



Bridging the official and teacher-intended curriculum through action research

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ABSTRACT

A persistent challenge in curriculum implementation is the gap between educational policies and classroom teaching practices, particularly in how teachers translate the official curriculum into contextualized instructional plans at the teacher-intended stage. This study aims to analyze how action research can strengthen teachers' roles in bridging this translation process. This study employs a literature review using a descriptive-analytical approach, drawing on scholarly sources from academic databases related to curriculum, teacher professionalism, and action research. The findings indicate that through cycles of planning, action, and reflection, action research supports teachers in identifying learning problems, making data-informed instructional decisions, and adapting teaching strategies to students' needs. In this way, the translation of the curriculum becomes more contextual and responsive to classroom realities. However, its effectiveness depends on institutional support, collaboration, and opportunities for continuous professional learning. Therefore, action research helps address the gap between policy and practice while supporting teachers' professional capacity in curriculum decision-making.

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ABSTRAK

Salah satu tantangan yang persisten dalam implementasi kurikulum adalah kesenjangan antara kebijakan pendidikan dan praktik pembelajaran di kelas, terutama dalam proses guru menerjemahkan kurikulum resmi menjadi rancangan pembelajaran yang kontekstual pada tahap teacher-intended curriculum. Penelitian ini bertujuan untuk menganalisis bagaimana action research dapat memperkuat peran guru dalam menjembatani proses penerjemahan tersebut. Penelitian ini menggunakan metode studi kepustakaan dengan pendekatan deskriptif analitis yang bersumber dari berbagai database ilmiah terkait kurikulum, profesionalisme guru, dan action research. Hasil kajian menunjukkan bahwa melalui siklus perencanaan, tindakan, dan refleksi, action research membantu guru mengidentifikasi permasalahan pembelajaran, mengambil keputusan berbasis data, serta menyesuaikan strategi pembelajaran sesuai dengan kebutuhan murid. Dengan demikian, proses penerjemahan kurikulum menjadi lebih kontekstual dan responsif terhadap kondisi di kelas. Namun, efektivitasnya bergantung pada dukungan kelembagaan, kolaborasi, serta peluang pengembangan profesional yang berkelanjutan. Oleh karena itu, action research berkontribusi dalam menjembatani kesenjangan antara kebijakan dan praktik pembelajaran serta mendukung kapasitas profesional guru dalam pengambilan keputusan kurikulum.

Kata Kunci: kurikulum resmi; kurikulum yang direncanakan guru; penelitian tindakan

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INTRODUCTION

Effective curriculum implementation is key to improving the quality of education in Indonesia. However, many schools still face challenges, mainly due to teachers' limited understanding of curriculum innovations and a lack of supporting resources (Mulkan & Zunnun, 2024). In the Kurikulum Merdeka, teachers play a central role, with considerable freedom to design creative, adaptive learning. However, this freedom requires teachers to translate the official curriculum into contextual and relevant goals for their students (Aribyan & Setiawan, 2024; Eppendi et al., 2024). The official curriculum contains learning objectives and standards, but must be translated by teachers into a more specific teacher-intended curriculum, which is then realized in classroom practice as the enacted curriculum (Remillard & Heck, 2014; Tran & O'Connor, 2024).

This involves complex decisions, from selecting materials and sequencing lessons to adjusting methods and evaluations. This translation stage is a major challenge due to the gap between policymakers and classroom practice (Mariyam et al., 2015). Limited understanding of the new curriculum, insufficient training, and heavy workloads often reduce teachers to passive implementers rather than innovative instructional developers. To address these challenges, an approach that empowers teachers to make decisions actively, reflectively, and evidence-based is needed. Action research offers a methodological framework that allows teachers to evaluate and improve their practices through cycles of planning, implementation, and reflection, in line with Henson's *Curriculum Planning: Integrating Multiculturalism, Constructivism, and Education Reform*.

This approach has the potential to strengthen the translation of the official curriculum into the teacher-intended curriculum, leading to learning practices that are more adaptive, meaningful, and aligned with students' needs. Previous research has shown that implementing the official curriculum in classroom practice is complex and often influenced by factors such as instructional materials and teachers' interpretations. In addition, studies have identified persistent gaps between the intended curriculum and classroom practice, indicating inconsistencies between curriculum planning and implementation (Choppin et al., 2022). However, these studies primarily focus on the gap between intended and enacted curriculum, with limited attention to how teachers translate the official curriculum into the teacher-intended curriculum.

As a result, teacher decision-making in this translation process remains underexplored. Therefore, this article positions action research as an approach that supports reflective and evidence-based decision-making, highlighting its role in strengthening the translation process between the official curriculum and the teacher-intended curriculum. Aligned with this scope, the article addresses two main questions: 1) How do teachers engage in the process of translating the official curriculum into the teacher-intended curriculum in classroom contexts?; and 2) How does action research support teachers' decision-making during this translation process? The study aims to explore how action research can strengthen teachers' capacity to translate official curriculum goals into more contextually relevant, responsive instructional decisions that meet students' needs.

LITERATURE REVIEW

Concept of Curriculum

According to Tyler, curriculum encompasses the entire planned and organized learning experiences provided by schools to achieve educational goals. Caswell and Campbell further explain that the curriculum includes all experiences students encounter under teachers' guidance, not merely the taught material. Harris in "*Kurikulum dan Pembelajaran*" highlights the importance of an individualized curriculum because each student has unique needs and characteristics, which calls for differentiated teaching approaches. In line with this, Hopkins, in "*Kurikulum dan Pembelajaran*" emphasizes that a curriculum should be collaboratively designed and flexible, adapting to the dynamic lives of students. Taba also argues that an effective curriculum is based on understanding the learning process and student development. It must be adaptive and responsive to their needs. Furthermore, S. Hamid Hasan in "*Kurikulum dan Pembelajaran*" describes curriculum through four interconnected dimensions: 1) The idea dimension as the fundamental concepts and principles; 2) The plan dimension as the realization of ideas into written documents; 3) The process dimension representing the actual classroom teaching; and 4) The result dimension, referring to changes in students' competencies after learning. The idea and plan dimensions are often called the ideal curriculum, while the process dimension is the actual curriculum. Ideally, these four dimensions should operate in parallel and support one another, though in practice, discrepancies between planning and execution are common.

Teacher Intended Curriculum

Understanding curriculum dimensions, including ideas, planning, implementation, and outcomes, can be further explained through an approach that emphasizes the operational aspect of the curriculum. Categorize the curriculum system into two main domains: the official curriculum and the operational curriculum (Remillard & Heck, 2014). This distinction clarifies how curriculum content moves from formal documents into classroom practice and what happens during that process. The official curriculum consists of all elements formally established by the government or educational authorities. It includes learning objectives, achievement standards, core materials, and key assessments that guide learning. In some education systems, instructional materials, such as textbooks, are also part of the official curriculum because their use is mandated at the national level and aligned with standards (Choppin et al., 2022; Remillard & Heck, 2014).

However, what actually occurs in classrooms often differs from what is written in official documents. This leads to the operational curriculum, which refers to how teachers interpret and adjust the curriculum content in day-to-day teaching. The operational curriculum can be subdivided into 1) the teacher-intended curriculum, which is the lesson plan teachers create based on official documents adjusted to classroom conditions; and 2) the enacted curriculum, the real teaching and learning interaction between teacher and students (Remillard & Heck, 2014). Teachers play a crucial role in bridging the officially designed national curriculum and the real needs in classrooms. They are responsible for developing the teacher's intended curriculum, which consists of learning planning documents. Examples within the Kurikulum Merdeka include the Tujuan Pembelajaran (TP) and Alur Tujuan Pembelajaran (ATP), which

are derived from learning achievements, as well as the Rencana Pelaksanaan Pembelajaran (RPP), now commonly referred to as Modul Ajar.

In preparing these documents, teachers make important decisions about content, methods, lesson sequencing, and assessments tailored to their students' specific needs and characteristics (Tran & O'Connor, 2024). The development and implementation of the teacher's intended curriculum involves more than simply following the official curriculum documents. It requires teachers to interpret and adapt the content to make learning more relevant and meaningful (Remillard & Heck, 2014). This process can be viewed through two complementary approaches in curriculum development: top-down and bottom-up. The official curriculum is typically designed top-down by the government and then distributed to schools for implementation. At this point, teachers adjust their teaching accordingly, in line with Clark's "Curriculum Renewal in School Foreign Language Learning". In practice, however, teachers also play an active role in developing the teacher-intended curriculum from the bottom up by modifying the curriculum content based on their local context and student needs (Bolghari & Hajimaghsodi, 2017).

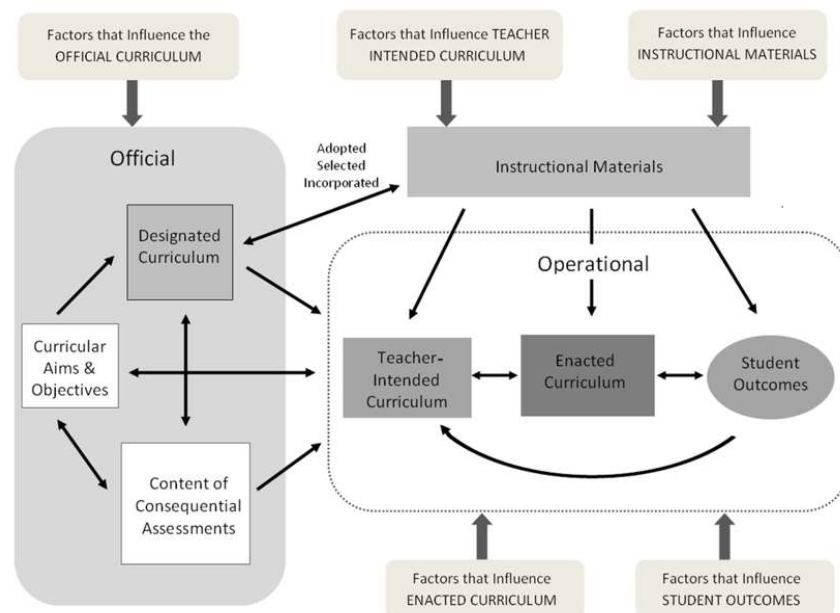


Figure 1. Visualization of Official Curriculum, Teacher Intended Curriculum, and Enacted Curriculum
Source: Remillard & Heck (2014)

Through their decision-making, teachers bridge the gap between official curriculum policies and classroom teaching, making the teacher-intended curriculum an essential operational link between broad educational policies and the enacted curriculum (See: **Figure 1**) (Bolghari & Hajimaghsodi, 2017; Remillard & Heck, 2014). This categorization is consistent with Deng's differentiation of policy curriculum, programmatic curriculum, and classroom curriculum (Deng, 2018). The policy curriculum contains broad educational goals and directions. Programmatic curriculum translates these policies into school structures and programs. Classroom curriculum refers to the activities teachers and students engage in to achieve learning objectives. This concept reaffirms the strategic position of teachers as connectors between curriculum documents and learning implementation.

The Role of Teachers in Curriculum

Murray Print explains that teachers have several important roles in curriculum development and implementation (Abdullah et al., 2023).

Teachers as Implementers. Teachers implement the curriculum designed, focusing on applying its content, methods, and assessments in the classroom. At this stage, teachers generally act as technical personnel, executing the curriculum document with little innovation. Teaching is often viewed as routine work rather than a profession that requires creativity.

Teachers as Developers. Teachers actively design and adapt the curriculum to suit student needs and the school context. Remillard asserts, "teachers are not just implementers of the curriculum; they are designers who actively transform and adapt curriculum materials to meet the needs of their students" (Remillard, 2005). Henson, in "Curriculum Planning: Integrating Multiculturalism, Constructivism, and Education Reform" adds that teacher involvement in curriculum development fosters more interactive learning, strengthens teacher-student relationships, and enhances academic achievement.

Teachers as Adapters. Teachers adjust the curriculum according to the unique conditions of their schools and communities. Factors such as limited facilities and resources compel teachers to make adaptations. The official curriculum is never implemented rigidly but always adapted to local needs (Remillard & Heck, 2014).

Teachers as Researchers. Teachers evaluate and investigate curriculum implementation to improve learning quality. Despite challenges such as limited experience, teacher involvement in research is vital for professional development and innovation, as Henson argues in "Curriculum Planning: Integrating Multiculturalism, Constructivism, and Education Reform". Methods such as Classroom Action Research help teachers find practical solutions for learning problems.

According to Wijaya, teachers as agents of change must possess four key traits: a clear personal vision, an inquiry habit for exploration and research, deep mastery of content, and strong collaboration skills (Aprillia et al., 2023). These aspects enable teachers to effectively implement, develop, adapt, and research the curriculum, thus acting as transformative agents in education.

Action Research

McCutcheon and Jung describe action research as a systematic form of inquiry conducted by teachers to understand and improve their teaching practices. This method allows teachers not only to apply theory but also to connect it directly to classroom practice, shifting their role from mere users to developers and decision-makers of the curriculum (Barcelona, 2020; Bolghari & Hajimaghsoodi, 2017). The history of action research began in the 1960s in the United States, when curriculum development was centralized, leading teachers to lose their active roles in curriculum design and school-based research, as Henson notes in "Curriculum Planning: Integrating Multiculturalism, Constructivism, and Education Reform". This situation created a need to restore teachers as reflective and active agents of change in improving teaching practices.

Action research offers teachers the opportunity to act as researchers, evaluating the effects of their own actions and adapting teaching methods to be more effective and relevant to student needs (Bolghari & Hajimaghsoodi, 2017). This approach is viewed as progressive, encouraging bottom-up curriculum innovation through active teacher involvement in line with Clark's "Curriculum Renewal in School Foreign Language Learning". Beyond being exploratory, action research is interventionist, in which teachers actively identify problems and implement direct changes, continuously reflecting to inform improvement. It can be carried out independently, collaboratively, or at the whole-school level involving all staff (Oranga & Gisore, 2023). The methodology follows a three-stage cycle: planning (identifying issues and action planning), acting (data collection and implementation), and reflecting (evaluation and revision for subsequent cycles). This model is simple yet profound, making it easily understood and applied by teachers as researchers focused on improving educational quality (Oranga & Gisore, 2023).

METHODS

This study uses a literature review as its primary research method, understood not merely as a summary of previous studies but as a process of organizing and synthesizing research to develop a deeper understanding of a particular topic. This study adopts a descriptive-analytical approach to examine the relationships among the official curriculum, the teacher-intended curriculum, and the role of action research in teachers' decision-making processes. The data were collected through searches of scholarly sources using academic databases and journal platforms such as Scopus and Taylor & Francis Online, supplemented by broader searches in Google Scholar. Keywords used in the search process were derived from the research focus, including "action research," "teacher-intended curriculum," "official curriculum," "curriculum enactment," and "teacher decision-making." Sources were selected based on their relevance to the research focus, covering curriculum, the teacher's role in curriculum making, curriculum interpretation processes, and the implementation of action research in learning development. The literature includes peer-reviewed journal articles, academic books, and conference proceedings, prioritizing recent studies while also incorporating foundational works relevant to the topic. The selected sources were analyzed by organizing and interpreting findings in relation to the research focus. This involved comparing results across studies and synthesizing key concepts to identify patterns and relationships relevant to the research objectives.

RESULTS AND DISCUSSION

The Role of Teachers in Bridging the Official and Teacher-Intended Curriculum

Teachers play a crucial role in connecting the official curriculum, which consists of policy documents outlining learning goals and standards, with the teacher-intended curriculum they design to meet classroom needs. Their role goes beyond mechanically implementing the curriculum content and involves active interpretation and instructional decision-making to ensure that learning is adapted to students' needs and characteristics (Tran & O'Connor, 2024). In this process, teachers act as agents who translate broad policy into meaningful, context-specific learning activities. In translating the curriculum, teachers develop the

teacher-intended curriculum through designing lesson plans, choosing materials, organizing the sequence of instruction, and determining strategies that best fit classroom conditions.

Gueudet and Trouche call this process "documentational genesis," in which teachers make professional interpretations of various learning resources and produce new documents that reflect those interpretations (Remillard & Heck, 2014). This teacher-intended curriculum is usually more detailed and flexible than the official curriculum, as it takes into account students' characteristics, classroom dynamics, and teachers' pedagogical experience. However, the teacher-intended curriculum is not always fully documented. Many pedagogical decisions are mental considerations and are not explicitly recorded, so instructional materials may not fully reflect the reasoning processes behind teachers' choices (Boolghari & Hajimaghsoodi, 2017). This situation shows that teachers' curriculum interpretation is dynamic and influenced by what they choose to notice and interpret in the curriculum materials.

This finding aligns with previous research showing that curriculum enactment is not a direct process, as teachers' interpretations are influenced by various factors, particularly instructional materials used in classroom practice (Choppin et al., 2022). Therefore, the teacher-intended curriculum functions not only as an interpretation of the official curriculum but also as an important basis for shaping how the curriculum is ultimately enacted in the classroom. One key concept in understanding how teachers interpret the curriculum is curricular noticing. This concept refers to the ongoing cycle in which teachers attend to, interpret, and respond to curriculum materials during both planning and teaching phases (Dietiker et al., 2018). During the attending phase, teachers identify significant information from the curriculum; in the interpreting phase, they relate this information to their own knowledge and pedagogical experience; and during the responding phase, they make instructional decisions such as selecting, presenting, or adapting tasks to meet students' needs.

The responding phase includes both planning and actual teaching activities (Parrish et al., 2023). Through the curricular noticing cycle, teachers can make more contextually relevant curriculum decisions that align with student needs (Jukić Matić, 2024). This process demonstrates that teachers are active agents who bridge the official curriculum and the teacher-intended curriculum through the interpretations and decisions they develop while designing instruction, before these are realized in the enacted curriculum in classrooms. In line with this, Deng emphasizes that teachers are curriculum makers who use their knowledge and reasoning to interpret, develop, and structure the curriculum in ways that create meaningful learning experiences referred to as powerful knowledge for students (Deng, 2022). In the Indonesian Kurikulum Merdeka, teachers are granted greater freedom to design learning aligned with students' needs and characteristics while still adhering to the official curriculum's learning outcomes.

Based on these outcomes, teachers formulate specific, measurable learning objectives as part of the teacher-intended curriculum. This process also involves creating operational and systematic Learning Objective Flows and using teaching modules that include media, assessments, and other learning elements. This framework provides teachers with flexibility to adjust instruction to local context and student characteristics (Eppendi et al., 2024). Once ATPs and teaching modules are applied daily in classrooms, the teacher-intended curriculum

becomes the enacted curriculum, the real, lived teaching practice. This enacted curriculum is like a theater performance, filled with unique and unpredictable elements and heavily dependent on teachers' responses to actual classroom situations (Remillard & Heck, 2014). Despite careful planning within the teacher-intended curriculum, classroom implementation cannot be fully predicted. Teachers may need to improvise and adjust strategies when plans prove ineffective in certain contexts or when students require different approaches to understand the material better.

Teachers rely on curriculum potential, which is the accumulation of subject knowledge, pedagogy, teaching experience, and a deep understanding of their students, as the basis for interpreting the official curriculum (Ross, 2024). This interpretative process is hermeneutic, where teachers read, interpret, design lesson plans, and implement them reflectively. Thus, teachers are not passive recipients of documents but are curriculum makers who adapt and innovate in response to student needs and learning contexts. A longitudinal study by Jukić Matić illustrates how a mathematics teacher named Sonia gradually shifted from relying heavily on official textbooks, which are part of the official curriculum, to becoming a creative lesson designer (Jukić Matić, 2024). Sonia used a national curriculum-based annual plan as a guide but actively interpreted and modified it, making learning more student-centered and incorporating digital technology such as GeoGebra.

This transformation demonstrates teachers as dynamic curriculum makers who adjust the official curriculum into an operational curriculum that is relevant and effective. However, significant challenges remain in implementing new curricula. Beltrán-Pellicer in "*Investigación en Educación Matemática XXVI*" notes that even though official curriculum documents provide technical guidance and sample learning scenarios, teachers still face difficulty fully understanding and applying regulations and assessment aspects. This condition highlights the necessity of initial and ongoing training integrated with practice so that teachers can accurately translate the official curriculum into a clear, operational teacher-intended curriculum, which will then be implemented in classroom practice. Therefore, teachers serve as change agents who bridge the official curriculum and the instructional designs they develop.

Through interpretation influenced by curriculum potential and curricular noticing, teachers design teacher-intended curricula that remain aligned with official curriculum goals and concurrently address student needs, resulting in a meaningful enacted curriculum. Adaptive instructional decisions enable teachers to ensure that learning is effective and aligns with curriculum objectives. Nevertheless, this process is not always easy, and ineffective teaching strategies can emerge if teachers lack systematic reflective mechanisms. Thus, an approach is needed to help teachers evaluate and continuously improve their instructional designs. The next section will discuss how action research can be an effective approach to strengthen evidence-based teacher decision-making when selecting appropriate strategies, methods, and teaching materials based on student needs and classroom contexts.

The Role of Action Research in Enhancing Teacher Decision-Making in Curriculum

Teacher decision-making plays a crucial role in developing and implementing the curriculum, which in turn greatly affects learning outcomes and the overall quality of education.

Teachers, as the primary actors in the classroom, have deep knowledge of their students' characteristics, classroom dynamics, and learning needs. These needs are often not fully addressed by the official curriculum, which is usually created through a top-down approach. Because teachers have a vested interest, meaning a direct stake and real responsibility for student learning success, they are best positioned to interpret and adapt the curriculum to their classroom context. This vested interest grounds their curriculum decisions in authentic and relevant experiences (Mertler & Hartley, 2017). Teacher agency is a vital component of curriculum decision-making because teachers bring critical perspectives on the relevance and equity of content, making their voices essential in the curriculum-making process (Parkhouse et al., 2021). Action research emerges as a method that enables teachers to make systematic, evidence-based decisions.

As a form of systematic inquiry into their own practice, action research involves identifying problems of practice, implementing targeted actions, and collecting and analyzing data to evaluate the effectiveness of those actions. Through this reflective process, teachers can develop more focused and responsive curriculum decisions aligned with student needs (Mertler, 2021). Mertler and Hartley state that "*action research provides teachers with a systematic process for making data-based decisions,*" illustrating that action research serves as a practical mechanism to bridge theory and practice by grounding curriculum decisions in empirical evidence generated by teachers (Mertler & Hartley, 2017). This is further supported by Ferencová, who highlights that action research enables teachers to critically reflect on their practice and use data to make informed instructional decisions that can be directly implemented in the classroom (Ferencová et al., 2025).

Throughout the action research cycle, which includes planning, acting, and reflecting, teachers actively gather empirical evidence and deeply evaluate instructional practices. The reflection phase provides teachers with more rational and critical insights, so that decisions to adjust curriculum or teaching methods are based not on intuition or habit but on valid data and analysis (Bolghari & Hajimaghsoodi, 2017). This leads to decisions that are relevant to the teaching context and improve learning quality continuously (Bolghari & Hajimaghsoodi, 2017). It also strengthens teachers' professional skills by sharpening reflection, boosting confidence, and enhancing their ability to design effective interventions (Ferencová et al., 2025). This is further reinforced by those who highlight that teachers engaging in action research become more systematic, develop stronger data analysis skills, and gain a deeper understanding of assessment (Monem & Cramer, 2022).

These competencies enable more informed and reflective curriculum decisions and support the integration of curriculum, instruction, and assessment based on students' needs. Findings from teacher-led action research can then serve as the foundation for developing the teacher-intended curriculum, a curriculum design directly adapted by teachers based on official documents and classroom needs and conditions. The teacher-intended curriculum acts as the critical bridge between the broad, normative official curriculum and the operational lesson plans implemented by teachers. Through action research, teachers go beyond mechanically translating official curriculum content; they make more conscious, evidence-based adjustments to goals, content, strategies, and assessments, resulting in curriculum decisions that are more accurate, relevant, and responsive to student characteristics (Saban, 2021).

Participatory Action Research (PAR) findings in multiethnic schools in Chiang Mai reinforce this, showing how teachers reconstruct curricula to better fit their local context and community identity through reflective, collaborative processes (Watthanawara et al., 2020). These adaptations strengthen the quality of the teacher-intended curriculum, making it more ready to be realized in classroom practice. Action research also supports meaningful and sustainable curriculum change because teachers can directly tailor the curriculum to fit classroom realities and student needs. This bottom-up approach enables reflective changes in the teaching and learning process, making it more responsive and adaptive to diverse student needs (Cierpiłowska, 2023). This aligns with the transformative potential of action research, which not only improves instructional practices but also empowers teachers and communities to create meaningful change (Dusty, 2024). Furthermore, such changes are often more effective than top-down approaches, as they are grounded in real classroom contexts.

Action research by teachers creates “*ripple effects*,” where improvements in one classroom can influence curriculum practices at the school and district levels, demonstrating how teacher-led initiatives can drive broader educational change (Parkhouse et al., 2021). With AR, teachers take on the role of practical researchers who understand their classroom context better than anyone else. They are responsible for identifying problems, implementing solutions, collecting data, and evaluating the impact of their actions. This active role positions teachers not only as consumers of educational knowledge but also as producers of knowledge capable of contextualizing and improving teaching practices and curricula (Bolghari & Hajimaghsoodi, 2017). Beyond this role, action research also enhances teachers’ motivation and engagement in teaching, curriculum development, and research activities, encouraging them to take greater ownership of the educational process (Ferencová et al., 2024; Mertler, 2021).

Furthermore, teachers who engage in inquiry tend to develop greater confidence in designing innovative learning aligned with student needs (Lin & Chen, 2025). Additionally, action research gives teachers a voice that is often unheard in education policy decisions. Participating in action research equips teachers with the language and framework to discuss learning challenges scientifically, enabling them to play a more active and critical role in decisions at the school and community levels (Vaughan & Mertler, 2021). Many teachers want to be involved in decisions about curriculum and syllabus design, and action research offers opportunities for meaningful involvement in this process (Mariyam et al., 2015). When teachers have space to research their practice, they can advocate for a more equitable and relevant curriculum for diverse student populations (Parkhouse et al., 2021). The importance of action research became especially clear during the COVID-19 pandemic when teachers faced unprecedented challenges with remote learning.

Action research helped teachers experiment with and adapt new teaching strategies—such as small group work and peer feedback—that improved student engagement and learning outcomes. The ongoing cycles of reflection and decision-making strengthened teachers’ ability to adjust teaching effectively in difficult circumstances (Mertler, 2021). Research found that almost all teachers (100%) benefited from action research by gaining a better understanding of how students learn, improving teaching methods, and integrating technology more effectively (Aguilar-de Borja, 2018). Beyond improving teaching, teachers felt that action research provided space to enrich the curriculum and better meet student

needs. Some reported that action research contributed to improvements in secondary school curricula and encouraged teaching practices aligned with 21st-century skills. One teacher commented,

"Through action research, there is an opportunity to contribute to the learning process with methods that fit the 21st century learners' need,"

Also, curriculum design evolved as teachers' ideas and research-based insights gained recognition and approval from schools.

However, only 44% of teachers identified themselves as teacher-researchers due to difficulties balancing teaching and research demands (Aguilar-de Borja, 2018). This issue is discussed further in the section about action research challenges. In Indonesia, research highlights that action research plays a key role in overcoming barriers teachers face, especially in professional development (Nurhasanah et al., 2020). They stress the importance of collaboration among teachers, university lecturers, and supervisors in conducting action research. This collaboration helps teachers not only solve classroom problems but also improve learning by developing practical skills like data collection, analysis, and reporting. It fosters a community of researchers among educators and enriches curriculum development, making it more adaptive and relevant. Although multiple studies have demonstrated that action research strengthens teacher decision-making, this approach does not automatically resolve all curriculum issues.

Prior findings tend to highlight the success of action research in contexts with strong collaborative cultures and institutional support. Thus, its effectiveness heavily depends on the readiness of the school ecosystem. Moreover, most studies focus on individual teacher impacts, while curriculum processes inherently involve coordination among teachers, principals, and broader organizational structures. This gap indicates that action research should be understood not merely as individual practice but as an institutional process that requires systemic support for optimal functioning (Bergmark, 2022; Parkhouse et al., 2021). After discussing the action research concept and benefits for reflective, data-driven decision-making, it is crucial to view action research within Indonesia's education policy, especially the Kurikulum Merdeka. This curriculum grants significant autonomy to teachers, creating a relevant space for the application of action research (Eppendi et al., 2024). With such flexibility, teachers can continuously adapt and develop teaching to meet student needs and local conditions, ensuring autonomy is implemented effectively and based on evidence.

Overall, action research is a highly strategic and effective approach to strengthening teacher decision-making in developing the teacher-intended curriculum. It bridges the gap between theory and practice, promotes a living and relevant curriculum, and empowers teachers as competent, innovative, and responsive professionals and change agents. The roles of teachers as implementers, developers, adapters, and researchers of the curriculum, as described by Murray Print, align with these explanations. Teachers do not just implement the official curriculum but also actively adapt and design learning to meet student and local context needs. The success of these roles depends on four key teacher traits identified by Wijaya: clear personal vision, inquiry habit, deep mastery of content, and strong collaboration skills (Aprillia et al., 2023). Through action research, teachers put these traits into practice by conducting evidence-based evaluations and making adjustments to ensure effective, relevant learning.

Challenges and Strategies in Action Research

Several challenges in conducting action research have been identified based on various literature.

Limited Time and Heavy Workload. Time constraints are among the most significant barriers teachers face when conducting action research. Teaching duties, administrative responsibilities, and other school-related tasks often leave little time for research activities (Mariyam et al., 2015; Saeb et al., 2021). As a result, teachers frequently struggle to complete various stages of action research, from literature review to data analysis. They may perceive it as an additional burden that contributes to stress and fatigue.

Lack of Theoretical, Methodological, and Practical Research Skills. Many teachers experience difficulties in understanding action research concepts, frameworks, and methodological procedures, which also affects their ability to implement research in practice. Teachers often struggle to identify research problems, formulate research questions, and connect practical issues with relevant theoretical frameworks (Calamlam & Calamlam, 2025; Tulung et al., 2022). These challenges extend to technical aspects such as data collection, data analysis, and report writing, indicating that essential research skills remain difficult to master even after initial training (Nagibova, 2019; Pasaribu et al., 2021). As a result, both conceptual and practical limitations reduce teachers' confidence and hinder the effective implementation of action research in classroom contexts.

Insufficient Institutional Support and Learning Resources. Teachers often receive limited institutional support and lack access to adequate research resources, including literature and opportunities to engage in curriculum or research decision-making (Mariyam et al., 2015).

Language and Communication Barriers. a language gap between academic researchers who use technical terms and teachers who need simpler, contextual language. Poor English proficiency hampers teachers' access to, understanding of, and interpretation of global research literature. One teacher remarked, "I spend a lot of time trying to understand the meaning of the sentence. Translation, of course, changes the meaning" (Nagibova, 2019). Language barriers reduce access to literature and adversely affect the quality of research comprehension and implementation.

Emotional and Motivational Challenges. The shift from being a teacher to becoming a teacher-researcher brings emotional challenges such as anxiety, frustration, and guilt, which can reduce motivation. Emotional struggles arise as teachers move from their comfort zone to the developmental stage of action research practice. This phase involves uncertainty and emotional pressure, leading to a loss of confidence and reluctance to take risks when changing teaching methods. Lack of motivation is also affected by teachers' unfamiliarity with and technical difficulties in conducting research.

The following strategies can be effectively employed to overcome the previously identified challenges.

Emotional Support and School Climate. Viewing teachers as co-inquirers rather than mere implementers, so that teaching practice and academic theory can mutually enhance each other. A school research culture and collaborative teacher work boost motivation and effectiveness. One teacher noted, "Working in collaboration is effective. We can easily discuss and solve the issue," illustrating how peer support makes research feel lighter and more

meaningful. Emotional support from the school environment is also vital. Research found that principals, research mentors, and peers foster open, trusting relationships during action research (Bergmark, 2022). Teachers felt more comfortable knowing their ideas were heard and valued, even when uncertain. When school leaders provide time, space, and appreciation for research efforts, teachers gain confidence to try new approaches. A supportive, warm, and collaborative school climate is essential for teachers to conduct sustainable action research confidently.

Simplifying Language and Providing Local Language Resources. Technical language is a major barrier to understanding research concepts. Many teachers find action research difficult due to confusing jargon. To improve accessibility, materials and guides should use simpler language and clear methodological steps. Guides offering practical steps, reflective questions, and real examples help teachers grasp the research process without feeling overwhelmed. Well-structured instructions, from formulating research questions to analyzing data, also help teachers confidently navigate each stage of the research process. Thus, simplifying language and offering practical learning resources are key to effective understanding and implementation of action research, as outlined by Burns in “*Sustaining Action Research*”.

Allocating Time Specifically for Research. One of the main challenges teachers face in conducting action research is a lack of sufficient time. Experience from two major school-based curriculum development projects in Ireland shows that for every hour of experimental teaching, about five hours of workshop planning are required. This emphasizes the critical importance of reducing teaching loads for teachers engaged in research so they have adequate time for both inquiry and lesson development. Although this requires financial investment, proper time management and institutional support are essential to turn schools into effective centers for curriculum development. Findings further demonstrate that providing teachers with structured time for planning, sharing results, and collaborative reflection significantly improves the quality and sustainability of action research projects in schools (Mertler & Hartley, 2017).

Enhancing Skills through Training. The importance of embedding research methodology training from teacher education through ongoing professional development. This aligns with recent studies showing that structured workshops and training programs are effective in deepening teachers’ understanding of action research principles and practice. For example, training strengthened teachers’ research skills through the use of the Perceptions about Action Research Questionnaire and reflective journals (Torrato et al., 2021). Consistent with these findings, follow-up support, such as coaching or reflective discussions, is crucial so that teachers do not revert to old practices but continue to develop as practitioner-researchers (Mertler & Hartley, 2017).

Providing Resources and Technical Assistance. Highlighting the need for adequate resources such as literature, guides, and access to research databases, it is effective when schools provide experienced teachers as mentors or research supervisors for beginners (Najibova, 2019). Since not all regions have such personnel in schools, university collaborations are a valuable alternative. As Henson states in “*Curriculum Planning: Integrating Multiculturalism, Constructivism, and Education Reform*,” the most effective school improvement model involves action research partnerships between schools and universities. Such mentoring can

be individual or group-based to provide technical and practical support and to strengthen collaboration networks among practitioners.

CONCLUSION

This study concludes that the gap between the official curriculum and teaching practice arises because teachers have not yet fully succeeded in translating the curriculum goals into a teacher-intended, contextually relevant curriculum. Action research strengthens this process through data-driven reflective cycles that help teachers identify student needs, evaluate strategies, and improve lesson plans more purposefully. Although challenges such as limited time and opportunities for reflection can sometimes hinder this process, action research remains an effective mechanism for aligning curriculum goals with classroom realities. As recommendations, schools can provide scheduled reflection time, enhance teacher training based on action research, and encourage collaboration through practitioner communities. These simple yet consistent supports are essential for teachers to sustainably implement action research and develop a teacher-intended curriculum that better matches student needs and official curriculum objectives.

AUTHOR'S NOTE

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