

**HOW DOES GRANTING TEACHER AUTONOMY
INFLUENCE CLASSROOM INSTRUCTION?
LESSONS FROM INDONESIA'S CURRICULUM
REFORM IMPLEMENTATION**

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ABSTRACT

This research seeks to understand how a curriculum reform that emphasizes student-centered learning influences classroom instruction. The new curriculum is designed by the government of Indonesia to grant autonomy to teachers in re-emphasizing learning according to the student's needs and local context. Previous studies suggest that teacher autonomy in elaborating curricula and pedagogy is associated with student's engagement and improvement in learning outcomes. Given the low autonomy of teachers in Indonesia, their responses can inform how we should formulate effective reforms. This research used a case study to investigate how curriculum reform is perceived by middle school teachers and how they translate it into classroom instruction. The data was collected through classroom observations and complemented by semi-structured phone interviews with 20 Math teachers in Jakarta and Central Java from November 2022 to February 2023. To avoid incongruous instruction, this research informs that countries with a long history of low teacher autonomy like Indonesia should not promote a grand education reform design without clear guidelines and adequate support. The reformers need to touch upon teacher's beliefs about curriculum completion and didactic pedagogy before expecting them to change their teaching practices into active learning and exercise their authority in independently developing curricula.

Keywords: *autonomy; beliefs; curriculum; reform; teacher*

INTRODUCTION

Many governments in developing countries, like Indonesia, have tried to improve education quality through various education reforms such as School Based Management, School Operational Assistance, or financial assistance for students from low-income families (Kurniawati et al., 2018; Sibuea, 2020). Other reforms are related to teacher professional development which rarely achieves the intended goals of improving teaching practices and student learning outcomes (Arif et al., 2022b; Revina et al., 2023; Yusrina et al., 2022)

Likewise, others prefer to change the curriculum which brings somewhat mixed results (e.g. DeJaeghere et al., 2021; Rodriguez-Segura & Mbiti, 2022). Therefore, Atuhurra et al. (2021) suggested that we need to pay closer attention to classroom instruction in order to understand the teacher's perception and come up with a more rational approach in implementing curriculum reform in developing countries, particularly in a low teacher autonomy context.

In this paper, we investigate how a new curriculum reform that has granted teacher's flexibility to emphasize student-centered learning influences classroom instruction. And how is the curriculum reform perceived by middle school teachers in a low autonomy setting like Indonesia?

Recently, the Ministry of Education, Culture, Research, and Technology (MoECRT) introduced a new curriculum called Emancipated Curriculum (*Kurikulum Merdeka*) that promotes student-centered learning which is considered an effective approach to improve student's academic performance (Altinyelken & Sözeri in Kusanagi, 2019). The curriculum is designed to give teachers more flexibility to focus on essential materials while developing student's character and life skills. Based on Learning and Assessment guidelines issued by MoECRT (2022), the learning process in the Emancipated Curriculum should consider student's development and learning abilities which may vary considerably among students.

Therefore, student-centered learning is an approach that allows teachers to stimulate student's critical thinking and invite them to be more engaged in the classroom (Arseven, Şahin, & Kılıç, 2016) instead of didactic pedagogy in which the teacher dominates the lesson. Meanwhile, the teacher's autonomy is the degree of teacher's professionalism which reflects their flexibility in delivering materials in the classroom and discretionary power in decision-making over student's interests (Maxwell, 2016). Given that schools and teachers in Indonesia were never granted substantial autonomy (Bjork, 2004; Rarasati and Pramana, 2023), it is interesting to investigate how they perceive the autonomy offered by the Emancipated Curriculum. The more instructions or dictates to be followed by schools and teachers the lower their autonomy. In contrast, if they are granted greater authority to decide the materials to be taught in the classroom considering the student's level of abilities in decision-making independently, then they have considerably exercised higher autonomy.

The Indonesian Government has attempted to devolve the national curriculum to school levels since the early 1990s. In 1994, the Ministry of Education introduced a new teaching approach in which the lessons were designed to shift from teacher-centered to student-based learning. In implementing this curriculum, teachers were encouraged to be pedagogically innovative, adjust teaching materials to the local context, and equip students with life skills (Nurhalim, 2011). Despite multiple reforms - followed by curriculum adjustments - the Indonesian education system remained less productive compared to the large amount of government investment (Kurniawati et al., 2018) and the curriculum objective was far from realized (Bjork, 2004). Some plausible challenges are due to the bureaucratic politicization in the implementation of education policies in which the main objective is extracting rents for the loyal supporters of political leaders (Arif et al., 2022a; Rosser, 2018). In addition, "many of national government policies were not directly targeted at learning or specifically at improving foundational skills like numeracy" (Beatty et al., 2021).

Therefore, the latest Programme for International Student Assessment (PISA) result shows that 71% of Indonesian students could not achieve the minimum foundational mathematics competency, which means that they have to struggle in situations that require problem-solving skills using mathematics in real life or solving mathematics problems that do not use whole numbers (Wuryanto & Abduh, 2022). Thus, Indonesian students' learning levels have stagnated at a low level since decentralization (Beatty, et al., 2021). To address this issue, the current Curriculum is designed to change a previously overambitious curriculum. This will prevent teachers from being overburdened with excessive materials so that they will have enough time to build student creativity and innovation to achieve foundational skills. Agency for Research and Development, MoEC (2017) reported that in the previous curriculum, Curriculum 2013, the content of student textbooks was considered overambitious to be covered by teachers considering the time limitation. In consequence, an overambitious curriculum could lead to a learning crisis:

“An overambitious curriculum causes more and more students left behind early and stay behind forever. ...If children don't acquire simple arithmetic concepts—like place and common denominator—then more sophisticated operations like adding fractions are impossible. If children don't acquire basic reasoning skills—like filling in a word to complete a meaningful sentence—then asking for creativity or critical analysis later is impossible.” (Pritchett & Beatty, 2012, p. 13)

Previous studies often use a political economy lens to discuss the reasons underlying learning crises in developing countries, which sometimes fail to capture the educators' voices and responses toward the reforms (e.g., Kingdon et al., 2014; Rosser & Fahmi, 2018). Therefore, education researchers argue that the research on education reform implementation should not only focus on political aspects because a large political commitment from high-ranking officials at the national and sub-national levels is not

enough to ensure that educators follow the prescription of the reform agenda (Aiyar et al., 2021; Bjork, 2016).

In Indonesia, the deeply ingrained top-down relationship between the state and school actors has led teachers to comply with the directives of their superiors, but this does not mean that they are willing to change teaching practices as prescribed by or support the previous reform agendas (Bjork, 2004; Kusanagi, 2019). This is exacerbated by the least autonomy given to teachers. Until 2020, teachers were required to cover all materials as stated in the national curriculum to prepare the students for high-stakes national exams. So, the previous curriculum reform was not followed by a significant change in classroom instruction, let alone expecting teachers to develop the school curricula (Bjork, 2006).

Incongruous Instruction: Teacher Autonomy and Teacher Beliefs

This paper is drawn on the combination of two frameworks which arguably could influence classroom instruction: teacher autonomy and teacher beliefs. We define teacher autonomy as a transfer of authority and flexibility towards teachers to improve their teaching practices. In this case, they are granted the flexibility to adjust the learning flow, develop syllabus, and develop teaching materials based on the student's needs which may vary across schools. The Organization for Economic Co-operation and Development (OECD) found that teacher autonomy is correlated with many positive benefits for improving learning outcomes (OECD, 2011; 2016). It also showed that granting teacher autonomy in elaborating school curricula and students' assessments is the determining factor of a student's academic performance. Teacher autonomy is also deemed to lead teachers in providing support for their students to be more engaged in the classroom (Benlahcene et al., 2020; Qiangqiang, 2021; Skilling et al., 2016). In addition, Öztürk in Kara and Bozkurt (2021) argued that “teachers may become lonely, avoid cooperation, and resist change in cases where they have fallen short of autonomy”.

However, Gurganious (2017) found no significant correlation between middle school teacher's autonomy and student's achievement even though they perceived their autonomy was diminishing due to the enactment of high-stake testing. The question is, what happens if teachers used to have little substantive autonomy and suddenly granted the flexibility and encouraged to create active learning? A previous study which estimated from the PISA panel dataset (2000-2009) indicates that transferring autonomy in low-performing and developing countries could cause negative consequences toward student achievement (Hanushek, Link, & Woessmann, 2013). However, we lack information on why altering autonomy in developing countries tends to bring unfavorable results to the students. One factor that might influence teacher's autonomy is the social context which could shape the way mathematics teachers respond toward autonomy differently (Paradis et al., 2019). Another aspect that possibly influences is how the schools manage themselves. School management practices like operations, monitoring, goal setting, and personnel management influence the improvement of student performance (Woessmann, 2016). Therefore, the results for teachers' autonomy in developing countries have not been very significant because they do not have a good school management system yet.

Meanwhile, teacher's beliefs are essential to be discussed because they can stir teacher's perception and how they implement the curriculum through classroom instruction. This is in line with Hargreaves (2005) who mentioned that in a world of constant change, understanding how teachers experience and respond to educational change is critical to make reform and improvement efforts more successful and sustainable. The expectation is that when teachers reform their teaching, the discussion at the school level as well as the classroom instruction will change (Hargreaves, 2005).

Moreover, teachers' beliefs and dispositions are crucial for recognizing and validating diverse knowledge and understanding (Moll, Neff & Gonzlez, 1992). Instead of focusing on students' shortcomings, teachers

who embrace inclusive teaching view the knowledge and skills of underrepresented groups as valuable contributions to the learning environment. They appreciate and confront differences, utilizing strategies to leverage students' existing knowledge in a respectful and legitimate way (Wrigley, Lingard, & Thomson in DeJaeghere et al., 2021). But somehow, when certain belief systems become deeply rooted, expressing new concepts and finding appropriate language to communicate new ideas can be challenging for teachers to translate the reform ideas into instruction (Aiyar et al., 2021)

Therefore, this paper attempts to shed some light on the rationale behind the challenge of curriculum reform implementation in developing countries. It provides nuanced explanations on how to create effective reform reflecting the teacher's beliefs and the degree of support given to exercise the autonomy.

Setting the Context

Mathematics is a scourge for Indonesian children. Unfortunately, this is exacerbated by the fact that Mathematics teachers are struggling to handle student's different abilities appropriately. Wijaya et al. (2019) revealed that Mathematics teachers in Indonesia are not extensively analyzing the challenges students face when learning Mathematics. They are not adequately pinpointing the cognitive processes students employ while grasping mathematical concepts (Wijaya et al., 2019). Whereas it is crucial to note students' existing knowledge and learning requirements to offer them the necessary assistance.

Student-centered approach arguably could be the answer to address the said problem by granting more autonomy to focus on essential materials, teach the children based on their needs, and discuss them extensively. Therefore, the primary objectives of current curriculum reform are: 1) focusing on essential materials and teaching at the right level which are applied in intra-curricular learning (MoECRT, 2022a) and 2) promoting soft skills and character building through

project-based learning (P5) which occupies 20% of the total learning hours in a year (MoECRT, 2022b). However, the second objective is beyond our investigation in this paper.

By employing the student-centered approach, children are expected to be more engaged in the lessons and finally improve their mathematical competency. Wahyuddin and Nurcahyana (2018) found a favorable result of the implementation of active learning in Mathematics lessons compared to the classical approach. Facilitating the needs of diverse students is at the heart of differentiated teaching. Differentiated teaching (Konstantinou-Katzi et al., 2013; Tomlinson, 2014; van Geel et al., 2019), where students are taught according to their actual level of understanding and provided with a customized learning path, is the key to ensuring ideal learning. However, the initial distribution of students' basic skills is often very high within the classroom.

In this reform, the curriculum is simplified to focus on essential materials and offer flexibility so that teachers can arrange their learning flow to fit students' needs in their classrooms and the local context (MoECRT, 2022c). The rationale is that the stated learning outcomes are not concrete enough to guide daily learning activities. In mapping the Learning Objective Flow and consulting their teaching materials, teachers are equipped with other supporting documents, such as textbooks provided by the Ministry (MoECRT, 2022d).

The MoECRT has also provided additional resources for teachers to implement the curriculum. The MoECRT is intentionally replacing the previous tiered training mechanism in which the transfer of knowledge takes time to reach individual teachers. The impact of such an old mechanism is only received by some teachers/schools while others were not selected by the MoECRT or their respective district education office due to budget constraints. To avoid the mess, the MoECRT has developed an app-based platform called *Platform Merdeka Mengajar* (PMM) to provide teachers with various information and independent online training free of charge and easy to access. Teachers

are expected to share their knowledge or lesson plans on the platform so that other colleagues can gain some inspiration to innovate their pedagogical lessons.

Lastly, the schools also receive the authority to decide whenever they are ready to adopt the new curriculum. So, the MoECRT provides three options: stage 1 called Independent Learning (Merdeka Belajar) where it gives freedom to schools to gradually adopt several principles of the curriculum without changing the curriculum officially; stage 2 is called Independent Change (Merdeka Berubah) which gives flexibility to schools to adopt the curriculum and adjust the syllabus with the format provided by the MoECRT; and the last stage is Independent Sharing (Merdeka Berbagi) where the schools fully subscribe to the new curriculum, and it provides full flexibility to schools in implementing the curriculum by developing their own school curricula and teaching tools. These schools are eventually expected to share their experience in implementing the new curriculum with other schools in the surrounding area.

RESEARCH METHODS

We employed a case study to investigate how granting teacher autonomy affects classroom instruction. Case study is an empirical method used to investigate contemporary and real events profoundly. The case study research strategy is very suitable to focus on 'how' or 'why' questions (Yin, 2014). Creswell (2014) revealed that case study strategies can be used by researchers in various fields to develop an in-depth analysis of an event, program, process, or activity of a group of people or individuals. The collection of data on case studies can be done in various ways and is carried out within a certain period. Priya (2020) added that questionnaires, in-depth interviews, surveys, observations, and desk studies can be used in case study strategies.

We consider that case studies are the most suitable strategy to use in this research because this can help us answer the research questions through a variety of in-depth data collection methods that focus on an activity

within a period of time, which is teacher teaching in the classroom. The data in this study was collected by conducting classroom observations of mathematics teachers. Mathematics is an essential subject that does not only equip students with logical and problem-solving skills but also sense-making about their daily activities (Li and Schoenfeld, 2019). This is in line with the Emancipated Curriculum, which focuses on improving the student's foundational skill, particularly in numeracy.

The data was collected in Jakarta and Central Java from November 2022 to February 2023. Those provinces were purposely selected because they represent different support from the district education office. Both district education offices instructed schools and teachers to implement the curriculum reform but, according to teachers, only district education office in Central Java provided support for teachers before and during the implementation.

For this study, we selected five schools in each area in which every school consists of two math teachers in grade seven. We could not select participants based on certain characteristics because the number of teachers in public schools is limited. Here are the details characteristics of teachers who participated in this study:

During the observation, we used a rubric to guide our observation which focused on the student-centered learning. We divide it into several aspects: 1) Did the contents and mathematical problems be made according to the student's need and local context (contextual teaching) 2) How enthusiastic the students were during the lesson and/or discussion (student engagement) 3) How did the teacher facilitate discussion (classroom management) 4) Did the teacher follow the student's level of understanding and adjust the support for students with different abilities? (Instructional support for students). These aspects were observed to see how teachers perceive student-centered learning as being promoted by the new curriculum and how they translate the reform into classroom instruction. We assessed whether teachers facilitate students based on their learning abilities and prepare learning

materials accordingly. We also paid attention to students' engagement and instructional support for each student which could reflect the teacher's competence in facilitating student-centered learning.

Table 1 The Characteristics of Teachers (Participants)

Number	School	Years of Service		Gender
		(Junior: less than 10 years; Senior: more than 10 years of service)		
JAKARTA				
1	A	Junior	F	
2		Senior	M	
3	B	Senior	F	
4		Junior	F	
5	C	Junior	F	
6		Senior	F	
7	D	Senior	F	
8		Junior	M	
9	E	Senior	M	
10		Senior	M	
CENTRAL JAVA				
1	F	Junior	F	
2		Junior	F	
3	G	Senior	M	
4		Senior	M	
5	H	Senior	F	
6		Senior	M	
7	I	Junior	M	
8		Senior	M	
9	J	Senior	M	
10		Senior	F	

Then we followed up the data with semi-structured phone interviews with a representative of grade 7 Math teachers

in each school and their respective school principals in February 2023 to delve deeper into the educator's perception of the curriculum reform. For selecting informants, we used convenient sampling because we preferred to talk to teachers who were more cooperative during the classroom observation, expecting they would provide comprehensive views regarding educator's perceptions of the new curriculum implementation. After that, we contacted the school principal to compliment and confirm the data gathered. To analyze the data, we used thematic analysis which allowed us to find essential thematic domains (Flick, 2014). Then we assessed the discrepancies and patterns of our findings by developing metrics.

RESULTS AND DISCUSSION

In general, our case study informs that Central Java teachers performed slightly better than their counterparts in Jakarta due to the different support provided by their respective district education offices. We found most teachers in Central Java could deliver materials or mathematical problems utilizing simple stories to help student's sense-making with the school environment. For instance, a teacher in a rural district of Central Java understands that their students have little money pocket, so she taught social arithmetic by encouraging students to buy snacks in the school canteen. Then, she divided the students into several groups to discuss with their peers. Meanwhile, another teacher in the urban district chose to teach about different parking fee schemes at the shopping mall which are available in the city. In contrast, we found many teachers in Jakarta still prefer to directly use formulas instead of stimulating student's critical thinking and creativity using daily activities and then connecting them with mathematical problems.

The different teaching practices led to the different students' enthusiasm during the lessons. When teachers used Mathematics not in interactive and contextual ways, students often did not bother with the teachers. They usually chit-chat with their friends and the classroom becomes

unconducive for learning. Meanwhile, we assessed the classroom management by seeing how they facilitated discussion. Again, we found a similar pattern: only a few teachers in Jakarta gave a chance to the students to share their opinions and try to get inactive students involved in the discussion, indicating that many teachers still prefer didactic pedagogy which emphasizes learning from the teachers.

We understand that student-centered learning is a complex process (Lee et al., 2016). Teachers must be able to provide support in motivation, cognitive, and social aspects. The student-centered approach focuses on how to support everyone who is unique and has a variety of interests, needs, capacities, backgrounds, and points of view. Thus, expecting teachers to change the approach from teacher-centered to student-centered learning needs extra effort and significant behavioral change from teachers (Bjork, 2009) so that they can adjust appropriate learning methods for individual students.

Many teachers in both provinces shared their concerns that they did not have enough experience to facilitate student discussion and guide different students to solve Mathematics problems. During the classroom observations, we witnessed that many teachers struggled to manage students and time while teaching Mathematics. Many teachers also had difficulty managing students when they were divided into groups and discussing different strategies to solve Mathematics problems. Ideally, teachers will explain the topic in advance, then pose essential questions. It is followed by student discussions, presentations, and the teacher should highlight the concept at the end. However, the teachers expressed that they were not confident in doing these. On several occasions, we heard teachers say that they were afraid the students would not be under their control, indicating that teachers perceive themselves as content experts echoing teacher-centered learning. Moreover, they worried that the discussion would last longer than the time slot. Others shared their difficulty in finding mathematical problems which suit student's different abilities. Eventually, these perceptions

hindered teachers from acquiring knowledge and developing the skills needed to conduct student-centered learning. As a result, observers found the discussions did not go well in many classes because the teachers could not facilitate it.

There are several possible reasons for the challenges faced by teachers. According to a study conducted by Keiler (2018), teachers often experience difficulties in transitioning roles in the teaching process, from initially acting as content experts in a teacher-centered approach to becoming facilitators in the student discussion process. Some teachers were not so sure about the ability of students to solve the problems given. So, these teachers believe that students will have difficulty learning something if it has not been explained thoroughly by them.

Apart from the teacher's belief in didactic pedagogy, education researchers in Indonesia found that teachers are often not confident so that they lack class and time management (Fadlilah & Herlanti, 2022). Likewise, we often heard teachers conveying that they were not sure whether the lesson would make any difference if they changed the teaching approach. Skilling et al. (2016) argued that if teachers believed that they have no self-efficacy, they tend to limit their efforts to engage with the students during Mathematics lessons:

“Teachers’ perceptions of being powerless to engage their students resulted in many limiting their efforts to attempt some form of intervention—thus highlighting the importance of teacher perceptions about engagement, and their beliefs in their abilities to effect change in their students via their teaching practices”

Consequently, we did not see any difference between teachers in Jakarta and Central Java in facilitating discussion and providing support for the students. Many teachers did not prepare sub-questions to probe or follow the student's level of understanding. Surprisingly, the struggles were faced by both junior and senior teachers.

In contrast to didactic pedagogy, teachers must be able to understand and adjust the level of ability of each student by not generalizing the treatment given in student-centered learning. Abdullah (2016) emphasizes that a good approach is when the teacher is able to be aware of each student's condition and ensures that the assessment given is according to the ability level of each student. Moreover, this approach also requires teachers to be facilitators in student's learning. Students who have low performance tend to be inactive and less interested in being involved during the learning process. This would affect student performance in class if teachers are not aware of this situation (Jailani et al., 2017). Indeed, it is not an easy task for teachers because changing teaching instruction as expected by the government requires a thorough understanding of the approach, shifting beliefs that have become their teaching practices for decades, and then changing the teaching instruction accordingly. Ideally, when teachers implement the reform as prescribed, the lesson would be more engaging because teachers are expected to create meaningful Mathematics problems which stimulate students' critical thinking and allow them to use multiple strategies, not only focusing on final answers. The lesson would be adjusted to students' contextual circumstances which encourage students' sense-making, not only teaching concepts and formulas. Lastly, it also considers their level of understanding and different students' needs.

The Autonomy Paradox

In the curriculum reform implementation, teachers have more autonomy to choose the topics and activities for the students. However, our findings indicate that many teachers were still struggling to create active learning as expected by the Ministry of Education. In the previous curriculum reform, Bjork (2004) found that teachers showed no effort to follow national government directives because “the role of the autonomous educator in a decentralized system required investments of time and effort that many teachers were either

unprepared for or uninterested in” (p. 253). Our findings, particularly in Jakarta, support the previous result because teachers considered the MoECRT and their respective district education office provide little or no assistance for the transition.

Nonetheless, we have not found apparent resistance from teachers or school principals. Bjork (2003) described that teachers in Indonesia tend to follow their superiors’ directives because the obedient culture was infused throughout the country’s education corps following decades of authoritarian rule. Our findings supported a study conducted by Adnan et.al (2022) which discussed one of factors that influence teachers to adjust learning mechanism using new curriculum is the directions from their superiors in addition to other things such as their understanding, their readiness and influence from teacher forum they participate in.

In addition, the absence of resistance might be influenced by teachers’ perceptions of leadership. According to Aziz et.al (2020), teachers will become passive, not daring to make decisions and tend to wait for orders from their superiors if they think the leadership role is only in the hands of their superiors. In implementing Curriculum reform, all schools said they were instructed to implement the Curriculum by the district education offices, regardless of their readiness. Therefore, all principals in Central Java chose stage 2 of the new curriculum implementation, signaling that they commit to using the curriculum. In contrast, some schools in Jakarta still prefer stage 1 (still utilizing the previous curriculum while learning the new one). However, the principals in Central Java could not explain why they chose stage 2 other than because the district education offices instructed them. In fact, this was supposed to be part of their autonomy to solely decide the curriculum adoption whenever they were ready.

As a result, we found some incongruous instructions which indicate teachers did not have the capacity to alter the curriculums like the expectation of reformers in maximizing their autonomy to facilitate student-centered learning based on their needs (Monika et al. 2023). Teachers in Central

Java also face some dilemmas, one of our participants reported about the uniformity of topics to be assessed by district education offices during the exam, which conflicted with promoting their autonomy in the design of the school curricula:

“We are told that we could choose the topics to be covered. However, at the end of semester, there is still uniformity in the topics to be assessed. Therefore, we need to closely discuss with the teacher working group (Musyawarah Guru Mata Pelajaran-MGMP) which topics should be covered and delivered to our students.” (Teacher, Central Java)

We often hear teachers feeling confused about how they should interpret and translate the current curriculum into their classrooms. Therefore, some of them demand proper in-person training like they used to have before implementing a new curriculum. In their view, the guidebook and online platform materials were not enough.

Nonetheless, for teachers who were confident in applying student-centered learning, many were surprised by students’ positive responses. On a reflection note, teachers were requested to write down their experience using the new teaching approach:

“Students were more motivated. They were more active through discussion. Students with less understanding were assisted by his group. (There was) freedom of speech among groups.” (Senior teacher, Central Java).

“I’m impressed with the response of my students who dared to share their opinion even though it was different from their friends.” (Teacher, Jakarta)

However, the positive feedback does not automatically replace their hesitation to adopt student-centered learning for reasons of time. Many teachers still complained about insufficient time to cover all subject knowledge materials which caused them unable to deliver materials thoroughly, that is the rationale behind the implementation of

this curriculum. In the words of a teacher in Jakarta, "In my opinion, (I have implemented the lesson) as planned, but it was not optimal because of the time constraint." Such perception should have been replaced by the objective of this curriculum which offers teachers the flexibility to focus on essential materials instead of touching upon all concepts without considering students' different comprehension.

This misconception leads teachers to hold on to the old belief systems to fulfill the curriculum completion and keep using didactic pedagogy. The reason for their hesitation is due to the perception that it will be time-consuming and hinder them from covering all materials. Aiyar et al., (2021) found that such a belief system would lead to confusion in the early years of curriculum adjustment. Then, it will inhibit teacher behavior from changing to the new reform introduced. Likewise, almost all teachers informed us that they still prefer using the previous approach, which puts curriculum completion as the ultimate goal and teachers as the content experts. The confusion indicates that they do not acquire sufficient knowledge and the skills needed to apply student-centered learning. Such skills were probably not thoroughly acquired during the training in teaching college and now the MoECRT expected them to independently learn it from the online platform provided. Whereas the old beliefs prevent most of them from voluntarily subscribing to the new curriculum.

These findings confirmed a previous study capturing Mathematics teacher's beliefs in Indonesia (Kusanagi, 2019), which have shaped their behavior in the classroom and how they perceive the educator's roles:

"The role of teachers was limited to the presentation of the curriculum, ...but they were not necessarily accountable for student learning... Their responsibilities to students were limited to curriculum acquisition, and the teachers prioritized curriculum presentation and examination preparation in their lessons." (Kusanagi, 2019, p. 4-10)

In consequence, teachers blamed the second curriculum reform structure that reduces time allocation for subject content mastery. In teacher perceptions, they failed to meet the syllabus completion. Even though the government of Indonesia has recently demolished the long-standing high-stakes testing which often resulted in "teaching for the test" (Gurganious, 2017) – meaning that they were expected to prepare the students for the examination – does not automatically disappear.

In the new curriculum, teachers have more authority to define what students should learn. However, teachers' paradigms have not shifted from covering all the subject topics to mastering foundational skills through student-centered learning. The teachers worried that reducing mathematics lesson time for project-based learning (Projek Penguatan Profil Pelajar Pancasila-P5) would disadvantage the teachers and students. Instead of supporting the idea of mastering essential materials through student-centered learning introduced by the reformer, teachers still prefer to hold the previous curriculum mindset about curriculum completion. This perception could be influenced by multiple external factors which hinder teacher's motivation to change their classroom instruction. Parent's and society's expectations of students' performance could lead to a teacher's perception that covering all materials is better than teaching students at the right level and according to the local context (Bjork, 2009; Aiyar et al., 2021) which requires a substantial change to different treatment and assessment for each student. Kusanagi (2014) argued that teachers in Indonesia were accountable bureaucratically because the government used a high-stake national exam for decades to determine students' performance even though it puts so much pressure on students.

Instead of subscribing to the government's idea to create engaging learning, teachers perceived that project-based learning (P5) has caused a learning hour deficit. In the teachers' lens, the special allocation of soft skills and character-building time could hinder the student's content mastery. The following comment from a teacher in Central

Java highlights uncertainties commonly experienced by teachers:

“It reduces the time allocation for [all subjects, including] Mathematics class so teachers have to catch up on the [subjects] material. I still have the mindset of the previous curriculum, so I think all the topics must be delivered completely. If the time is reduced, [as a result] the teachers have to teach in a hurry.”

This indicates that teachers still prefer didactic pedagogy and they do not fully subscribe to the rationale of student-centered learning in the first place. In other words, they are more familiar with the old beliefs suggested by the previous curriculum than exercising their authority to initiate different methods and create engaging classroom instruction.

The (Insufficient) Support to Implement the Curriculum Reform

Despite the new support scheme through a digital platform called *Platform Merdeka Mengajar* (PMM), all sample schools in Jakarta mentioned that they were not prepared to implement the new national curriculum. We heard strong criticism addressed to the district education office and the MoECRT, which did not provide proper guidance in the implementation of the new curriculum. They conveyed that they did not receive sufficient information or initial training to ensure school readiness in all respects:

“We are not ready [to implement the new curriculum], there should be instructors for socialization and guide us to practice it directly. In fact, we only had 2 consecutive days of training provided by MGMP. Then, out of the blue we received an order to implement it last year. It is definitely not an emancipating curriculum but a ‘colonization’ curriculum. In consequence, schools and teachers are grappling with its implementation.” (Vice principal, Jakarta).

In contrast, we did not receive such comments from their counterparts in Central Java. Despite the disagreement and confusion, the schools have implemented the curriculum since 2022. This does not mean that the implementation of the new curriculum goes without problems. The new curriculum requires teachers to develop modules and syllabus based on student’s needs and the local context. It could be overwhelming for teachers if they do not work together with their colleagues like what we found in Central Java, “We face a little hassle with administration, but it can be resolved because the module and syllabus are developed together, so ideas can be shared.” (Teacher, Central Java)

This suggests that despite the challenges of implementing a new curriculum, teachers in Central Java could cater because they relatively have adequate support from the school and district education offices. Paradis et al. (2019) argued that trust and support from their colleagues, school principals, and parents are essential aspects that could determine how Mathematics teachers perceive and then exercise their autonomy. Teachers in rural districts of Central Java further explained that they did not only receive training in advance, but the local bureaucrats also visited the school to monitor how teachers implement it, although the feedback merely focused on non-substantive matters such as the absence of photographs as a documentation report. Rather than focusing on learning improvement, district education offices paid more attention to administrative aspects which have been warned by the MoECRT in its publication that this transition should not be interpreted as merely a curriculum administration change.

CONCLUSION AND POLICY RECOMMENDATIONS

This paper describes the implementation of the current national curriculum at schools and how teachers respond differently towards the goals. The MoECRT introduced a new curriculum to recover student learning due to the learning crisis which is exacerbated by the pandemic. This reform aims to reduce subject coverage so

that teachers would emphasize essential materials that many students are still lacking behind. The intention aligns with education practitioners which suggest avoiding over ambitious policies and encouraging teachers to focus more on foundational skills before stimulating students' creativity and critical thinking (Bjork 2006; Prichett and Beatty, 2012).

However, the implementation of the new curriculum was not as smooth as expected. Our findings show that the objective is not well translated into instructions due to the teacher's beliefs about curriculum completion and teacher-centered learning. Apart from that, teachers perceived that they received insufficient support from the local government to have a thorough understanding of the MoECRT expectations to achieve reform objectives. Whereas teacher beliefs are more important predictors of teacher effectiveness – rather than teacher and student's characteristics – to improve student's learning outcomes particularly in Math (Filmer, Nahata, and Sabarwal, 2021). Such beliefs include the teacher's satisfaction of the support from the school principal and government towards their performance in the classrooms that would influence student's learning gain. Hence, this finding suggests that merely changing policies or curriculum would not automatically lead to pedagogical reform (Kusanagi, 2019) if the government does not pay attention to the root causes of teacher's beliefs which hinder them from changing the instruction.

This study contributes to highlighting that education reform can be implemented well in low teacher autonomy environments like Indonesia if the reform ideas are aligned with teachers' beliefs and the government provides adequate support and prescriptions for school actors to translate it into their classroom instructions. The prolonged top-down instruction in Indonesia's education system means that teachers do not have enough knowledge and skills needed to exercise the authority given, so teachers need to have clear guidance (Arif et al., 2022b; Bjork, 2004). Giving teachers more authority in teaching does not mean leaving them unattended without adequate assistance,

as noted (Bjork, 2004, p. 254): “... *the MoEC did not provide the assistance required for a smooth transfer of authority to sub-national actors and institutions ... [while] teachers and administrators, independently, continued to wait for direction.*”

Given the teacher's low autonomy, we suggest that the MoECRT provides clear and adequate guidance apart from the digital platform, to ensure that the new curriculum is smoothly implemented rather than focusing only on the number of schools implementing the curriculum. Fullan (2000) explained that the main reason such reforms fail to achieve (large) scale and persist is because we fail to understand that the development of local schools and the quality of the surrounding infrastructure are critical for lasting success. Seeing all school principals opting for stage 2 of implementing the Emancipated Curriculum indicates that they or the district education offices commit to using the curriculum. However, are all the schools/teachers ready to change? Building close collaboration with the district education offices might help to improve bureaucrat's capacity to translate reformer's ideas because their actions could shape teacher's different perceptions towards the reform and eventually hinder the implementation of government policies (Aiyar et al., 2021; Arif et al., 2022).

To ensure smooth transfer, we recommend the government provides capacity-building activities including providing training for school teams and local school councils (Bryk et al., 1998). These activities would give assistance and prescriptions for school actors to translate in their classrooms. We understand that, due to budget constraints, the MoECRT has only held some training and implementation support for some teachers/schools. The problem arises when more schools choose stage 2 without having sufficient support from the MoECRT that will only lead to misinterpretation. Although, we cannot guarantee that those participating in the MoECRT training will do better. The reform may be an energetic instructive change, but rushing in the effort will prove unsustainable and result in only minor changes that will last for a while, just as previous policies.

Furthermore, we understand that teachers need not only training but also intensive support to apply for the training materials. They are still looking forward to in-person training that will allow them to be more engaged and grasp the new knowledge better. In addition, teachers need more time and support to digest the objectives and how teachers should adjust their teaching according to the government's expectations before changing their paradigm. For this purpose, both national and local governments are supposed to provide more support for teachers to learn with their peers through the existing teaching working groups available in their respective schools and regions. Besides, the government should encourage teachers to always turn to reliable sources from the digital platform (PMM) provided by the MoECRT if they find doubts in implementing this curriculum.

In sum, giving greater autonomy to teachers should be accompanied by offering sufficient support to smoothly change their beliefs from syllabus completion and teacher-centered to teaching at the right level. Contradictory practices, such as district-level assessment customization, should be avoided. Teachers also need to be prepared and understand the end-to-end process, from the planning to the student assessment in order to achieve the reform objectives.

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