literacy interest and mitigate the broader impacts of school closures are required, but curriculum adaptation is best positioned to address the immediate challenges facing the education system. This policy brief will therefore focus on how to transform the education curriculum to account for the different needs of Indonesian students to accelerate learning recovery.

Moving Towards Student-Centered Learning to Promote Post-Covid Recovery

Before the pandemic, many countries including Indonesia adopted rigid curricula with prescriptive modules and strict learning outcomes and timeframes. Indonesia's K–13 followed this approach for almost a decade. Such a model proved ineffective for learning recovery after the pandemic (World Bank, 2022).

Indonesia responded by introducing the Emergency Curriculum (*Kurikulum Darurat*), a simplified adaptation of K–13. This curriculum laid the groundwork for the *Merdeka* Curriculum, which was later formalized and made the national curriculum through the Ministry of Education, Culture, Research and Technology and remains in place (MOECRT)[2] Regulation No.12/2024 on Curriculum for ECE, Primary and Secondary Education Levels (MOECRT, 2024). During the shift to online learning, the curriculum's focus was narrowed to key competencies such as literacy and numeracy improvement. These simpler requirements allow for more flexibility to address learning loss.

The *Merdeka* curriculum emphasizes a student-centered learning (SCL) approach,granting students the autonomy to make choices in their learning process while enabling schools to develop instructional strategies tailored to the specific needs and characteristics of their students (Kaput, 2018). SCL relies on school leaders to set their school's educational objectives. According to the OECD (2008), the idea of school leaders differs by nation and sometimes used interchangeably with school management and administration. In Indonesia, the function of school leaders goes beyond principals to include boards and even teachers who serve on daily management teams or as leaders of certain activities within their school.

SCL grants schools greater autonomy in managing lesson plans, in classroom innovation, and allowing school management to address teacher capacity development needs (Benkovska et al, 2024; Ping et al., 2024). The principle is especially effective for improving foundational knowledge. For example, Finland adopted SCL[3] and performs above the OECD average in all subjects (OECD, 2023). In Southeast Asia, Vietnam reformed its education system using SCL (World Bank, 2020) and was ranked second highest in the region for PISA 2022 (SEASIA, 2024).

[2] In October 2024, MOECRT was renamed the Ministry of Primary and Secondary Education (MOPSE).
[3] Finnish education providers (municipality, state, or private providers) base their curricula on a national core curriculum. Their national curriculum provides a framework within which teachers can choose teaching techniques and resources (Finland Ministry of Foreign Affairs, 2017).

The implementation of SCL in Indonesia is interpreted as a shift toward emphasizing foundational learning outcomes—such as basic literacy, numeracy, and character development—which enables schools to design lesson plans that are directly aligned with these essential competencies. The *Merdeka* curriculum integrates project-based activities to connect learning with real-world problems, encouraging students to actively engage and make informed choices in the learning process.

As applied, the MOECRT Regulation No. 16/2022 on Process Standards requires that learning outcomes be personalized by considering students' characteristics along with available school resources. To support this, the MOECRT has also rolled out the Guidelines for Differentiated Instructions to help teachers implement personalized learning approaches in their classroom. This guideline also gives teachers the autonomy in designing and evaluating curriculum that directly respond to student needs.

The government introduced supporting initiatives to the new curriculum implementation as part of the *Merdeka Belajar* package of programs. To better understand how these initiatives enhance or challenge promoting SCL for learning recovery, this policy brief uses the OECD and UNESCO educational policy analysis framework, categorizing the *Merdeka Belajar* supporting initiatives into input, process, and outcome initiatives (UNESCO, 2020; OECD, 2021). Table 2 summarizes the key initiatives supporting the implementation of SCL.

Table 2.
MOECRT's Supporting Initiatives for *Merdeka* Curriculum

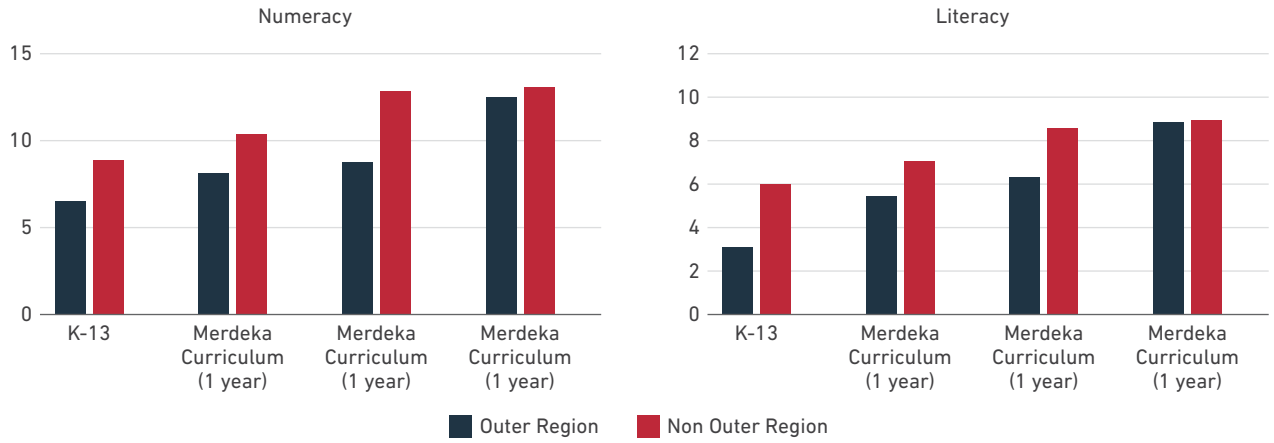
Intervention Classification	Initiatives	Objective
Input	Sekolah Penggerak/ Transformational School	"Best practice" education units that implement *Merdeka* Curriculum and serve as a reference for other educational institutions.
	Guru Penggerak/ Transformational Teacher	Teachers serve as transformational agents by mentoring their peers and supporting the implementation of student-centered learning under the new curriculum.
Process	Platform Merdeka Mengajar/ Merdeka Mengajar Platform[4]	Online educational platform to help teachers obtain references, inspiration, and understanding of the *Merdeka* curriculum.
	Komunitas Belajar/ Learning Communities	Facilitate collaborative learning on implementing Merdeka curriculum's SCL principles for both online and offline.
Outcome	Asesmen Nasional/National Assessment	Basic competencies and learning environment evaluation.
	Rapor Pendidikan Nasional & Daerah/ National & Regional Education Report	Analysis tool for improving the quality of educational services.

Compiled from multiple sources (MOECRT, 2022; Romanti, 2023; MOECRT Teacher Information Center, 2024; CIPS & Tanoto Foundation, 2024)

The *Merdeka* curriculum has been implemented in over 300,000 educational institutions, or equal to 80% of formal schools across early childhood education (ECE), primary, and secondary education levels (Wulandari, 2023; MOECRT, 2024; Napitupulu, 2024). The Education Standard, Curriculum, and Assessment Agency (*Badan Standar, Kurikulum dan Asesmen Pendidikan* or BSKAP)'s 2024 academic review on *Kurikulum Merdeka* for Learning Recovery claims that this curriculum improved learning recovery. MOECRT monitors these efforts by evaluating changes in literacy and numeracy scores through the National Assessment (*Asesmen Nasional* or AN) in the years following the pandemic, comparing them to scores from schools using the K–13 Curriculum. Figure 3 shows that while schools using the K–13 Curriculum also improved foundational competencies, those implementing the *Merdeka* curriculum demonstrated faster progress even in geographically challenging areas.

[4] As of 2025, the platform has been integrated into the new digital ecosystem, *Rumah Pendidikan*.

Figure 3.
Changes in Literacy and Numeracy Scores of Primary Students Based on AN 2021 vs 2023



Compiled from multiple sources (Center for Education Standards and Policy, 2024; Antara News, 2024; Zamjani et al., 2024)

The above figure represents compelling evidence in support of the SCL approach. However, ongoing improvements are needed, particularly in assessing regional readiness and capacity to implement the curriculum effectively and ensure equitable access to quality education (The House of Representatives, 2024). Addressing the diverse learning needs of Indonesian students necessitates a closer examination of regional disparities and student achievement as reflected in national assessment results.

AN results are compiled into the Education Profile & Report (*Profil dan Rapor Pendidikan*), designed not only to measure performance but to prompt schools to reflect and tailor data-driven strategies for education reform. This policy brief compiled AN results across regions as depicted in Table 3.

Across Indonesia, there are persistent achievement gaps across Indonesia in addition to a general under-performance in basic literacy and numeracy skills, despite the widespread adoption of the SCL approach in the existing curriculum (Table 3). This shows that more needs to be done to address the pre-existing and deeply entrenched learning crisis through programs that supplement the demonstrated effectiveness of the SCL approach for recovering from lost learning.

Table 3.
Primary Education students AN 2024 Results

	Literacy		Numeracy	
	MOECRT General Primary Schools	MORA Primary Schools	MOECRT General Primary Schools	MORA Primary Schools
Jakarta	↑	↑	↑	↑
West Java	↑	↑	↑	↑
Central Java	↑	↑	↑	↑
East Java	↑	↑	↑	↑
Special Region of Yogyakarta	↑	↑	↑	↑
Aceh	↑	↑	↑	↑
North Sumatera	↑	↑	↑	↑
West Sumatera	↑	↑	↑	↑
Riau	↑	↑	↑	↑
Jambi	↑	↑	↑	↑
South Sumatera	↑	↑	↑	↑
Lampung	↑	↑	↑	↑
West Kalimantan	↑	↑	↑	↑
Central Kalimantan	↑	↑	↑	↑
South Kalimantan	↑	↑	↑	↑
East Kalimantan	↑	↑	↑	↑
North Sulawesi	↑	↑	↑	↑
Central Sulawesi Tengah	↑	↑	↑	↑
Southeast Sulawesi	↑	↑	↑	↑
Maluku	↑	↓	↑	↑
Bali	↑	↑	↑	↑
NTB	↑	↑	↑	↑
NTT	↑	↓	↑	↑
Papua	↑	↑	↑	↑

> 70% students have achieved minimum competency

40% - 70% have achieved minimum competency

< 40% students have achieved minimum competency

↑ Increase from 2023 ↓ Decrease from 2023

Analysis compiled from Regional Education Report at Provincial levels

Table 3 confirms that disparities persist across regions in Indonesia, as highlighted by the Regional Education Report. Ensuring that best practices in implementing the SCL approach are equitably shared remains a challenge. One key reason is that many teachers struggle to apply the existing curriculum due to limited understanding of the government-defined foundational learning goals, often resulting in misinterpretation during lesson planning and classroom implementation. (Wibowo et al., 2023).

Following the transition to the new administration of President Prabowo Subianto in October 2024, discussions about whether the SCL approach in the *Merdeka* curriculum should continue have gained momentum. Supporting initiatives for the SCL package have already required significant investment, with a budget allocation of Rp4.57 trillion (Secretary Cabinet, 2022)—nearly double the Rp2.49 trillion allocated for the K–13 (Kompas.com, 2013). Ensuring that learning recovery is effectively supported through this curriculum depends on teachers who not only understand the principles of SCL but are also equipped to lead its implementation.

The next section explains why SCL requires better teachers who grasp its ideas and assume leadership positions.

Promoting SCL Best Practices through Teachers' Role as School Leaders

An interview with the head of a Teacher Professional Education (*Pendidikan Profesi Guru* or PPG) institution in East Java (2025), which provides pre-service training to teachers, emphasized school and teacher readiness as significant barriers. Not all educators possess equivalent levels of preparedness to carry out SCL due to pedagogical skills limitations.

A case study in one primary education institution similarly revealed that on literacy abilities teachers scored just 35.71% out of a possible 100% (Harjito et al., 2019). A separate study in 2024 examined the pedagogical abilities—lesson design, execution, and assessment—of teachers at five schools located in West Java (Cahyana & Agustin, 2024). The majority of teachers scored 83% in lesson planning, but just 66.7% in classroom implementation. It suggests a gap between planning and execution. Teachers may know *what* to teach as evident by higher score in lesson planning, but struggle with *how* to teach it effectively in practice.

Reviewing input-focused initiatives such as Transformational Schools (*Sekolah Penggerak* or SP) and Transformational Teachers (*Guru Penggerak* or GP) is crucial to understand how teachers are being prepared to implement SCL within the current curriculum framework. Input-wise, the transformational school are intended to promote systemic change inside educational units, primarily tasked with distributing SCL best practices from a selected transformational school to its neighboring schools[5] (Directorate General of Early Childhood Education, Primary Education, and Secondary Education, 2021).

Teachers chosen as transformational teachers are those who have successfully completed extensive training through the Transformational Teacher Education (*Pendidikan Guru Penggerak* or PGP)[6] and are typically entrusted with dissemination responsibilities of SCL principles. Transformational Teacher Education is training provided to teachers who are already in-service and looking to improve their understanding of SCL methods and assume leadership roles. To become transformational teachers, teachers must undergo a nine-month selection and training process supported by professional facilitators and mentors.

However, challenges persist as the dissemination of best practices from transformational schools has been limited to nearby schools which significantly constrains the program's reach. This limitation mainly stems from the program's reliance on additional funding. For example, in Kalimantan, selected transformational schools often face operational difficulties in reaching remote schools that rely on offline training and dissemination for the new curriculum due to inadequate funding, despite receiving additional performance-based school operational grants[7] (Herdiansyah, 2024). Teachers have also criticized the Transformational Schools program for its rushed curriculum training (CNN, 2021) and increased administrative burdens (Shobri & Alfurqan, 2023). These aspects contradict longstanding government promises to reduce teacher workloads.

On the other hand, one of the main challenges with transformational teachers stems from the selective nature of Transformational Teacher Education as the program follows an agents-of-change model where teachers are positioned as the main drivers of curriculum transformation toward the *Merdeka* curriculum implementation (Interview with Indonesian Teacher's Association [*Ikatan Guru Indonesia* or IGI] representative, 2024). Out of 3.03 million teachers in the 2023/2024 academic year (Statistic Indonesia, 2024), only 400,000 teachers were targeted to receive the training and graduate from Transformational Teacher Education (Directorate of Primary Education Teachers, 2021).

[5] By August 2024, over 14,000 schools across all levels have been designated as transformational schools in 34 provinces, with a target of 40,000 schools by the program's fourth year (MOECRT, 2021; Sekolah Penggerak, n.d).
[6] A total of 61,256 teachers have graduated from cohorts 1 to 8 of the *Guru Penggerak* program, while 32,203 candidates from cohort 9 are currently undergoing training (MOECRT, 2024).
[7] Commonly referred to as *Bantuan Operasional Satuan Pendidikan Kinerja* or BOSP Kinerja, is funds for *Sekolah Penggerak* support initiatives such as human resource development, new learning paradigms, school digitalization, and data-driven planning.

Having received specialized training on SCL, the duty of the "Transformational Teacher" as an agent of change is to continuously disseminate their knowledge, especially to teachers who are not covered by the program. For example, a transformational teacher can conduct outreach or training sessions for fellow teachers on how to implement personalized learning aligned with the SCL approach. To accomplish this, a transformational teacher must be motivated and dedicated to engaging in dialogue with their peer teachers.

Assigning transformational teachers to leadership roles can strengthen the implementation of SCL, as these teachers have undergone specialized training and taken on greater responsibilities in promoting SCL practices. More recently, the program was intended to be exclusively for teachers preparing to become principals or as advanced training for current school principals (Hidayati, 2024). Completion of Transformational Teacher Education is a requirement for teachers to qualify as a school principal, as stipulated under MOECRT Regulation No. 40/2021 on Assignment of Teachers as School Principals. A formal leadership position enables them to more effectively influence school-wide instructional strategies, however it should not only be limited to school principal positions.

In some regions, there are more transformational teachers than there are vacant principal seats (Interview with IGI representatives, 2024), while in others, there are no trained transformational teachers at all. To address the lack of transformational teachers in some regions, Article 4 of MOECRT Regulation No. 40/2021 allows local governments to appoint teachers as principals even if they do not yet have a prospective principal certificate or a GP certificate. This shows that the placement of teachers trained for leadership roles through the Transformational Teachers program is ultimately left to the local government's discretion.

In practice, MOECRT has found that local government leaders often remain reluctant to appoint transformational teachers to leadership roles . This reluctance is partly due to concerns about their professional track records, as many transformational teachers are relatively early in their careers which perceived as lacking seniority as well as political considerations also continue to influence these appointment decisions (Tempo, 2023). Consequently, a discrepancy often arises: the selection of transformational teachers is conducted nationally, but decentralization gives local governments the authority to appoint teachers to leadership positions, including school principals. This disconnect between national selection and local appointment authority highlights a critical governance gap.

Transformational teacher placement in leadership roles other than the school principal can be similarly challenged by bureaucratic hurdles. For example, the appointment of non-principal functional teachers[8] must comply with Ministry of State Apparatus Empowerment and Bureaucratic Reform Regulation No. 21/2024. While the regulation provides clearer qualification requirements meant to consider performance-based assessments[9] for teachers, Article 11 of the regulation states that teacher appointments ultimately rely not only on recommendations from the Education Ministry but also on the appointment process managed by other agencies overseeing teacher governance within the civil service system. These agencies include the Ministry of State Apparatus Empowerment and Bureaucratic Reform [MSAEBRR] and the National Civil Service Agency.

This suggests that administrative processes involving multiple ministries influence teacher appointments, despite stricter qualification standards and performance-based factors in MSAEBRR Regulation No. 21/2024. This may compromise teacher recruitment. These constraints can lead to missed opportunities and wasted resources as transformational teachers are trained and then unable to contribute to changes.

[8] The hierarchy of teacher positions from the lowest to the highest level are First Expert Teacher, Junior Expert Teacher, Senior Expert Teacher, and Principal Expert Teacher.
[9] To be appointed, a teacher should hold civil servant status, demonstrate high integrity and moral conduct, maintain physical and mental fitness, possess at least a bachelor's or applied bachelor's degree, and have a performance rating of at least "good" in the past year.

Rethinking Teacher Education: Addressing Gaps in Preparing Teachers for SCL

Teacher education institutions (*Lembaga Pendidikan Tenaga Kependidikan* or LPTK), including an additional year of pre-service teacher training program from Teacher Professional Education (*Pendidikan Profesi Guru* or PPG)[10], have not significantly improved competence in facilitating effective numeracy and literacy learning (Revina, 2022). The now-abolished Teacher Competency Test (*Uji Kompetensi Guru* or UKG) assessed teachers' attributes in personality, social, pedagogical, and professional domains. This test showed inadequate competency ratings among teachers with an average score of 56.69% in 2015, well below the optimal competency threshold of 70% (MOEC, 2017).[11]

If SCL is to be attained, teacher professional education has to meet teacher needs. In particular, teachers must have the skills to respond to diverse student learning needs, manage large class sizes, and engage effectively with parents—an essential aspect of SCL implementation (Interview with IGI representative, 2025). Both the curriculum and learning outcomes of teacher education institutions must be evaluated to ensure that trained teachers are equipped to accommodate student diversity and adopt reflective teaching practices—regularly evaluating their own teaching, responding to classroom conditions, and adjusting methods to meet students' needs and progress (Directorate General Teacher & Education Personnel, 2022).

Training providers need to assess and monitor their graduates to ensure they meet leadership standards and are ready to support and apply SCL in schools. However, there is a lack of coordination between pre-service Teacher Professional Education providers and the in-service training providers, including those that administer Transformational Teacher Education[12]. Coordinating these training services is a low-cost option to better map out and track outcomes from both Teacher Professional Education and Transformational Teacher Education programs (Interview with Head of Teacher Professional Education, 2025).

Pedagogical competence is not sufficient for teachers to implement the SCL approach effectively. Personal competencies such as emotional maturity to strong characters and social skills also affect teachers' motivation to apply SCL principles and replicate good practices in the classroom. Therefore, teacher training programs should be re-evaluated to ensure they build both pedagogical and non-pedagogical competencies. The case study in Box 1 highlights key insights from Vietnam's approach to assessing their teacher competency.

[10] The PPG covers programs for both pre-service and in-service teachers to obtain teacher certification. Graduates of this program will earn a Bachelor of Education degree.
[11] The UKG has since been terminated, primarily due to its prohibitive cost. The cost complicated its implementation on a large scale and regular basis.
[12] Such as the Center for Teacher Leadership Development (*Balai Besar Guru Penggerak*) as an institution that organizes the PGP program.

Box 1.
Vietnam's Education Reform for Personalized Learning

Vietnam is recognized as a leading country in education reform, particularly in improving foundational literacy and numeracy skills. In 2020, Vietnam introduced the Competency-Based Curriculum (C2018), moving away from rote learning to a more flexible, skills-focused model. This reform reduced mandatory subjects but prioritized subjects such as ICT. The "Internet Connection and Computers for Students" program was launched to help students who couldn't afford computers as online learning became essential post-pandemic. The Ministry of Education and Training (MOET) partnered with various organizations to provide ICT resources for students.

Teacher Training Institution Evaluation

Vietnam made significant investments in both pre-service and in-service teacher training programs, which play a crucial role in its educational reforms. Through a World Bank-funded continuous professional development (CPD) initiative, teachers are trained in four key areas: research, innovation, blended teaching (combining in-person and online methods), and curriculum development with new teaching methods. Additionally, teacher training was revamped to focus on practical, student-centered approaches that integrate interdisciplinary learning.

Instead of evaluating teachers after graduation, Vietnam assesses the effectiveness of its program by consistently reviewing teacher education and training institutions. During this process, the MOET, in collaboration with the World Bank, convened national and international experts to develop a monitoring tool known as "The Teacher Education Institution Development Index" to enhance the capacity of teacher's education institutions. This tool serves to monitor and assess the quality and effectiveness of the teacher training institutions.

Source: ADBI, 2022; World Bank, 2022; OECD, 2023; Kataoka et al.,, 2023.

At this point, this brief argues that meaningful SCL implementation requires an end-to-end teacher reform. First, it involves re-evaluating the teacher education curriculum to ensure alignment with current pedagogical demands. Second, it requires fair and transparent teacher management—from training to appointment—to support SCL. The current Ministry of Primary and Secondary Education is considering changes to teacher governance in the revision of Law No. 20/2003 on the National Education System, aiming to promote a more meritocratic teacher appointment system and improve teacher welfare. Several policy alternatives under consideration include centralized planning, recruitment, and placement of teachers, either partially limited to civil servant teachers or fully under national government authority (TVR Parlemen, 2025).

Scaling Up Implementation of SCL Practices

Process-focused programs must also be evaluated in terms of their functionality and accessibility, particularly in regions with low minimum competency levels. The process-focused programs include the *Merdeka Mengajar* Platform (*Platform Merdeka Mengajar* or PMM) and Learning Communities (*Komunitas Belajar* or Kombel) facilitate SCL learning amongst teachers both offline and online. For teachers who are not selected to be trained as transformational teachers, process-focused initiatives are designed to encourage self-directed learning and collaboration with their communities to improve their understanding of SCL best practices.

PMM is an online platform to help teachers access a wide range of training and teaching materials to help them ensure that their teaching is student-centered (Wang et al., 2023). The Student Assessment (*Asesmen Murid*) feature provides literacy and numeracy question sets tailored to students' characteristics (Ramdani et al, 2022). The Collaborate (*Berkarya*) feature enables teachers to work together in creating engaging educational content (Triningsih et al, 2024). As of 2025, PMM has been integrated into the *Rumah Pendidikan* super-app and serves as a central platform for teacher professional development, sharing of instructional practices, and performance evaluation.

Although the platform has been improved, it remains essential to address the challenges teachers experienced with PMM, as these may continue under the current *Rumah Pendidikan* platform. Teachers face significant barriers to effective use, including technical issues, limited digital skills, and inadequate internet access. First, recommended practices on the platform are outdated or inappropriate, such as when PMM recommends using online tools like Canva when some schools operate with limited connectivity or digital tools (Interview with IGI representative, 2024). Second, teachers lack the necessary digital competency. A 2021 MOECRT survey found that 60% of teachers do not have adequate technological skills (Makdori, 2021; BPMP Sulawesi Utara, 2021). Third, schools face disparities in ICT infrastructure knowing that computer availability at the primary education level is only 5.31% (Susilawati, 2021, Statistic Indonesia, 2023). These limitations have resulted in teachers being unable to maximize the use of PMM.

Offline solutions are needed to facilitate SCL adoption where there are technological barriers to PMM use. Training and disemmination are facilitated through learning communities to ensure widespread adoption of SCL (Nurhaliza, 2022; Merdeka Mengajar, 2024). Nonetheless, a challenge in the implementation of learning communities is that transformational teachers are often not active in initiating learning activities within their groups (Interview with IGI representative, 2024). Learning communities face challenges that are largely the result of teacher capacity and motivation. Key issues include low teacher participation, limited support from school leadership, the absence of clear discussion topics in each meeting, and the lack of regular evaluation mechanisms to measure and improve the effectiveness of these learning communities (Giyanto et al., 2023).

Regional discrepancies, as illustrated by Table 3, make it necessary to complement online initiatives like PMM with offline initiatives such as learning communities. This matters most in regions outside Java, which often have limited internet access. Regions achieving higher scores on literacy and numeracy have stronger internet penetration (APJII, 2024). These well-resourced regions appear to have a solid foundation for digital learning and therefore to use PMM. Regardless, teachers must possess knowledge of SCL principles and motivation to implement those principles in classrooms, in order to translate these approaches into meaningful progress in learning recovery.

Process-focused initiatives should extend beyond facilitating discussions on the classroom application of SCL. They must also equip teachers to interpret and use educational outcome data from outcome-focused initiatives, such as the Education Report Card (Table 3). Integrating these two approaches is essential to ensure that data-driven insights inform teaching practices and promote learning recovery across regions.

However, teachers would still have trouble managing lesson plans that properly reflect the assessment result (Sudianto & Kisno, 2021). This stems not only from limited capacity to interpret learning outcomes, but also from the absence of structured, multi-stakeholder dialogue needed to reflect on those outcomes collectively (Interview with IGI representative, 2024). Sustained support from local governments is therefore essential to institutionalize this reflective process and ensure that future educational priorities are shaped by evidence and adapted to regional needs.

The Regional Education Reports were restricted to government bodies but became publicly accessible in October 2024 to encourage wider stakeholder participation and input. This transparency is expected to create opportunities for data-driven educational planning through collaborative efforts between civil society organizations and the private sector, fostering more inclusive and effective policy decisions.

Recommendations

The success of recovery from pandemic learning loss depends heavily on human resource capacity, specifically on teachers' ability to interpret and act upon learning outcomes. With this in mind, the following recommendations are proposed:

- **Teacher leadership should be improved through targeted programs such as Transformational Teacher Education to drive learning transformation and accelerate recovery.** This requires ensuring that Transformational Teacher Education graduates are placed in leadership positions to support education reform at the school level. Since there are a limited number of positions as school principals and the need for change is great, "school leadership" should not be confined to principals alone.
- **Transformational Teacher Education graduates should be assigned to a range of managerial roles**—such as school principal, vice principal, curriculum development coordinators, and other leadership roles. This can be a strategic approach to ensuring that their expertise is effectively disseminated.
- In ensuring skilled teachers can hold strategic positions and shift schools towards the SCL approach, **revisiting the Draft Bill on the National Education System is crucial to promote merit-based teacher appointments.**
- Teacher training programs that address the ongoing practical needs of teachers should continue in parallel to Transformational Teacher Education for more effective SCL implementation. Therefore, **continuous evaluation of both pre-service and in-service teacher training programs is necessary to ensure alignment with classroom realities and teachers' needs.** Coordination between both institutions is crucial to inform curriculum updates in teacher education institutions. This will enable graduates to develop core pedagogical and social competencies, including the capacity for reflective teaching aligned with students' diverse learning needs.
- **The implementation of policies such as the Regional Report Card requires collective dialogue among local education stakeholders to better understand student needs.** Facilitating reflective discussions among neighboring schools with similar characteristics can help identify shared challenges and generate more targeted, collaborative solutions. This approach is essential for identifying context-specific challenges and developing targeted strategies that align with regional needs.

References

Antara News. (2024, March 27). *Nadiem: Kurikulum Merdeka tingkatkan skor numerasi satuan pendidikan*. Antara.news. Retrieved from https://www.antaranews.com/berita/4031790/nadiem-kurikulum-merdeka-tingkatkan-skor-numerasi-satuan-pendidikan

APJII. (2024, 13 Oktober). *Lebih dari 80%, tingkat penetrasi internet di Jawa tertinggi di Indonesia*. Good Stats. Diambil dari https://data.goodstats.id/statistic/lebih-dari-80-tingkat-penetrasi-internet-di-jawa-tertinggi-di-indonesia-laru6

Beatty, A., Berkhout, E., Bima, L., Coen, T., & Pradhan, Menno., & Suryadarma, D. (2018). *Program Rise di Indonesia Bersekolah, Apakah Belajar? Analisis 2000-2014*. Jakarta: Research on Improving Systems of Education.

Benkovska, N., Kharchenko, N., Kulbach, L., Rabokorovka, G., & Bolotnykova, T. (2024). Analyzing Pedagogical Strategies for Personalized Learning to Compensate for Students' Learning Losses. *Revista Eduweb*, *18*(1), 235-244. https://doi.org/10.46502/issn.1856-7576/2024.18.01.17

https://setkab.go.id/nadiem-beberkan-alokasi-apbn-2023-di-kemendikbudristek/

BPMP Sulawesi Utara. (2021, July 01). *Pembelajaran Jarak Jauh : Tantangan dan Strategi Menghadapi*. Retrieved from https://bpmpsulut.kemdikbud.go.id/pembelajaran-jarak-jauh-tantangan-dan-strategi-menghadapi/

Cahyana, C & Agustin, M. (2024). Kompetensi Pedagogik Guru Kelas: Perencanaan, Penerapan dan Evaluasi dalam Pembelajaran. *Educative Journal of Education Science*, *6*(1), 844 - 851. https://doi.org/10.31004/edukatif.v6i1.5962

Center for Education Standards and Policy Ministry of Primary and Secondary Education. (2024). *Forum on Education and Learning Transformation (FELT) 2024 | Senin, 22 Juli 2024* [Video]. YouTube. Indonesia: PSKP Kemendikdasmen.

Chanduvi, et al. (2022). *Where Are We on Education Recovery?*. New York: United Nations Children's Fund (UNICEF).

CIPS & Tanoto Foundation. (2024). *Education Landscape in Indonesia*. Retrieved from https://www.cips-indonesia.org/publications/education-landscape-in-indonesia

CNN Indonesia. (2021, August 03). *Guru Kritik Program Sekolah Penggerak Nadiem Eksklusif*. CNN Indonesia. Retrieved from https://www.cnnindonesia.com/nasional/20210802151641-20-675300/guru-kritik-program-sekolah-penggerak-nadiem-eksklusif

Dao, N.D., Phan, T.H., & Chau, H.M.T. (2022). *Tackling Unequal Access to Digital Education in Viet Nam during the COVID-19 Pandemic*. ASIAN DEVELOPMENT BANK INSTITUTE.

Directorate General of Early Childhood Education, Primary Education, and Secondary Education. (2021, February 01). *Kemendikbud Luncurkan Merdeka Belajar Episode 7: Program Sekolah Penggerak*. Retrieved from https://pdm.dikdasmen.go.id/media-berita/kemendikbud-luncurkan-merdeka-belajar-episode-7-program-sekolah-penggerak

Directorate General of Teachers and Education Personnel. (2022, December 13). *Peningkatan Mutu Pembelajaran PPG Prajabatan melalui Penerapan Student Centered Learning*. Retrieved from https://ppg.dikdasmen.go.id/news/peningkatan-mutu-pembelajaran-ppg-prajabatan-melalui-penerapan-student-centered-learning#:~:text=Pembelajaran%20SCL%20dilakukan%20melalui%20kegiatan,dan%20perbaikan%20yang%20harus%20dilakukan

Directorate of Primary Education Teachers. (2021, February 10). *Target Program Sekolah Penggerak: 2.500 Sekolah Dapat Menjadi Sekolah Penggerak Sepanjang Tahun 2021*. Retrieved from https://gurudikdas.kemdikbud.go.id/news/Target-Program-Sekolah-Penggerak:-2.500-Sekolah-Dapat-Menjadi-Sekolah-Penggerak-Sepanjang-Tahun-2021#:~:text=0%20Komentar-,Target%20Program%20Sekolah%20Penggerak%3A%202.500%20Sekolah%20Dapat%20Menjadi%20Sekolah%20Penggerak,menjadi%20sekolah%20penggerak%20sepanjang%202021

Education Standards, Curriculum, and Assessment Agency. (2024, October 14). *Rapor Pendidikan Indonesia*. Education Data Portal. Retrieved from https://data.kemdikbud.go.id/publikasi/p/rapor-pendidikan-indonesia/rapor-pendidikan-indonesia-2024

Finland Ministry of Foreign Affairs. (2017). *Education in Finland: Key to the Nation's Success*. Retrieved from https://www.educationfinland.fi/sites/default/files/2019-11/finfo_education_in_finland_en.pdf

Harjito., Nuswowati, M., & Kasmui. (2019). Tingkat Penguasaan Pengelolaan Bahan Literasi Guru-guru Sekolah. *Journal of Educational Research*, *36*(2). https://doi.org/10.15294/jpp.v36i2.17039

Harmey, S., & Moss, G. (2021). Learning Disruption or Learning Loss: Using Evidence From Unplanned Closures to Inform Returning to School After COVID-19. *EDUCATIONAL REVIEW*, *75*(4), 637-656. https://doi.org/10.1080/00131911.2021.1966389

Herdiansyah, F. (2024, November 04). *Dana BOS Kinerja Belum Mencukupi Pengimbasan Sekolah Penggerak*. RRI. Retrieved from https://rri.co.id/daerah/1096456/dana-bos-kinerja-belum-mencukupi-pengimbasan-sekolah-penggerak

Hidayati, N. (2024, December 09). *Bocoran Kelanjutan Program Pendidikan Guru Penggerak dari Nunuk Suryani, Sebagai Syarat Menjadi Kepala Sekolah, Simak Informasi Lengkapnya!*. Melintas.id. Retrieved from https://www.melintas.id/pendidikan/345401749/bocoran-kelanjutan-program-pendidikan-guru-penggerak-dari-nunuk-suryani-sebagai-syarat-menjadi-kepala-sekolah-simak-informasi-lengkapnya?page=3

House of Representatives of the Republic of Indonesia. (2024, May 02). *PR Kemendikbud di Hardiknas: Kurikulum Merdeka, UKT, Hingga Kesejahteraan Guru-Dosen*. Retrieved from https://emedia.dpr.go.id/2024/05/02/pr-kemendikbud-di-hardiknas-kurikulum-merdeka-ukt-hingga-kesejahteraan-guru-dosen/

INOVASI. (2022, November). *Build Back Stronger: Post-Pandemic Learning Recovery*. Retrieved from https://www.inovasi.or.id/wp-content/uploads/2023/06/Infographic_Learning_Gap_ENG_FIN_V1-1.pdf

INOVASI. (2023, July). *The Learning Gap Series 4 – Bounce Back Stronger: Learning Recovery After the Pandemic A Case Study of INOVASI Partner Schools*. Retrieved from https://www.inovasi.or.id/en/publikasi/the-learning-gap-series-4-bounce-back-stronger-learning-recovery-after-the-pandemic-a-case-study-of-inovasi-partner-schools/

Inspectorate General of the Ministry of Education, Culture, Research and Technology. (2023, August 31). *Memahami Lebih Lanjut Peran Guru dalam Kurikulum Merdeka.* . Retrieved from https://itjen.kemdikbud.go.id/web/memahami-lebih-lanjut-tentang-peran-guru-dalam-kurikulum-merdeka/

Kaput, K. (2018, January). *Evidence for Student-Centered Learning*. Minneapolis: Education Evolving.

Kataoka, S., Vinh, L.A., Kitchlu, S., Inoue, K. (n.d.). *Vietnam's Human Capital: Education Success and Future Challenges*. Washington DC: World Bank.

Kompas.com. (2013, February 01). *Rp 2,49 Triliun untuk Kurikulum*. Kompas.com. Retrieved from https://tekno.kompas.com/read/2013/02/01/02134013/rp.249.triliun.untuk.kurikulum#:~:text=jakarta%2C%20kompas%20%2D%20Untuk%20pelaksanaan%20Kurikulum,tambahan%20Rp%20751%2C4%20miliar.

Kusuma, C. S. D. (2017). Counteract Hoax Through Reading Interest Motivation. *International Conference on Ethics of Business, Economics, and Social Science*, 34-54.

Makdori, Y. (2021, April 15). *Kemendikbud Sebut 60 Persen Guru Masih Terbatas Menguasai Teknologi Informasi*. Liputan 6. Retrieved from https://www.liputan6.com/news/read/4533328/kemendikbud-sebut-60-persen-guru-masih-terbatas-menguasai-teknologi-informasi?page=2

Martha, A. S. D., Junus, K., Santoso, H. B., & Suhartanto, H. (2021). Assessing Undergraduate Students' e-Learning Competencies: A Case Study of Higher Education Context in Indonesia. *Education Sciences, 11*(4), 189. https://doi.org/10.3390/educsci11040189

Ministry of Education, Culture, Research and Technology of the Republic of Indonesia. (2021, September 17). *Animo Tinggi, Program Guru Penggerak Targetkan 405 Ribu Guru hingga 2024.* Retrieved from https://www.kemdikbud.go.id/main/blog/2021/09/animo-tinggi-program-guru-penggerak-targetkan-405-ribu-guru-hingga-2024

Ministry of Education, Culture, Research and Technology of the Republic of Indonesia. (2017, November 25). *Membangun Pendidikan Karakter Melalui Keteladanan Guru*. Retrieved from https://www.kemdikbud.go.id/main/blog/2017/11/membangun-pendidikan-karakter-melalui-keteladanan-guru

Ministry of Education, Culture, Research and Technology of the Republic of Indonesia. (2023, December 05). *Peringkat Indonesia pada PISA 2022 Naik 5-6 Posisi Dibanding 2018*. Retrieved from https://www.kemdikbud.go.id/main/blog/2023/12/peringkat-indonesia-pada-pisa-2022-naik-56-posisi-dibanding-2018

Ministry of Education, Culture, Research and Technology of the Republic of Indonesia. (2024, March 27). *Telah Terbit Peraturan Mendikbudristek No. 12 Tahun 2024 tentang Kurikulum pada PAUD, Pendidikan Dasar, Jenjang Pendidikan Dasar, dan Menengah*. Retrieved from https://kurikulum.kemdikbud.go.id/berita/detail/telah-terbit-peraturan-mendikbudristek-no12-tahun-2024-tentang-kurikulum-pada-paud-jenjang-pendidikan-dasar-dan-menengah

Ministry of Education, Culture, Research and Technology of the Republic of Indonesia. (2024, March 28). *Kemendikbudristek Terbitkan Payung Hukum bagi Implementasi Kurikulum Merdeka secara Nasional*. Retrieved from https://www.kemdikbud.go.id/main/blog/2024/03/kemendikbudristek-terbitkan-payung-hukum-bagi-implementasi-kurikulum-merdeka-secara-nasional

Ministry of Education, Culture, Research and Technology of the Republic of Indonesia. (2024, May 28). *Pemda Harus Pahami Filosofi Kurikulum Merdeka sebagai Penyelenggara dan Pembina Kurikulum di Satuan*. Retrieved from https://www.kemdikbud.go.id/main/blog/2024/05/pemda-harus-pahami-filosofi-kurikulum-merdeka-sebagai-penyelenggara-dan-pembina-kurikulum-di-satuan

Ministry of Education, Culture, Research and Technology of the Republic of Indonesia. (n.d.). *Tahapan Implementasi Kurikulum Merdeka*. Retrieved from https://kurikulum-demo.simpkb.id/tahapan-ikm/

Ministry of Education, Culture, Research and Technology of the Republic of Indonesia. (n.d.). *Sekolah Penggerak adalah Katalis untuk Mewujudkan Visi Pendidikan Indonesia*. Retrieved from https://psp-web.pauddikdasmen.kemdikbud.go.id/#/home

Ministry of Primary and Secondary Education. (2025, February 11). *Cara Melihat Hasil Refleksi Kompetensi Guru*. Retrieved from https://pusatinformasi.guru.kemdikbud.go.id/hc/en-us/articles/23358033765273-Cara-Melihat-Hasil-Refleksi-Kompetensi-Guru

Ministry of Primary and Secondary Education. (2025, February 11). *Apa Itu Ruang GTK?*. Retrieved from https://pusatinformasi.guru.kemdikbud.go.id/hc/id/articles/6090880411673-Apa-Itu-Ruang-GTK#:~:text=Platform%20Merdeka%20Mengajar%20dibangun%20untuk,mengajar%2C%20belajar%2C%20dan%20berkarya

Ministry of Primary and Secondary Education. (2025, January 24). *Apa Itu Komunitas?*. Retrieved from https://pusatinformasi.guru.kemdikbud.go.id/hc/id/articles/8016289743769-Apa-Itu-Komunitas

Ministry of Primary and Secondary Education of the Republic of Indonesia. (2024, July). *Dasar Hukum Rapor Pendidikan*. Retrieved from https://pusatinformasi.raporpendidikan.kemdikbud.go.id/hc/id/articles/6544817645593-Dasar-Hukum-Rapor-Pendidikan

Nadhiva, A.A., & Syaputri, N.E. (2022, October 25). *Fighting Learning Crisis, Building Foundational Skills*. Retrieved from https://rise.smeru.or.id/en/blog/fighting-learning-crisis-building-foundational-skills

Napitupulu, E.L. (2024, March 27). *Kurikulum Merdeka Resmi Jadi Kurikulum Nasional*. Kompas.id. Retrieved from https://www.kompas.id/baca/humaniora/2024/03/27/kurikulum-merdeka-resmi-jadi-kurikulum-nasional

Noviandri N., Khairina., Yarrow, N., Cilliers, J., & Dini, I.S.Z. (2023). *Improving Teachers and School Leadership in Indonesia: Impact Evaluation of Guru Penggerak Program at the Primary Level.* Washington DC: World Bank.

Nurhaliza, S. (2022, October 11). *Komunitas Belajar penting dalam implementasi kurikulum merdeka*. Antara.news. Retrieved from https://www.antaranews.com/berita/3172641/komunitas-belajar-penting-dalam-implementasi-kurikulum-merdeka

Nurhasanah, S., Najib, M., & Ruknan. (2023). The Influence of Literacy Culture on Reading Interest of Elementary School Students. *The Influence of Literacy Culture on Reading Interest*, 404-409.

OECD. (2021). *Insights and Context to Inform Policies and Global Dialogue*. Retrieved from https://www.oecd.org/en/publications.html

OECD. (2023, December 05). *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*. Retrieved from https://www.oecd.org/en/publications/2023/12/pisa-2022-results-volume-i_76772a36.html

OECD. (2023, December 05). *PISA 2022 Results (Volume I and II) - Country Notes: Finland*. Retrieved from https://www.oecd.org/en/publications/pisa-2022-results-volume-i-and-ii-country-notes_ed6fbcc5-en/finland_6991e849-en.html

OECD. (2023, December 05). *PISA 2022 Results (Volume I and II) - Country Notes: Viet Nam*. Retrieved from https://www.oecd.org/en/publications/pisa-2022-results-volume-i-and-ii-country-notes_ed6fbcc5-en/viet-nam_a727c3a8-en.html

OECD. (n.d.). *Education and Skills*. Retrieved from https://www.oecd.org/en/topics/education-and-skills.html

Page, Ella. (2021). *Learning Loss, Learning Gains and Wellbeing: A Rapid Evidence Assessment*. Education Development Trust (United Kingdom)

Ping, L., Vongkulluksn, V.W., Liu, K., & Liu, C. (2024). Student-Centered Teaching Across OECD Countries: An Ecological Perspective. *Learning and Individual Differences*, *113*, 102487. https://doi.org/10.1016/j.lindif.2024.102487

Putra, I.P. (2024, March 05). *Tak Hanya Sekolah, Rapor Pendidikan Segera Dapat Diakses Publik*. Medcom.id. Retrieved from https://www.medcom.id/pendidikan/news-pendidikan/akW1a7XN-tak-hanya-sekolah-rapor-pendidikan-segera-dapat-diakses-publik

Ramdani, M., Yuliyanti, S.Y., Rahmatulloh, I.T., & Suratman. (2022). Penggunaan Platform Merdeka Mengajar (PMM) pada Guru Sekolah Dasar. *Journal of Instructional and Development Researches*, *2*(6), 248-254.

Roofe, C.G. (2014). One Size Fits All: Perceptions of the Revised Primary Curriculum at Grades One to Three in Jamaica. *Research in Comparative and International Education*, *9*(1), 4-15. http://dx.doi.org/10.2304/rcie.2014.9.1.4

Rose, D.H., & Strangman, N. (2007). Universal Design for Learning: Meeting the Challenge of Individual Learning Differences Through a Neurocognitive Perspective. *Universal Access in the Information Society*, *5*, 381-391. https://doi.org/10.1007/s10209-006-0062-8

Sarolangun Regency Government. (2024, July 23). *Kurikulum Merdeka bagi seluruh anak Indonesia*. Retrieved from https://sarolangunkab.go.id/artikel/baca/kurikulum-merdeka-bagi-seluruh-anak-indonesia#

Secretary Cabinet of the Republic of Indonesia. (2022, December 01). *Nadiem Beberkan Alokasi APBN 2023 di Kemendikbudristek*. Retrieved from https://setkab.go.id/nadiem-beberkan-alokasi-apbn-2023-di-kemendikbudristek/

SEASIA. (2024). *Two Southeast Asian Nations Attain Top 35 Highest PISA Scores Worldwide*. Retrieved from https://seasia.co/2024/01/01/two-southeast-asian-countries-seize-the-worlds-35-highest-pisa-scores

Shobri, F & Alfurqan. (2023). Peran Guru Pendidikan Agama Islam pada Program Sekolah Penggerak di SD Negeri 03 Kandis. *Journal on Education*, *5*(3), 7938-7945.

Statistics Indonesia. (2024, April 23). *Proporsi Sekolah dengan Akses Komputer, 2021-2022*. Retrieved from https://www.bps.go.id/id/statistics-table/2/MTc5NiMy/proporsi-sekolah-dengan-akses-komputer.html

Statistic Indonesia. (2024, November 25). *Jumlah Guru di Indonesia TA 2023/2024, Terbanyak di Tingkat SD*. Retrieved from https://databoks.katadata.co.id/pendidikan/statistik/674413599940d/jumlah-guru-di-indonesia-ta-20232024-terbanyak-di-tingkat-sd

Sudianto & Kisno. (2021). Potret kesiapan guru sekolah dasar dan manajemen sekolah dalam menghadapi asesmen nasional. *Journal of Education Management Accountability*, *9*(1), 85-97. https://doi.org/10.21831/jamp.v9i1.39260

Susilawati, E., Sarifudin, S., & Muslim, S. (2021). Internalisasi Nilai Pancasila dalam Pembelajaran Melalui Penerapan Profil Pelajar Pancasila Berbantuan Platform Merdeka Mengajar. *Jurnal Teknodik*, *25*(2), 155–167. https://doi.org/10.32550/teknodik.v25i2.897

Tempo. (2023, October 22). *Isi Kekosongan Guru, Kemendikbud Dorong Pemda Angkat Guru Penggerak Jadi Kepala Sekolah*. Retrieved from https://www.tempo.co/politik/isi-kekosongan-guru-kemendikbud-dorong-pemda-angkat-guru-penggerak-jadi-kepala-sekolah-129698

Triningsih, W., Utami, R.T., Murtiyasa, B., & Setyaningsih, N. (2024). Pemanfaatan Fitur Asesmen Murid dalam Platform Merdeka Mengajar (PMM) pada Pembelajaran Statistika di Sekolah Dasar. *JURNAL BASICEDU*, *8*(1), 127 -135. https://doi.org/10.31004/basicedu.v8i1.6960

UNESCO. (2020). *Inclusion and Education*. Retrieved from https://www.unesco.org/gem-report/en/inclusion

UNESCO. (2021). *School Closures and Regional Policies to Mitigate Learning Loss due to COVID-19: a Focus on the Asia-Pacific*. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000378429

UNESCO. (2023, September 01). *Maximizing Learning Outcomes, Minimizing Instructional Time*. Retrieved from https://www.ibe.unesco.org/en/node/42

UNICEF. (2022, July 13). *As children in Indonesia Return to School, UNICEF Calls for Urgent Action to Address Learning Crisis*. Retrieved from https://www.unicef.org/indonesia/press-releases/children-indonesia-return-school-unicef-calls-urgent-action-address-learning-crisis

Wang, C., Zhang, M., Sesunan, A., & Yolanda, L. (2023). *The Role of Technology in Transformation Education in Indonesia A review of recent impacts Merdeka Belajar movement*. Oliver Wyman.

Wibowo, S. E., Saptono, B., Hastomo, A., Herwin, & Ardiansyah, A. R. (2023). The Challenges of Implementing the Independent Curriculum in Indonesian Language Learning in Elementary School High Classes. *Jurnal Ilmiah Sekolah Dasar*, *7*(3), 536–545. https://doi.org/10.23887/jisd.v7i3.59167

World Bank. (2022, September 13). *From Learning Recovery to Education Transformation*. Retrieved from https://blogs.worldbank.org/en/education/learning-recovery-education-transformation

World Bank. (2022, December 02). *Training the Educators for Vietnam's Future Growth*. Retrieved from https://blogs.worldbank.org/en/eastasiapacific/training-educators-vietnams-future-growth

World Bank. (2023, June). *The Invisible Toll of COVID-19 on Learning*. Washington DC: World Bank.

World Bank. (2023, June 26). *Indonesia Economic Prospects (IEP) June 2023: The Invisible Toll of Covid-19 on Learning*. Retrieved from https://World Bank, 2023a

Wulandari, T. (2024, March 28). *PGRI: Cek Implementasi Kurikulum Merdeka di Lapangan*. Detik.com. Retrieved from https://www.detik.com/edu/sekolah/d-7266793/pgri-cek-implementasi-kurikulum-merdeka-di-lapangan

Zamjani, et al. (2024). *Implementasi Kurikulum Merdeka dan Peningkatan Kemampuan Literasi dan Numerasi Peserta Didik*. Jakarta: Center for Education Standards and Policy.

ABOUT THE AUTHORS

Sharfina Indrayadi is a Research and Policy Analyst at CIPS. She obtained her Master of Science of Public Policy and Management from the University of Glasgow, studying digital literacy in Indonesia for her dissertation. She also holds a Bachelor of Arts in Communication with dual degree programs from the University of Indonesia and Curtin University focusing on media studies. As a Research and Policy Analyst at CIPS, her research interest encompass study on education, curriculum implementation, integration of ICT in schools, and digital literacy. At CIPS, she has contributed to project on education landscape in Indonesia, school autonomy for cultural-responsive learning, learning loss, to students interest in STEM.

Aditya Alta is a Head of Research at CIPS. He is trained in qualitative and interpretive methodologies and received his Master's degree in governance and development policy from Erasmus University Rotterdam. Prior to joining CIPS, Aditya has worked on a range of subjects as a researcher in the Institute for Economic and Social Research (LPEM) at the University of Indonesia, and as a consultant for development projects.

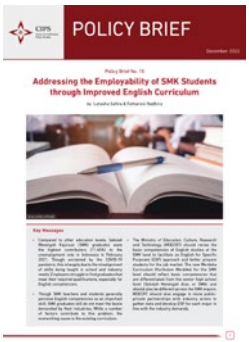
Our work relies on your support.
To support CIPS, visit **www.cips-indonesia.org/donate**.

Explore other policy briefs published by the Center for Indonesian Policy Studies

Optimizing Teachers' Autonomy to Use Information and Communications Technology in Indonesian Classrooms

Enhancing Inclusion in the National Digital Literacy Index: From Measurement to Empowerment

Establishing Foreign Higher Education Institutions in Indonesia



Addressing the Employability of SMK Students through Improved English Curriculum

Parent's Perception on Face-to-Face Learning

Promoting Digital Literacy Skill for Students through Improved School Curriculum

Addressing Distance Learning Barriers in Indonesia Amid the Covid-19 Pandemic

Indonesia's Strategies for Joining the ASEAN Digital Economy Framework Agreement

Cybersecurity Protection in Indonesia

Go to our website to access more titles:

www.cips-indonesia.org/publications

CIPS
Center for Indonesian Policy Studies

ABOUT THE CENTER FOR INDONESIAN POLICY STUDIES

Center for Indonesian Policy Studies (CIPS) is a strictly non-partisan and non-profit think tank providing policy analysis and practical policy recommendations to decision-makers within Indonesia's legislative and executive branches of government.

CIPS promotes social and economic reforms that are based on the belief that only civil, political, and economic freedom allows Indonesia to prosper. We are financially supported by donors and philanthropists who appreciate the independence of our analysis.

KEY FOCUS AREAS:

Sustainable Food Sytems and Agriculture: CIPS engages in research on the sustainable growth and modernization of Indonesia's agriculture. CIPS also researches and advocates for policy alternatives that open up trade in strategic food items in order to stabilize food prices and achieve greater food security for Indonesians. We expose links between agriculture, trade and investment, food prices, and a nutritious diet of Indonesian consumers with the aim of ensuring that low-income families can access affordable quality food.

Quality Education: CIPS conducts research and advocacy on education policy in Indonesia to improve education accessibility and quality. We focus on how private initiatives, greater school autonomy, and appropriate skills among students and teachers alike can build a resilient education system in Indonesia, facilitate the improvement of education quality and increase education choices for low-income Indonesians.

Open and Competitive Business Environment: CIPS believes that greater economic freedom and open markets generate economic opportunities for Indonesians to access and earn decent livelihoods. Whether through trade and investment, digital technologies, entrepreneurship, property rights, or employment opportunities, CIPS advocates for policy reforms that enable Indonesians of all backgrounds to seek greater prosperity for themselves and their communities.

www.cips-indonesia.org

facebook.com/cips.indonesia
@cips_id
@cips_id
Center for Indonesian Policy Studies
CIPS Learning Hub

Jalan Terogong Raya No. 6B
Cilandak, Jakarta Selatan 12430
Indonesia

Copyright © 2025 by Center for Indonesian Policy Studies