

Training on the Use of Google Classroom Platform to Strengthen Digital Learning Management at MIS Lubbul Labib Kedungsari Maron Probolinggo

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Abstract— *This community service project aimed to strengthen the digital learning management capacity of teachers at MIS Lubbul Labib, Kedungsari, Maron, Probolinggo, through targeted training on the use of Google Classroom. Initial assessments identified several key issues: low digital literacy among teachers, limited access to devices, and the absence of institutional policies supporting digital learning. To address these challenges, the program applied a participatory approach involving planning, training, and mentoring phases. The training introduced core features of Google Classroom and its integration with Google Docs, Forms, Meet, and Drive. Using a hands-on, learning-by-doing model, teachers actively practiced managing digital classes. More experienced teachers were also empowered as peer mentors. Evaluation was conducted through formative observation and a summative assessment involving surveys, interviews, and analysis of teachers' digital classroom outputs. Results showed significant improvements in teachers' technical skills, confidence, and consistency in using Google Classroom for lesson planning, task distribution, and assessment. Moreover, the school began drafting internal policies to institutionalize digital learning practices. This program demonstrates that with participatory methods and contextualized support, even schools in rural areas can move toward sustainable digital transformation in education.*

Keywords— *Google Classroom, digital learning management, educational technology.*

1 Introduction

The rapid advancement of information and communication technology (ICT) over recent decades has profoundly impacted various aspects of life, including the education sector. As societal demands continue to evolve dynamically, the digitalization of education has emerged as an urgent necessity. This transformation gained unprecedented momentum during the COVID-19 pandemic, which compelled educational institutions across the globe to adopt online learning systems. Amid this crisis, digital technologies did not merely serve as an alternative; they became essential pillars ensuring the continuity of teaching and learning processes. This shift has catalyzed a broader reform movement within education systems, promoting the development of learning environments that are more flexible, accessible, and technology-driven. The experience has highlighted the potential of digital tools to support sustainable education while simultaneously revealing structural gaps that must be addressed to build resilient and adaptive educational infrastructures for the future.

In the realm of digital learning, Google Classroom has emerged as one of the most widely adopted Learning Management Systems (LMS) on a global scale. This platform facilitates the organization of instructional materials, the distribution of assignments, the monitoring of student

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progress, and the implementation of digital assessments with relative ease. Its user-friendly interface and integrated functionalities have positioned it as a valuable tool for enhancing the effectiveness of classroom management and fostering active learning environments.[1]. Moreover, its seamless integration with complementary services such as Google Drive, Google Docs, Google Meet, and Google Forms enables educators and learners to cultivate a collaborative, well-structured, and comprehensively documented learning ecosystem. This interoperability not only streamlines instructional processes but also supports the creation of flexible and interactive pedagogical experiences aligned with the demands of 21st-century education.[2].

Despite the considerable potential offered by digital learning platforms, the reality on the ground reveals that many educational institutions, particularly those located in peripheral or rural areas, lack the capacity to adopt educational technologies effectively[3]. This issue is evident in the case of Madrasah Ibtidaiyah Swasta (MIS) Lubbul Labib, a primary-level Islamic school situated in Kedungsari Maron Probolinggo, East Java. Preliminary observations and interviews with school stakeholders indicate that MIS Lubbul Labib continues to face multiple and interrelated challenges in implementing a digital learning system. These include limited technological infrastructure, insufficient digital literacy among teachers, and an absence of institutional policies supporting the integration of digital platforms into the teaching and learning process. This situation underscores the need for targeted interventions and capacity-building initiatives to bridge the digital divide and ensure equitable access to quality education in underserved areas.

One of the major challenges identified is the low level of digital literacy and skills among teachers. The lack of adequate training opportunities and limited access to online learning resources have resulted in a general unfamiliarity with platforms such as Google Classroom. Teachers tend to rely on traditional instructional methods and have limited experience in integrating digital tools into their teaching practices. Furthermore, the management of instructional activities at the institution remains largely manual, encompassing lesson planning, content delivery, and student assessment. This reliance on conventional systems leads to inefficiencies in administrative processes and contributes to the poor quality of academic documentation, ultimately hindering the development of a modern, responsive learning environment[4].

The absence of institutional operational policies that explicitly support the integration of digital platforms into the instructional system of the madrasah has significantly hindered the advancement of digital learning practices. Current efforts to adopt educational technology remain fragmented and heavily reliant on individual teacher initiatives, lacking systemic and coordinated support. Moreover, essential infrastructure—including access to computers, laptops, and institutional Google Workspace for Education accounts—is still critically limited. This disparity exacerbates the gap between the promising potential of digital learning technologies and the actual capacity available on the ground, thereby restricting the implementation of sustainable and equitable digital education solutions.

This community engagement initiative was designed to address two primary objectives: enhancing teachers' competencies at MIS Lubbul Labib in utilizing Google Classroom as a tool for digital learning management, and formulating strategic measures for its sustainable integration into the madrasah's instructional system. A participatory and collaborative approach was adopted, emphasizing hands-on technical training, guided simulations, the development of operational guideline documents, and continuous mentoring. Each phase of the program was intentionally structured to not only build individual teacher capacity but also to foster institutional transformation toward a digitally adaptive madrasah. The overarching goal was to cultivate a sustainable digital learning ecosystem that aligns with evolving technological demands while remaining responsive to the unique contextual needs of the educational institution.

2 Method

The implementation of this community engagement initiative employed a Participatory Action Research (PAR) approach, a methodology that integrates systematic inquiry with transformative action by actively involving the target community throughout all stages of the process—from problem identification and needs assessment to solution development and reflective evaluation. This approach was selected for its alignment with the empowerment-oriented objectives of the program, particularly in strengthening the pedagogical and digital capacities of teachers at MIS Lubbul Labib.

Given the complex and context-specific challenges surrounding the transition to technology-based learning systems, the PAR framework offered a collaborative and inclusive strategy to facilitate institutional change, ensuring that interventions were not only contextually relevant but also co-owned by the stakeholders involved.

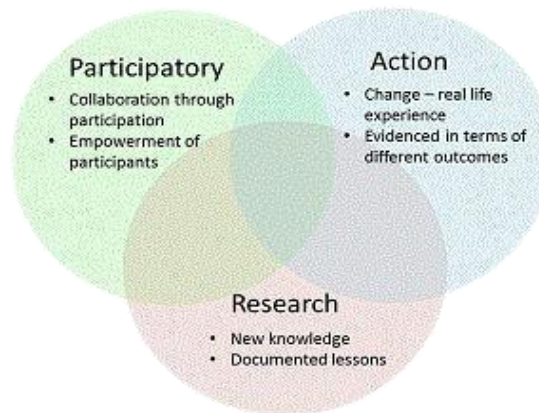


Fig. 1. The multiple linked facets of participatory action research

2.1 Planning Stage

During the planning phase, the community engagement team collaborated closely with teachers and school leadership to identify core challenges through direct observation and semi-structured interviews. The findings revealed that the primary obstacles to effective adoption of Google Classroom at MIS Lubbul Labib included low levels of digital literacy among teachers, limited access to technological devices, and the absence of institutional policies supporting digital learning. Despite these challenges, several local assets were identified, such as the presence of younger teachers with basic technological familiarity, access to personal internet connections, and strong support from the school principal for digital transformation initiatives. Based on these insights, the team and the school stakeholders jointly formulated a needs-based plan of action. The planned activities included training sessions on Google Classroom usage, hands-on practice in managing digital classrooms, the integration of Google Forms for assessment, and the development of standard operating procedures to guide implementation. This collaborative process not only produced a structured roadmap for intervention but also fostered a shared sense of ownership and commitment across the school community toward embracing digital change.

2.2 Implementation Stage

The implementation phase centered on intensive and incremental teacher training and mentoring, aimed at building practical competencies in digital classroom management. The program commenced with an introduction to the basic features of Google Classroom, followed by hands-on sessions where participants created and managed digital classes under the guidance of the facilitation team. Employing a learning-by-doing approach, teachers engaged in experiential learning while simultaneously exploring the platform's functionalities. Collaborative learning was encouraged through peer sharing of tips and experiences, fostering a supportive environment that enhanced both individual confidence and collective capability. The training also covered the integrated use of complementary Google tools—such as Google Docs for collaborative assignments, Google Meet for virtual instruction, and Google Drive for centralized file storage—to ensure a cohesive adoption of the Google ecosystem. Teachers with advanced digital proficiency were encouraged to act as peer mentors, reinforcing horizontal learning within the group. In parallel with the technical training, the facilitation team supported the development of a draft Standard Operating Procedure (SOP) tailored to the specific conditions and resource availability of the madrasah, ensuring the sustainability and institutionalization of the digital learning practices introduced.



Fig. 2. Training to strengthen digital learning management using the Google Classroom platform

2.3 Evaluation Stage

The evaluation process employed a dual approach comprising formative and summative assessments. Formative evaluation was conducted throughout the training sessions to monitor participant engagement, identify emerging challenges, and provide immediate feedback aimed at improving the ongoing learning experience. This continuous monitoring allowed facilitators to adjust instructional strategies in real time, ensuring relevance and responsiveness to participants' needs. Upon completion of the program, a summative evaluation was carried out to assess overall outcomes and impact. This included the administration of structured questionnaires to participating teachers, in-depth interviews with the head of the madrasah, and an evaluation of the digital classroom management outputs produced by the teachers. The summative phase focused on measuring the effectiveness of the intervention in enhancing digital competencies, the practical application of acquired skills, and the readiness of the institution to sustain digital learning practices independently.

3 Result And Discussion

3.1 Result

The training and mentoring program on the utilization of Google Classroom at MIS Lubbul Labib yielded tangible positive outcomes in enhancing teachers' capacity for digital learning management. Throughout the implementation process, teachers demonstrated notable enthusiasm and active engagement, not only in participating in technical training sessions but also in hands-on practice with digital classroom management. Their involvement extended to the development of essential instructional documents, reflecting a growing competence and confidence in adopting digital tools to support and structure the teaching and learning process.

The evaluation results indicated a substantial improvement in teachers' comprehension and proficiency in utilizing the core features of Google Classroom. Educators demonstrated the ability to create and manage virtual classrooms, distribute instructional materials, assign and collect student tasks, and conduct assessments through the integration of Google Forms. Moreover, there was a marked increase in the teachers' confidence in using Google Meet to facilitate synchronous online sessions and Google Docs to support collaborative student activities. This progress reflects not only enhanced technical skills but also a growing adaptability to digital pedagogical practices.

One of the key outcomes of the program was the development of a draft Standard Operating Procedure (SOP) for the implementation of Google Classroom, tailored to the specific needs and contextual realities of the madrasah. This draft served as an initial guideline to facilitate the consistent and sustainable integration of digital technologies into the teaching and learning process. Additionally, the initiative prompted a strategic response from the school leadership, including a commitment to institutionalize the training as an annual professional development program and to formulate supporting policies that advance the broader agenda of digital transformation within the institution.

Table 1. Summary of Google Classroom Training Outcomes at MIS Lubbul Labib

Activity Aspect	Before the Program	After the Program
Teachers' Digital Literacy	Low, with most teachers unfamiliar with LMS platforms	Improved, teachers can independently manage Google Classroom
Use of Google Apps	Limited to basic information searching	Integrated use: Docs, Forms, Meet, and Drive actively utilized
Classroom Management	Manual, lacking digital documentation	Digitized, more efficient, and systematically documented
Digital Learning Policy	Non-existent	Drafted SOP and internal policy plan have been developed
Sustainability Initiative	Absent	The school is committed to continuing the program as an annual training initiative

The training program on the utilization of Google Classroom at MIS Lubbul Labib resulted in notable improvements in the management of digital learning practices. Prior to the intervention, teachers generally exhibited low levels of digital literacy and lacked familiarity with Learning Management System (LMS) platforms. However, following the training, there was a marked enhancement in their competencies. Teachers were able to independently create and manage digital classrooms, distribute instructional materials, assign and monitor student tasks, and conduct online assessments effectively using Google Classroom. This shift indicates a substantial progression toward the integration of digital tools in everyday pedagogical routines, demonstrating both individual capacity building and the institutional readiness to adopt technology-enhanced learning environments.

Prior to the intervention, the use of Google applications at the madrasah was limited primarily to basic functions such as information retrieval and email communication. However, following the implementation of the training program, teachers began to integrate a broader range of Google tools—including Google Docs, Google Forms, Google Meet, and Google Drive—into their instructional processes. This integration facilitated a more collaborative, flexible, and well-documented learning environment. The transition from manually managed, poorly documented classroom activities to a more systematic and efficient digital management system marked a significant shift in pedagogical practices, reflecting a growing capacity for and commitment to technology-driven education.

At the institutional level, the initiative catalyzed the development of a draft Standard Operating Procedure (SOP) tailored to regulate the use of digital platforms in alignment with the specific characteristics and available resources of the madrasah. Previously lacking a clear digital policy direction, the institution began to demonstrate a strengthened commitment to digital transformation by positioning the training as an annual capacity-building program and formulating a comprehensive strategy for the systematic integration of digital technologies into its educational framework.

This initiative not only enhanced teachers' technical competencies but also fostered a heightened institutional awareness and commitment toward the imperative of digital transformation within the educational system. The outcomes demonstrate that a community-based participatory approach, rooted in Participatory Action Research (PAR), can effectively drive inclusive and sustainable change that is responsive to local needs. By engaging stakeholders in every phase of the process—from problem identification to action planning and implementation—the initiative cultivated a sense of ownership and reinforced the relevance of context-sensitive strategies in shaping educational reform.

3.2 Discussion

The outcomes of the Google Classroom training program at MIS Lubbul Labib underscore the effectiveness of the Participatory Action Research (PAR) approach in fostering both individual teacher competency and the development of a participatory, context-responsive digital learning system. This approach positioned teachers not merely as passive recipients of training but as active agents of educational transformation, deeply engaged from the planning to the evaluation stages. Their involvement in co-designing and co-executing the program fostered a strong sense of ownership and accountability, enabling the cultivation of locally grounded strategies for digital

integration. As a result, the process not only enhanced technical proficiency but also strengthened institutional readiness for sustained innovation in teaching and learning practices.[1][5].

The implementation of a learning-by-doing approach proved instrumental in enhancing teachers' practical understanding and operational proficiency in utilizing Google Classroom. Rather than relying solely on theoretical instruction, this hands-on methodology enabled educators to engage directly with the platform's core features, such as classroom creation and assignment management, in real time. Furthermore, the training facilitated the seamless integration of Google Classroom with complementary digital tools—including Google Docs, Google Drive, Google Meet, and Google Forms—thereby cultivating a more collaborative, interactive, and efficient digital learning ecosystem. This integrated approach not only improved teachers' technical skills but also fostered pedagogical adaptability, empowering them to create more engaging and well-structured online learning environments.[6][7].

The support of the school principal, the active involvement of digitally literate young teachers, and access to personal internet connectivity represent critical forms of social capital that significantly contribute to the success of digital transformation initiatives. The Asset-Based Community Development (ABCD) approach underscores that meaningful and sustainable educational reform does not necessarily depend on external resources, but rather on the strategic mobilization and optimization of existing local assets. By leveraging internal strengths and community-based capabilities, institutions can foster resilient and contextually relevant innovations in digital education, even in resource-constrained settings.[4][8].

Institutionally, this initiative catalyzed a growing awareness among school management regarding the strategic importance of establishing digital policies that support technology-enhanced learning. The development of a draft Standard Operating Procedure (SOP) and the formulation of an annual internal training agenda represent tangible outcomes that signal the strengthening of institutional capacity. These efforts align with best practices in the integration of ICT in education, where the presence of clear operational guidelines and sustained professional development frameworks is considered essential for ensuring the continuity and scalability of digital transformation within educational settings.[9].

The combined implementation of formative and summative evaluations revealed a marked improvement in teachers' competencies in managing digital classrooms. These findings underscore the effectiveness of practice-oriented training models that incorporate peer mentoring as a core component of professional development. By engaging teachers in hands-on learning experiences and fostering collaborative knowledge exchange, the intervention successfully cultivated sustainable skill enhancement and pedagogical confidence. This approach demonstrates particular efficacy in promoting long-term behavioral change in instructional practices, especially in contexts where prior exposure to educational technology is limited.[8][10].

The Participatory Action Research (PAR) approach fosters simultaneous reflection and collective action, creating an enabling environment for both individual behavioral transformation and the cultivation of a collaborative institutional culture. This methodology not only empowers educators to engage actively in the innovation process but also strengthens their sense of ownership over the changes implemented.[11]. By positioning teachers as peer facilitators, the approach promotes horizontal learning structures that accelerate technological adaptation within the educational community, particularly by leveraging shared experiences and mutual support to overcome resistance and enhance professional confidence in digital practices.[12].

Nevertheless, infrastructural challenges, particularly the limited availability of hardware, remain a critical barrier to the full realization of digital integration in educational settings. Addressing this issue is essential, as the provision of adequate technological resources constitutes a foundational prerequisite for the effective implementation of ICT-based pedagogical models. Moving forward, strategic institutional strengthening should prioritize the development of supportive digital policies that institutionalize continuous professional training and ensure equitable access to necessary infrastructure. Such measures are pivotal to fostering a sustainable ecosystem for digital learning, particularly in under-resourced educational contexts.[8][11].

This initiative offers a critical insight that digital transformation in primary education within peripheral areas is indeed attainable when driven by participatory methodologies, local asset mobilization, and community empowerment. Such an approach ensures that interventions are contextually grounded, culturally relevant, and socially inclusive, thereby fostering greater ownership and long-term sustainability. The outcomes align with global educational development

agendas that emphasize inclusivity, equity, and resilience, reinforcing the imperative of leveraging local strengths and collaborative engagement to bridge digital divides in underserved educational environments.[13].

4 Conclusion

This community engagement initiative has yielded tangible outcomes in enhancing the digital teaching capacities of educators at MIS Lubbul Labib through the effective integration of Google Classroom. Employing a Participatory Action Research (PAR) framework, the program successfully facilitated active involvement from both teachers and school leaders throughout its planning, implementation, and evaluation phases. The findings reveal substantial improvements in teachers' digital competencies, particularly in creating virtual classrooms, distributing assignments, conducting assessments using Google Forms, and utilizing Google Meet and Google Drive as integral components of an online learning ecosystem.

Beyond individual skill development, the initiative also fostered a growing institutional awareness of the necessity for digital transformation. The formulation of a draft Standard Operating Procedure (SOP) and a roadmap for ongoing training represent foundational steps toward a more structured and sustainable digital learning management system. Moreover, the emphasis on leveraging local assets enabled the madrasah to harness internal capacities, thereby reducing dependency on external resources for its digitalization process.

The outcomes underscore that strengthening digital teaching capacities within religious primary education settings can be achieved effectively through collaborative, context-sensitive, and community-empowerment-based approaches. This transformation lays a critical foundation for developing a more adaptive, inclusive, and technologically responsive madrasah education system, capable of meeting the demands of contemporary educational paradigms.

5 References

- [1] A. Suparman, S. Danim, N. Nirwana, M. Kristiawan, and E. Susanto, "The Effect of Using Google Classroom and Whatsapp Applications on Learning Activities," *Educ. Q. Rev.*, vol. 5, no. 1, 2022, doi: 10.31014/aior.1993.05.01.434.
- [2] N. Rosita, U. N. Padang, S. Saun, and S. Mairi, "Google Classroom for Hybrid Learning in Senior High School," *J. Learn. Teach. Digit. Age*, vol. 5, no. 1, pp. 35–41, 2019, [Online]. Available: <http://www.staloysiusla.org/academics/lmu-ideal->
- [3] M. Keshavarz, Z. Mirmoghtadaie, and S. Nayyeri, "Design and Validation of the Virtual Classroom Management Questionnaire," *Int. Rev. Res. Open Distrib. Learn.*, vol. 23, no. 2, pp. 120–135, 2022, doi: 10.19173/irrodl.v23i2.5774.
- [4] B. A. Martin, "Teachers Perceptions of Google Classroom," *Can. J. Learn. Technol.*, vol. 47, no. 1, pp. 1–16, 2021.
- [5] M. Polat, "A Case Study of Preservice Teachers' Classroom Management Dilemma in a Climate of Uncertainty during the COVID-19 Pandemic," *Int. J. Educ. Lit. Stud.*, vol. 10, no. 1, p. 90, 2022, doi: 10.7575/aiac.ijels.v.10n.1p.90.
- [6] A. B. Medina, "Utilization of Learning Management System (LMS) and Teachers' Perceived Performance in the Online Learning Modality: A Linear Regression Analysis," *La Consolat. Univ. Philipp.*, no. July, pp. 1–23, 2016.
- [7] J. Moonma, "Google Classroom: Understanding EFL Students' Attitudes towards Its Use as an Online Learning Platform," *English Lang. Teach.*, vol. 14, no. 11, p. 38, 2021, doi: 10.5539/elt.v14n11p38.
- [8] M. H. Lin, "The construction of an English composition MOOC using Google Classroom," *JALT CALL J.*, vol. 17, no. 3, pp. 277–297, 2021, doi: 10.29140/JALTCALL.V17N2.384.
- [9] C. S. Santiago Jr, M. P. Leah Ulanday, Z. R. Jane Centeno, M. D. Cristina Bayla, and J. S. Callanta, "Flexible Learning Adaptabilities in the New Normal: E-Learning Resources, Digital Meeting Platforms, Online Learning Systems and Learning Engagement," *Asian J. Distance Educ.*, vol. 16, no. 2, p. 38, 2021, [Online]. Available: <http://www.asianjde.com/>.

- [10] E. Susanto, R. N. Sasongko, M. Kristiawan, N. Nipriansyah, and P. Purdiyanto, "Constraints of Online Learning Using Google Classroom During Covid-19," *Educ. Q. Rev.*, vol. 4, no. 2, 2021, doi: 10.31014/aior.1993.04.02.201.
- [11] S. Wahyuni, F. Etfita, and N. Alkhaira, "Students' preferences and challenges in learning English fully online with Google Classroom," *J. Educ. Learn.*, vol. 16, no. 2, pp. 244–253, 2022, doi: 10.11591/edulearn.v16i2.20496.
- [12] D. Wiwin, U. W. Utami, and T. Taris, "Digital Media and Its Implication in Promoting Students' Autonomous Learning," *JET (Journal English Teaching)*, vol. 8, no. 1, pp. 97–106, 2022, doi: 10.33541/jet.v8i1.3284.
- [13] K. Alharbi and L. Khalil, "A Descriptive Study of EFL Teachers' Perception toward E-learning Platforms during the Covid-19 Pandemic," *Electron. J. e-Learning*, vol. 20, no. 4, pp. 336–359, 2022, doi: 10.34190/ejel.20.4.2203.

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