Jurnal Guru Dikmen dan Diksus
Volume 9 Number 1, 2026. Page 95-112
p-ISSN: 2655-481x, e-ISSN: 2723-6404

Improving participation in history learning through the MIKIR strategy during the COVID-19 pandemic at SMA Negeri 1 Pasie Raja

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(Received: June 20, 2022; Accepted: October 21, 2022; Published: June 30, 2026)

ABSTRACT

School closures during the COVID-19 pandemic created barriers to participation in history learning, particularly for students with limited access to smartphones and reliable internet connections. This study examined participation and achievement following the implementation of a locally defined MIKIR (Indonesia / *Melaksanakan pembelajaran daring dan luring, Konstektual dan berdaya guna, Intens melakukan refleksi dan Relevan dengan kemampuan Orangtua dan siswa)* strategy at SMA Negeri 1 Pasie Raja, South Aceh Regency, Indonesia. MIKIR combined online and offline instruction, contextual and useful learning activities, frequent reflection, and adaptation to students' and parents' circumstances. Classroom action research involved 22 students in Grade XI social sciences, comprising 15 girls and seven boys, and consisted of two cycles with two meetings per cycle. Online learning used a teacher-managed blog and WhatsApp, while offline learning used printed worksheets and the school's 4M (Indonesia/*membagi kelompok, mengantar tugas, monitoring dan menjemput/*) delivery, monitoring, and collection arrangement. Assignment records, observations, reflection forms, and achievement summaries provided descriptive evidence. On-time participation increased from eight students at the second meeting of Cycle I to 20 students at the second meeting of Cycle II, equivalent to an increase from 36.36% to 90.91%. Late participation decreased from ten to two students. At the final meeting, 20 of 22 students achieved the minimum mastery score of 75. The reported meeting means increased from 57.11 and 66.45 in Cycle I to 83.05 and 84.70 in Cycle II. Inconsistent cycle averages and dates in the source records require verification. The findings suggest that coordinated access arrangements, clearer instructions, and reflection supported participation in this class; the design does not establish causality or generalizability.

Keywords: MIKIR; history learning; student participation; classroom action research; emergency remote learning

INTRODUCTION

The sudden movement from classroom instruction to learning at home during the COVID-19 pandemic required schools to address access, instructional continuity, and student support simultaneously. Studies of teachers' adaptation show that emergency provision depended on digital competence, previous teaching experience, and the conditions under which instruction was delivered. A review of school-level emergency remote teaching also identifies substantial variation across settings and methods (Al Mazrooei et al., 2022; Kaden, 2020; König et al., 2020). These findings provide a context for examining a school response rather than assuming that moving assignments online automatically sustains participation.

At SMA Negeri 1 Pasie Raja in South Aceh Regency, the history teacher reported low participation among students in Grade XI social sciences, class XI IPS 2. The original record describes initial participation as 53.96%, combining students who participated on schedule with those who participated late. Smartphone ownership was reported as approximately 23%, although the associated count was not supplied. Unstable connectivity, the cost of internet data, shared devices, and limited familiarity with educational applications complicated instruction. These local observations are consistent with research documenting unequal home-learning resources and family difficulties during school closures (Andrew et al., 2020; Garbe et al., 2020).

Access problems also affected the suitability of particular teaching arrangements. According to the teacher, live video meetings were difficult to coordinate, and fixed online submission schedules disadvantaged students who borrowed devices. Research on secondary teachers' readiness for online instruction emphasizes that readiness involves more than knowing how to use a platform. Wider work on educational digitalization similarly relates classroom technology use to organizational conditions and available support (S. K. Howard et al., 2021; Pettersson, 2021). The practical question was therefore how students could receive materials, complete tasks, and obtain feedback through channels they could actually use.

The school introduced a locally defined MIKIR strategy: implementing online and offline learning; providing contextual and useful activities; reflecting frequently; and adapting provision to students' and parents' circumstances. Online provision relied on a teacher-managed blog, while offline provision used printed materials and a 4M arrangement. The Indonesian 4M terms referred to forming groups, delivering assignments, monitoring learning, and collecting completed work. An Indonesian study of online and offline instruction offers a relevant comparison, while research on home-schooling highlights the importance of listening to students, parents, and teachers (Bubb & Jones, 2020; Pratama & Mulyati, 2020).

History learning presents an additional instructional challenge: students need opportunities to interpret and explain material rather than merely receive facts. During emergency provision, however, those opportunities depend on receiving understandable instructions and maintaining contact with the teacher. Research on Google Forms in Indonesian history education and on history modules developed during the pandemic illustrates local attempts to reorganize learning materials (Heryadi, 2021; Marta et al., 2022). The present study examines a different arrangement that deliberately preserves an offline route alongside digital communication.

The study addresses two questions: how students' participation changed across the two MIKIR action-research cycles, and how their recorded history achievement changed. Its contribution is a classroom account of coordinating access, instruction, and reflection under resource constraints. Achievement and participation are treated as separate outcomes, and the conclusions are limited to the evidence available from the participating class.

LITERATURE REVIEW

Emergency remote learning and equitable access

Emergency remote teaching requires adaptation under conditions that differ from planned online courses. Teachers need preparation, communication support, and realistic expectations about what families can provide. Research on teachers' experiences during the pandemic and on students' emergency remote engagement identifies technological and social conditions as important features of provision (Khlaif et al., 2021; Trust & Whalen, 2020). Consequently, an online activity may be pedagogically appropriate yet inaccessible to a student without a suitable device or a stable connection.

Family conditions also influence the opportunities available for learning at home. Studies examining household learning resources and the impact of remote education on families show why space, equipment sharing, and parental availability deserve attention (Andrew et al., 2020; Chifari et al., 2021). Evidence of learning loss following school closures further cautions against treating access to assignments as equivalent to continuity of learning (Engzell et al., 2021). These studies do not measure the present class, but they explain why an intervention should monitor both participation and achievement.

A combination of online and offline routes can be understood as a response to these access conditions. In MIKIR, the offline route involved physical materials, delivery, and collection; it did not simply mean an online lesson completed outside school. The teacher-managed blog offered an asynchronous route for students with internet access. A systematic review of the transition to online teaching provides broader evidence about the diversity of instructional strategies used during the pandemic, although its higher-education setting limits direct transfer to this school (Koh & Daniel, 2022).

Participation, motivation, and meaningful tasks

Participation is an observable component of engagement, but engagement also involves cognitive, emotional, and agentic dimensions. Research applying self-determination theory to online learning connects student engagement with support for autonomy, competence, and relatedness. Related research on blended learning examines digital and teacher support for these needs (T. K. F. Chiu, 2021; T. K. F. Chiu, 2022). In the present study, assignment submission serves as a behavioral indicator; it does not constitute a validated measure of all engagement dimensions.

Motivation research likewise distinguishes the reasons students undertake learning activities. Theoretical and meta-analytic studies associate autonomous motivation with learning-related outcomes and examine the conditions that support it (Bureau et al., 2022; J. L. Howard et al., 2021; Ryan & Deci, 2020). For MIKIR, this literature suggests that understandable instructions, relevant activities, and supportive contact are plausible ways to help students participate. The study did not administer a motivation scale, so these relationships provide an interpretive framework rather than measured mechanisms.

Contextual tasks may help students connect historical material with recognizable concerns, including experiences during the pandemic. Writing about a topic can also support learning when students explain ideas rather than copy information; a meta-analysis includes evidence from social studies as well as science and mathematics (Graham et al., 2020). Research on generative learning and its variation across age groups further emphasizes the importance of the thinking demanded by an activity (Brod, 2021; Fiorella, 2023). Assignments should therefore be evaluated for the explanations they require, alongside their attractiveness and ease of access.

Digital competence, instructional clarity, and reflection

Teachers' digital competence combines technical knowledge with pedagogical judgment, ethical awareness, and an understanding of context. A digital competence framework and an umbrella review of teachers' roles in digitalizing education both support this broader view (Falloon, 2020; Wohlfart & Wagner, 2023). Research on teachers' perceptions of technology integration and their professional learning identifies continuing support needs (Akram et al., 2022; Fernández-Batanero et al., 2022). In this setting, selecting a manageable blog and maintaining printed materials represent decisions about fit between instruction and local conditions.

The quality of lesson planning remains important when technology is introduced. Studies of technology-enhanced planning, integration models, and the relationship between teacher competence and contextual factors suggest that useful digital instruction depends on coordinated content, pedagogy, and resources (Backfisch et al., 2020; Lucas et al., 2021; Tondeur et al., 2021). These considerations are relevant to selecting assignment formats that students can understand through both online and printed routes.

Multimedia design research offers guidance for the tutorials and infographics introduced after Cycle I. A synthesis of design principles and cognitive load theory indicates that instructional materials should direct attention toward essential information and avoid unnecessary processing demands (Noetel et al., 2022; Sweller, 2020). Evidence on instructional video and distracting details supports concise explanations and purposeful visual elements (Mayer et al., 2020; Sundararajan & Adesope, 2020). Such principles explain why varying an assignment's presentation should be accompanied by clarity rather than adding animation without an instructional purpose.

Feedback and reflection can help teachers identify barriers that participation totals alone conceal. A meta-analysis of educational feedback emphasizes that feedback effects vary with its characteristics and context (Wisniewski et al., 2020). Research on remote-learning engagement and parent–teacher relationships also supports examining the communication surrounding learning at home (Gershy & Katz, 2023). Within MIKIR, blog comments, printed reflection forms, and monitoring reports were intended to inform subsequent action.

Coordination and classroom improvement

Implementing parallel delivery routes requires leadership and coordination. Research on leadership during the pandemic, educational technology leadership, and successful school leadership highlights the relevance of organizational support to school improvement (Dexter & Richardson, 2020; Harris & Jones, 2020; Leithwood et al., 2020). The present intervention connected the principal, subject teacher, homeroom teacher, school committee, students, and parents rather than assigning responsibility solely to the student.

Classroom action research provides a framework for identifying a practical problem, implementing action, observing its consequences, and revising provision. The action-research planner describes this iterative orientation (Kemmis et al., 2014). Literature on teacher professional development and learning and development principles provides additional grounds for examining

implementation conditions and responding to learners' circumstances (Darling-Hammond et al., 2020; Sims & Fletcher-Wood, 2021). These sources frame improvement as a continuing inquiry, while the classroom data determine the findings reported below.

METHODS

Design, setting, and participants

The study used classroom action research organized around planning, action, observation, and reflection. Two cycles were implemented, with two meetings in each cycle. Participants were the 22 students in class XI IPS 2 at SMA Negeri 1 Pasie Raja, South Aceh Regency, Aceh, Indonesia: 15 girls and seven boys. This was an existing class, rather than a randomly selected sample or a group randomly assigned to a treatment.

The original manuscript contains conflicting descriptions of timing and history topics. It identifies the first semester of the 2020/2021 academic year but also gives August–October 2021. Its abstract assigns the Japanese occupation to Cycle I and the proclamation of independence to Cycle II, whereas its methods assign Western colonial rule to Cycle I and the Japanese occupation to Cycle II. These details require confirmation from the teaching records. The analysis consequently refers to Cycle I and Cycle II without selecting an unverified calendar or topic sequence.

The locally defined MIKIR intervention

The intervention combined four components. First, instruction used online and offline routes. Students with suitable access obtained materials through a teacher-managed blog, commented on tasks there, and sent answers through WhatsApp. Students without suitable access received worksheets and textbooks through the 4M arrangement. Second, assignments emphasized contextual and useful learning, including questions intended to encourage explanation. Third, students and parents provided reflection through blog comments or printed forms. Fourth, arrangements were adapted to household resources and the circumstances of students and parents.

For offline learning, the homeroom teacher arranged small groups of students living near one another, with an intended group size of three. The manuscript does not provide a complete group allocation for the 22 students. School personnel delivered materials, monitored learning, and collected completed worksheets. Students generally had one week to work on assignments, with

collection and reflection at the end of the week. This description retains the reported procedure without assuming that every student followed the same delivery route throughout the study.

The principal organized communication with teachers and parents and supervised learning at home. The subject teacher prepared materials, selected accessible media, answered questions, and reviewed work. Parents helped organize learning and communicated difficulties to the school. The 4M team supplied information about delivery and completion problems. These responsibilities formed part of the intervention; their individual contributions were not evaluated separately.

Action and reflection across cycles

Cycle I implemented the initial blog and worksheet arrangements. Reflection identified unfamiliar assignment formats, unclear directions, repetitive tasks, and delays in delivering printed worksheets. The teacher responded in Cycle II by providing tutorials and assignment infographics, varying materials using tools such as Powtoon, Canva, and Bandicam, and introducing contextual tasks related to the pandemic. Offline provision continued, with stronger coordination among parents, the school committee, homeroom teachers, and the subject teacher.

The additions were made as part of a combined classroom strategy. No separate comparison isolated the effect of the tutorials, the visual materials, the offline delivery system, or parental coordination. Interpretation therefore concerns the overall sequence of classroom changes.

Data sources and analysis

Data consisted of assignment participation records, observations and monitoring reports, student and parent reflection forms, and summarized achievement results. On-time and late participation were distinguished according to the school's assignment schedule. The principal quantitative participation indicator was the number of students submitting or participating on schedule. Achievement was summarized using the score bands supplied in the manuscript, meeting means, and the number reaching the minimum mastery criterion, or KKM, of 75.

Percentages were calculated as the reported number of students divided by the class size of 22, multiplied by 100. Meeting-specific figures were retained separately. A final-meeting value was not relabeled as a cycle average. The initial 53.96% combines on-time and late participation and therefore cannot serve as a directly equivalent baseline for final on-time participation.

The available evidence does not include complete individual scores, test items, reliability estimates, a standardized engagement scale, or a comparison class. Descriptive analysis was used;

no significance test, causal effect, or individual-level correlation was calculated. Source aggregates that cannot be reconciled with their component figures are explicitly identified in Table 3. Dates, topic assignments, and conflicting nonparticipation counts also require verification before publication.

RESULTS AND DISCUSSION

Changes in recorded participation

Table 1 presents on-time and late participation at the four meetings. On-time participation increased from five to eight students in Cycle I and from 18 to 20 students in Cycle II. Comparing the second meeting of each cycle, the increase was 12 students, from 36.36% to 90.91%, or 54.55 percentage points. Late participation decreased from ten students to two, equivalent to 45.45% and 9.09%, respectively. These are meeting-specific comparisons, rather than cycle averages.

Table 1. Recorded participation by meeting (N = 22)

Cycle	Meeting	On time, n (%)	Late, n (%)
I	1	5 (22.73)	12 (54.55)
I	2	8 (36.36)	10 (45.45)
II	1	18 (81.82)	2 (9.09)
II	2	20 (90.91)	2 (9.09)

Source: Participation counts in the original narrative; percentages recalculated as n/22 × 100. Nonparticipation is omitted because the source gives conflicting totals, including one nonparticipant at the final meeting despite 20 on-time and two late participants.

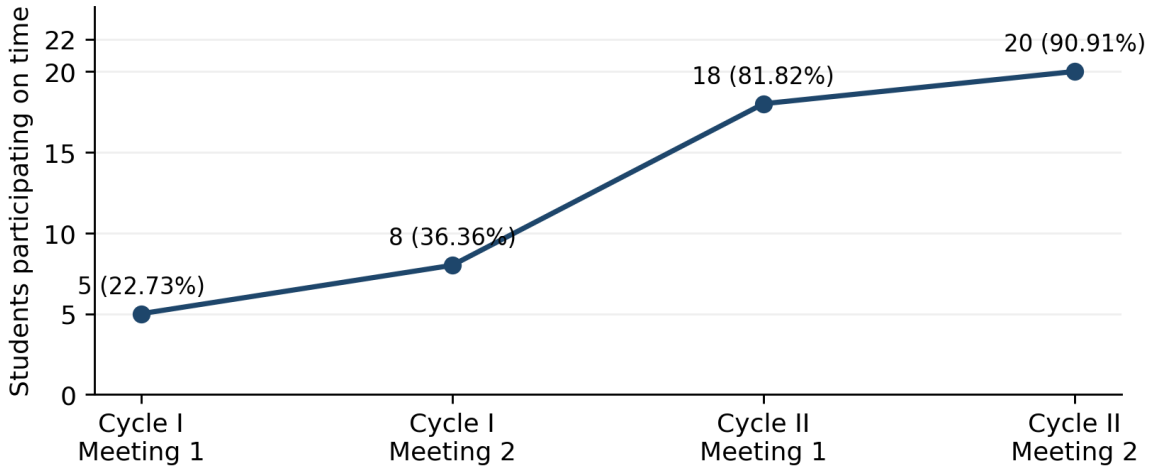


Figure 1. On-time participation across the four meetings.

Source: Counts reported in the original results narrative. Percentages were recalculated using N = 22. The figure presents meeting-specific observations, not cycle averages.

The pattern indicates greater alignment with the assignment schedule in the later meetings. Nevertheless, on-time completion does not reveal how deeply students understood the historical material or whether their interest increased. The distinctions proposed in research on online engagement are relevant here: completing tasks is evidence of behavioral participation, while cognitive and emotional engagement require additional indicators (T. K. F. Chiu, 2022).

Nonparticipation cannot be summarized consistently from the supplied narrative. At the final meeting, the reported 20 on-time participants and two late participants already account for all 22 students, yet other passages report one nonparticipant. The original baseline pie-chart labels also sum to 102%. These conflicts prevent reliable comparison of the original nonparticipation percentages; they are not resolved by estimating values from chart heights.

History achievement across the meetings

Table 2 consolidates the score distributions and meeting means from the two original achievement tables. Each meeting's score-band counts, including students without a recorded score, totals 22. The number reaching a score of at least 75 increased from 14 at the first meeting to 20 at the final meeting. At the second meeting of Cycle I, 17 students reached mastery; at the second meeting of Cycle II, 20 students did so, corresponding to 77.27% and 90.91%.

Table 2. Reported history achievement at each meeting

Indicator	Cycle I, M1	Cycle I, M2	Cycle II, M1	Cycle II, M2
Score ≥ 91, n	2	4	3	5
83 ≤ score < 91, n	4	5	5	7
75 ≤ score < 83, n	8	8	9	8
Score < 75, n	3	1	3	2
No recorded score, n	5	4	2	0
Reported meeting mean	57.11	66.45	83.05	84.70
Students reaching KKM ≥ 75, n	14	17	17	20
Mastery, % of all 22 students	63.64	77.27	77.27	90.91

Source: Original Cycle I and Cycle II achievement tables. M1 = Meeting 1; M2 = Meeting 2. Count-based percentages are recalculated using N = 22. The treatment of missing scores in the reported meeting means was not specified.

The meeting means were reported as 57.11 and 66.45 in Cycle I and 83.05 and 84.70 in Cycle II. The available record does not explain whether students without a score were excluded

from the mean or assigned another value. Consequently, the means should not be used to infer the average growth of the same set of individually scored students. The final distribution, however, records scores for every student and places two students below the mastery threshold.

The cycle and overall averages in the original manuscript require separate treatment. Table 3 retains those reported figures and distinguishes them from arithmetic that can be checked using the meeting summaries. In particular, the reported Cycle II mean of 83.73 does not equal the simple mean of 83.05 and 84.70, which is 83.875. The reported 88.58% cannot be reproduced as the mean of the final-meeting mastery proportions. Neither figure is used as the principal outcome in the revised abstract or conclusion.

Table 3. Verification of cycle and overall aggregates

Aggregate	Original reported value	Verification or interpretation
Cycle I mean	61.78	Matches (57.11 + 66.45)/2 = 61.78.
Cycle II mean	83.73	Does not match the simple meeting mean: (83.05 + 84.70)/2 = 83.875, rounded to 83.88. Weighting or original scores needed.
Overall mean across cycles	72.75	The mean of the reported cycle values is 72.755. Aggregation and rounding need confirmation. This is not the final meeting mean.
Cycle I mastery summary	77.27%	Matches 17/22 at Meeting 2; is not the mean of the two meeting proportions.
Cycle II mastery summary	88.58% in Table 2; 90.90% in Table 3	Final meeting count is 20/22 = 90.91%. Neither original value is a verified two-meeting average.
Overall mastery summary	88.58%	Cannot be reproduced as the mean of the two final-meeting proportions, which is 84.09%. Original calculation needed.

Source: Original cycle and summary tables. Recalculations are arithmetic checks of reported aggregates, not replacement estimates from individual student data. Unresolved aggregates require confirmation before publication.

Interpreting the classroom changes

The reflection records suggest that clearer directions addressed an immediate participation barrier. Students initially found the blog tasks and worksheets unfamiliar or difficult to understand. The later tutorials and infographics provided more explicit guidance. This interpretation is consistent with multimedia design and cognitive load research, which provides a rationale for organizing explanations around essential steps (Noetel et al., 2022; Sweller, 2020). The study did not measure cognitive load, so this remains a plausible explanation of the reported experience.

Maintaining printed materials provided an instructional route for students who could not depend on online access. Evidence about family resources and learning at home supports the importance of such access arrangements (Chifari et al., 2021; Garbe et al., 2020). In this class, however, the school did not report separate outcomes for online and offline participants. The results therefore cannot establish that one route was superior or quantify the contribution of the 4M system independently.

Contextual assignments and varied presentation may also have encouraged task completion. Motivation theory offers a useful interpretation of activities that help students understand the purpose of a task and experience competence (Ryan & Deci, 2020). Generative learning research further suggests that the value of an assignment depends on the explanations students construct, not only its visual presentation (Fiorella, 2023). The teacher's report supports continued use of clear and relevant tasks, but it does not document a measured change in motivation or historical reasoning.

Coordination appears central to implementation. The reflection process involved teachers, families, and the 4M team, and Cycle II strengthened communication among these participants. Research on parent–teacher relationships during remote learning and school leadership in disruptive conditions provides a relevant context for this interpretation (Gershy & Katz, 2023; Harris & Jones, 2020). The evidence supports describing coordinated provision as part of the strategy, while avoiding claims about the effectiveness of any one participant's role.

Limitations and implications

The study concerns one class and a combined intervention across two cycles. Changes may reflect clearer instructions, additional practice, improved familiarity with delivery arrangements, differences between history topics, or other conditions that were not controlled. The design cannot separate these influences. Missing details about assessment, scoring denominators, and cycle aggregation further limit interpretation of the achievement means.

The conflicting dates, topic sequence, and participation aggregates should be checked against attendance records, worksheets, and the original scoring spreadsheet. Future implementations should record the learning route used by each student, actual delivery dates, assignment deadlines, reasons for lateness, and comparable assessment results. Student explanations and reflection responses could supplement completion counts, helping distinguish access, behavioral participation, and learning.

CONCLUSION AND RECOMMENDATIONS

The locally defined MIKIR strategy was associated with improved recorded participation in history learning among 22 students at SMA Negeri 1 Pasie Raja during pandemic-related learning at home. At the second meeting of Cycle I, eight students participated on schedule; at the second meeting of Cycle II, 20 did so. Late participation decreased from ten to two students. At the final meeting, 20 of 22 students reached the mastery score of 75, and every student had a recorded achievement score.

The classroom experience suggests the practical value of combining accessible online materials with printed provision, clarifying assignment instructions, using contextual activities, and incorporating reflection with students and parents. These findings support continued classroom improvement; they do not establish that MIKIR alone caused the changes. The reported cycle averages, initial participation categories, nonparticipation totals, calendar, and topic sequence require confirmation from original records.

Teachers should preserve an accessible route for each student, provide clear instructions through both delivery modes, and review participation and learning separately. School leaders should support timely material distribution and regular communication with families. Subsequent studies should use complete individual records, explicit scoring rules, and comparable assessments to evaluate the strategy more precisely.

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