ZAHRA: Research And Tought Elementary School Of Islam Journal
Volume 7, Number 2, August 2026, pp. 253-278
P-ISSN: 2723-4932 E-ISSN: 2723-7893



Exploring Teachers' Strategies in Using Simple Instructional Media to Support Students' Learning Independence in Multigrade Classrooms at Madrasah Ibtidaiyah

Zaenol Fajri[1], Izzatu Alvin Nisa'[2]
[1,2] Universitas Nurul Jadid, Probolinggo, Indonesia

ARTICLE INFO

Article history:
Received July 29, 2026
Revised August 25, 2026
Accepted September 28, 2026
Available online November 10, 2026

Kata Kunci:
Pembelajaran kelas rangkap; media pembelajaran sederhana; strategi guru; kemandirian belajar; madrasah.

Keywords:
Multigrade classroom; simple learning media; teachers' strategies; learning independence; madrasah.

This is an open access article under the CC BY-SA license.

Copyright © 2026 by Author. Published by Program Studi Pendidikan Guru Madrasah Ibtidaiyah

ABSTRAK

Penelitian ini mengkaji strategi guru dalam memanfaatkan media pembelajaran sederhana untuk mendukung kemandirian belajar siswa pada pembelajaran kelas rangkap di Madrasah Ibtidaiyah. Keterbatasan fasilitas pembelajaran menuntut guru mengembangkan pendekatan adaptif melalui optimalisasi sumber belajar yang tersedia. Penelitian ini bertujuan mengeksplorasi strategi pemilihan dan penggunaan media sederhana, implementasinya dalam pembelajaran kelas rangkap, tantangan yang dihadapi, serta kontribusinya terhadap kemandirian belajar siswa. Penelitian menggunakan pendekatan kualitatif dengan desain studi kasus di MI Mambaul Falah Bondowoso. Data dikumpulkan melalui observasi kelas, wawancara mendalam, dan dokumentasi dengan melibatkan guru, siswa, dan kepala madrasah. Analisis data menggunakan model interaktif Miles dan Huberman melalui reduksi data, penyajian data, dan penarikan kesimpulan. Hasil penelitian menunjukkan bahwa guru menerapkan strategi kontekstual melalui pemanfaatan kertas bekas, lembar kerja siswa, kartu soal, dan media visual yang disesuaikan dengan tujuan pembelajaran serta kebutuhan siswa. Penggunaan media tersebut membantu pengelolaan dua kelompok kelas secara bersamaan dan memberikan kesempatan kepada siswa untuk menyelesaikan tugas dengan ketergantungan yang lebih rendah terhadap bantuan langsung guru. Kendala utama meliputi keterbatasan waktu dan bahan pembelajaran serta perbedaan kemampuan siswa dalam memahami instruksi. Kemandirian belajar tercermin melalui kemampuan menyelesaikan tugas, mengikuti instruksi, menunjukkan kepercayaan diri, dan berpartisipasi aktif. Penelitian ini menegaskan bahwa optimalisasi media sederhana dapat mendukung pembelajaran kelas rangkap yang adaptif dan mendorong kemandirian belajar siswa di tengah keterbatasan sumber daya pendidikan.

ABSTRACT

This study examines teachers' strategies for utilizing simple instructional media to support students' learning independence in multigrade classrooms at Madrasah Ibtidaiyah. Limited instructional facilities require teachers to develop adaptive approaches by optimizing available learning resources. This study explores teachers' strategies in selecting and implementing simple media, the challenges encountered, and their contribution to students' learning independence. A qualitative case study design was employed at MI Mambaul Falah Bondowoso, Indonesia. Data were collected through classroom observations, in-depth interviews, and documentation, involving teachers, students, and the head of the madrasah. Data analysis followed the Miles and Huberman interactive model, comprising data reduction, data display, and conclusion drawing. The findings reveal that teachers employed contextual strategies by utilizing recycled paper, worksheets, question cards, and visual materials according to learning objectives and students' needs. These media facilitated the simultaneous management of different grade levels and provided opportunities for students to complete tasks with less direct teacher assistance. However, implementation was constrained by limited instructional time and materials, as well as differences in students' abilities to understand instructions. Students demonstrated learning independence through task completion, following instructions, self-confidence, and active participation. The study highlights that creatively utilizing simple instructional media can support adaptive multigrade learning and strengthen students' independence in resource-constrained educational settings..

*Corresponding author.
E-mail addresses: Zaenol Fajri (alfajri002@unuja.ac.id)

INTRODUCTION

In the current digital era, teachers' strategies for utilizing learning media have become increasingly important in supporting students' learning independence (Arif et al., 2025; Arimbawa et al., 2025)Technological developments have transformed students' learning patterns from being previously dependent on teachers toward greater independence and flexibility (Mahmud, 2024; Suarmita et al., 2025). However, not all educational institutions have access to advanced technologies, requiring teachers to be creative in utilizing simple and accessible learning media (Ekosantoso et al., 2025; Lillihata et al., 2023; Suarmita et al., 2025). The appropriate use of learning media can encourage students to become more active and responsible and to regulate their own learning processes (Ekosantoso et al., 2025; Lillihata et al., 2023)Therefore, teachers' strategies for utilizing both digital and simple learning media have become an important issue in improving the quality of learning at the elementary school level.

In multi-grade learning at Madrasah Ibtidaiyah (Islamic elementary schools), particularly at MI Mambaul Falah Bondowoso, teachers face challenges in managing two or more grade levels simultaneously. This condition limits the amount of attention that teachers can provide to individual students, making learning independence an essential aspect of the learning process. In practice, however, many students remain dependent on teachers' instructions and demonstrate limited initiative in their learning. The use of simple learning media has also not been fully optimized as a means of fostering students' learning independence. Therefore, an in-depth exploration of teachers' strategies for utilizing simple learning media is needed to address these challenges.

This issue is important to investigate because it has a direct impact on the quality of learning and the development of students' independence. Practically, this study may provide teachers with solutions for managing multi-grade learning more effectively and efficiently (Mahmud, 2024; Naparan & Alinsug, 2021). In addition, the findings may serve as a reference for schools in developing learning policies that are adaptive to limited educational resources and facilities (Munsif et al., 2025; Suarmita et al., 2025). Theoretically, this study may address a gap in the literature concerning the integration of instructional strategies, simple learning media, and the multi-grade classroom context, which remains relatively underexplored (Bojos et al., 2025; Hariri et al., 2026; Mustofa, 2023). Thus, this study is expected to make a meaningful contribution to the development of educational research, particularly at the Madrasah Ibtidaiyah level.

Multigrade learning is implemented in some elementary and Madrasah Ibtidaiyah contexts as a practical response to limitations in instructional resources, teacher availability, and uneven student enrollment across grade levels. In multigrade classrooms, teachers are required to manage students from different grade levels simultaneously while maintaining meaningful learning activities for each group. This situation creates particular pedagogical challenges because teachers must accommodate different learning objectives, instructional tasks, and levels of student support within the same classroom. The availability of appropriate instructional media is therefore important, yet schools with limited resources may not always have access to technology-based or commercially produced learning materials. In such circumstances, teachers need to develop adaptive strategies by creatively utilizing simple, accessible, and low-cost instructional media to facilitate learning activities and provide opportunities for students to participate more independently.

The implementation of multigrade learning at MI Mambaul Falah Bondowoso reflects these broader challenges. Teachers are required to organize learning activities for more than one class group within the same instructional setting, while the availability of instructional facilities remains limited. Consequently, teachers cannot rely solely on conventional or technology-based instructional media and instead need to optimize materials that are readily available in the school and surrounding environment. Simple materials, including used paper, student worksheets, question cards, and visual materials, can be adapted to accommodate different learning objectives and student needs. In this context, teachers' strategies are important not only for managing simultaneous learning activities but also for creating opportunities for students to complete tasks, follow learning instructions, and participate in learning with reduced dependence on direct teacher assistance. Fajri et al., emphasized the importance of adaptive instructional practices in responding to contextual conditions and available educational resources(Fajri et al., 2022). Therefore, the conditions at MI Mambaul Falah provide an important context for examining how teachers utilize simple instructional media in multigrade classrooms and how these practices relate to students' learning independence.

Previous studies have discussed the relationship between teachers' instructional strategies, learning media, multigrade learning, and students' learning independence from different perspectives. Bukit et al., demonstrated that teachers' strategies play an important role in fostering students' learning independence through systematic and student-centered approaches(Bukit et al., 2022). Sakinah et al., similarly highlighted active learning strategies as an approach to strengthening students' learning independence. In relation to instructional

media(Sakinah et al., 2026), Ekosantoso et al., examined the use of information technology-based media to support learning independence in the digital era(Ekosantoso et al., 2025). These studies suggest that teachers' instructional strategies and learning media can create learning conditions that encourage students to become more active and independent learners.

Research on multigrade learning has addressed different challenges associated with organizing learning for students from multiple grade levels. Lillihata et al., for example, examined multigrade learning as an alternative instructional arrangement in areas experiencing teacher shortages(Lillihata et al., 2023). Other studies have discussed the management and implementation of multigrade learning in different educational contexts (Cornish, 2021; Nurhamidah & Nurachadijat, 2023; Putri & Hudah, 2019). These studies provide important insights into the organizational and pedagogical dimensions of multigrade learning. However, the use of simple instructional media as part of teachers' strategies in managing multigrade learning has received less attention, particularly when considered in relation to students' learning independence.

The literature therefore reveals a more specific research gap. Existing studies tend to examine teachers' strategies for developing learning independence, technology-based instructional media, and multigrade learning management as relatively separate areas of inquiry. Studies on learning independence have generally emphasized instructional strategies or technology-supported learning environments (Arif et al., 2025; Bayu et al., 2023; Khalid et al., 2024), whereas studies on multigrade learning have focused more strongly on teacher shortages, classroom organization, and instructional management (Cornish, 2021; Lillihata et al., 2023; Nurhamidah & Nurachadijat, 2023; Putri & Hudah, 2019). As a result, there is limited empirical understanding of how teachers in resource-constrained Madrasah Ibtidaiyah contexts select, adapt, and utilize simple instructional media while simultaneously managing multigrade learning and creating opportunities for students to learn independently. In particular, the existing literature provides limited insight into teachers' actual experiences, the practical strategies they employ, the constraints they encounter, and the ways in which students respond to the use of such media during multigrade learning activities. This is the specific gap addressed by the present study.

Based on this gap, the present study explores teachers' strategies in using simple instructional media to support students' learning independence in multigrade classrooms at MI Mambaul Falah Bondowoso. The study specifically examines how teachers select and utilize simple instructional media, how the media are implemented during multigrade learning activities, the challenges encountered in their implementation, and the ways in which students

demonstrate learning independence during the learning process. Rather than measuring the statistical effectiveness of a particular instructional intervention, this study seeks to provide an in-depth understanding of teachers' actual practices and the contextual learning conditions associated with the use of simple instructional media.

The contribution of this study lies in providing empirical evidence from a resource-constrained Madrasah Ibtidaiyah context in which teachers creatively optimize available materials to manage multigrade learning. By examining the intersection of teachers' strategies, simple instructional media, and students' learning independence, the study extends existing discussions of multigrade learning beyond classroom organization and teacher availability. The findings also reinforce the perspective of student-centered learning by highlighting students' active roles in learning and demonstrating how available resources can be creatively optimized to support meaningful learning in resource-constrained educational settings (Agung & Sopiansyah, 2022; Casane, 2025; Suayan-Bondad, 2026).

RESEARCH METHOD

This study employed a qualitative approach with a case study design(Cornish, 2021). This approach was selected because the study aimed to explore in depth teachers' strategies for utilizing simple learning media in multi-grade learning and their implications for students' learning independence. The study was conducted at MI Mambaul Falah Bondowoso, Indonesia, from 10 February to 10 May 2026. In this study, multi-grade learning refers to a classroom arrangement in which one teacher is responsible for teaching students from two or more grade levels simultaneously within the same instructional setting and learning period. This instructional arrangement requires teachers to manage different learning objectives, student characteristics, tasks, and levels of learning ability at the same time(Alif Utama et al., 2025). Consequently, teachers need to employ flexible instructional strategies and appropriate learning media to maintain students' engagement and encourage them to learn more independently. A qualitative approach enables researchers to understand these practices contextually and holistically based on the actual experiences of the research participants, while the case study design allows for an in-depth examination of multi-grade learning practices within the specific context of the madrasah.

The research participants consisted of 8 informants, including classroom teachers, students, and the head of the madrasah who were directly or indirectly involved in the implementation of multi-grade learning. Participants were selected using purposive sampling,

whereby informants were intentionally chosen based on their knowledge of and direct involvement in the multi-grade learning process. The primary informants consisted of classroom teachers who implemented multi-grade instruction and selected students who actively participated in the learning activities(Lopez et al., 2021). The head of the madrasah served as a supporting informant to provide managerial and policy-related perspectives on the implementation of multi-grade learning. Participant selection considered teachers' teaching experience, students' involvement in multi-grade learning activities, and the learning environment, particularly the availability and limitations of educational facilities and resources.

The research instruments consisted of observation sheets, interview guidelines, and documentation. Observation sheets were used to directly examine multi-grade learning activities, teacher–student interactions, classroom management across different grade levels, and the use of simple learning media(Bogdan, 1982). A semi-structured interview guide was developed to obtain in-depth information regarding teachers' strategies for managing different grade levels simultaneously, the types of simple learning media employed, the challenges encountered, and the ways in which these strategies supported students' learning independence. Documentation served as supporting data, including photographs of multi-grade learning activities, learning records, lesson plans, worksheets, and other instructional materials used by teachers. Data credibility was established through source triangulation and method triangulation, allowing the consistency of information obtained from different informants and data collection techniques to be examined.

The research procedure was conducted systematically through several interconnected stages. The first stage was preparation, which included identifying the research context, developing observation and interview instruments, obtaining research permission from the institution, and determining the informants through purposive sampling. The informants were selected based on their direct involvement and relevant experience in the implementation of multigrade learning at MI Mambaul Falah Bondowoso. They included the school principal, teachers involved in multigrade learning, and selected students who participated directly in the observed learning activities. The selection criteria were designed to ensure that each informant could provide relevant information concerning teachers' strategies, the use of simple instructional media, multigrade classroom management, and students' learning independence. One school principal, two multigrade teachers, and selected students representing different levels of learning independence.

The second stage was data collection, conducted from 10 February to 10 May 2026. Data were obtained through classroom observations, in-depth interviews, and documentation. Observations were conducted directly during multigrade learning activities to examine how teachers organized learning for different grade levels, allocated attention between groups, provided differentiated tasks, utilized simple instructional media, and facilitated students' independent completion of learning activities. In-depth interviews were conducted with the selected informants to obtain information about teachers' strategies, considerations in selecting and utilizing simple instructional media, challenges encountered during implementation, and students' experiences in completing learning tasks. Interviews with students were used to complement the information obtained from teachers and to understand students' responses to the use of simple instructional media. Documentation was used to obtain supporting evidence, including learning materials, student worksheets, instructional media, photographs of learning activities, and other relevant school documents.

The third stage involved data processing and analysis, which was conducted continuously throughout the data collection process. Field notes, interview data, and documentation were organized and examined according to the research objectives. The researchers compared information obtained from different informants and data collection techniques to identify consistent patterns and discrepancies. The final stage involved verifying the emerging findings, drawing conclusions, and preparing the research report. Conclusions were developed based on patterns that were repeatedly identified across the observation, interview, and documentation data rather than on isolated statements or individual observations.

Data analysis employed the interactive model of Miles and Huberman, which consists of three interconnected stages: data reduction, data display, and conclusion drawing and verification (Asipi et al., 2022; Milles & Huberman, 2014). Data reduction was conducted throughout the research process by selecting, focusing, simplifying, categorizing, and organizing information relevant to the research questions. The reduced data were grouped into key analytical categories, including teachers' strategies, the selection and utilization of simple instructional media, multigrade classroom management, challenges encountered by teachers, and students' learning independence.

The second stage, data display, involved organizing the reduced data into systematic descriptive narratives and thematic categories. The displays were used to identify recurring patterns, relationships, similarities, differences, and connections among teachers' strategies, media utilization, classroom management, and students' learning behaviors. The researchers

compared the accounts of teachers and students with the results of classroom observations and supporting documentation to determine whether the emerging interpretations were consistent across data sources.

The final stage involved conclusion drawing and verification. Preliminary conclusions were developed from recurring patterns in the displayed data and were continuously checked against subsequent observations, interview findings, and documentary evidence. The conclusions were considered sufficiently supported when similar findings emerged across different informants and data collection techniques. This process enabled the researchers to interpret how teachers utilized simple instructional media in multigrade classrooms and how these practices provided opportunities for students to demonstrate learning independence.

The credibility of the findings was ensured through source and technique triangulation. Source triangulation was conducted by comparing information obtained from different groups of informants, particularly the school principal, teachers, and students. Technique triangulation was conducted by comparing findings obtained through observations, interviews, and documentation. The researchers also conducted repeated observations and cross-checked interview statements against observed classroom practices and available documentary evidence. When inconsistencies were identified, the researchers examined the relevant data again before drawing conclusions. This triangulation process was used to minimize reliance on a single source or technique and to strengthen the credibility, consistency, and trustworthiness of the research findings.

Research ethics were also given particular attention throughout the study(Hendren et al., 2023). The researchers obtained permission from the school authorities before conducting the research. All 8 informants were informed about the purpose and procedures of the study and provided informed consent before data collection began. For student participants, consent procedures were conducted in accordance with the school's requirements and applicable ethical considerations for research involving children. The identities of all informants were kept confidential to protect their privacy and ensure their comfort and safety as research participants. Furthermore, all data collected were used solely for academic purposes and were not disclosed or misused for other purposes.

RESULT AND DISCUSSION

Result

The findings are presented according to four main themes emerging from the field data: (1) teachers' strategies in utilizing simple instructional media, (2) implementation of simple

instructional media in multigrade classrooms, (3) challenges encountered during implementation, and (4) students' learning independence in the learning process. The findings were derived from classroom observations, in-depth interviews, and documentation conducted at MI Mambaul Falah Bondowoso. Data from the head of the madrasah, multigrade teachers, and students were compared with observational and documentary evidence to identify consistent patterns across data sources. The results are presented descriptively to show how teachers utilized simple instructional media and how students responded to the learning activities.

Teachers' Strategies in Utilizing Simple Instructional Media

The first finding concerns teachers' strategies for selecting and utilizing simple instructional media in multigrade classrooms. Interview data indicated that teachers considered the availability of materials, learning objectives, classroom conditions, and students' needs when selecting instructional media. Limited facilities did not prevent teachers from preparing learning materials; instead, teachers utilized materials that were easily accessible and could be adapted to the learning activities. A classroom teacher identified by the initials SR explained:

> "We make use of what is available around us, such as used paper, small whiteboards, and teacher-made teaching aids so that students can continue learning effectively."

This statement illustrates that teachers adapted available resources to meet the instructional requirements of multigrade learning. Documentation confirmed the use of paper, student worksheets, question cards, and teacher-made visual materials during learning activities. The selection of these materials was also related to the need to provide tasks that students could work on while the teacher was providing direct instruction to another grade-level group.

Classroom observations further showed that teachers divided their attention between two grade-level groups during the same learning period. While providing direct explanations to one group, teachers assigned structured tasks to another group using worksheets, question cards, or other simple instructional materials. Students were expected to follow the instructions provided in the materials while waiting for further teacher assistance. Of the 18 students observed, 14 were able to complete the assigned tasks without intensive teacher assistance, whereas 4 students required additional guidance. This observation shows differences in students' ability to work independently within the multigrade classroom.

The findings therefore indicate that teachers' strategies were characterized by adaptation, resource optimization, and task organization. Simple instructional media were not used merely as substitutes for more sophisticated instructional technologies but were incorporated into classroom management to help teachers distribute instructional attention between different grade-level groups.

Implementation of Simple Instructional Media in Multigrade Learning

The second finding concerns the implementation of simple instructional media during learning activities. Interview data indicated that teachers used simple media to present learning content, provide structured tasks, and support students while the teacher was working with another group. Teacher AN stated:

> "These simple learning media help me manage two classes at the same time because students can learn independently while I explain the material to the other group."

This statement indicates that teachers perceived simple instructional media as supporting tools for organizing simultaneous learning activities. The media provided students with materials and instructions that could be followed while the teacher focused on another group.

Students also described the usefulness of the media in supporting their learning activities. Student AL stated:

> "When there are pictures or worksheets, I can study by myself without having to wait for the teacher."

The statement suggests that worksheets and visual materials provided students with an immediate source of learning guidance. Documentation further showed that teachers used question cards, pictures, concise learning notes, and worksheets during the observed learning activities.

Observations showed that the use of these materials provided a clearer structure for students' tasks. Students generally followed the instructions contained in the worksheets and began working without waiting for repeated directions from the teacher. In several situations, students discussed the tasks with their seatmates when they encountered difficulties. Of the 18 students observed, 12 participated in discussions with peers, while 6 preferred to complete the tasks individually.

These findings indicate that simple instructional media created different opportunities for students to engage with learning tasks. Some students used the materials independently, whereas others utilized peer interaction as an additional source of assistance. Thus, the

relationship between simple instructional media and learning independence was observed primarily through the opportunities provided for students to initiate, follow, and complete learning tasks with reduced immediate teacher assistance, rather than through a measured increase in independence.

Challenges in Utilizing Simple Instructional Media

The third finding concerns the challenges experienced by teachers in preparing and implementing simple instructional media. Interview data showed that limited preparation time was one of the main challenges. Teacher SR explained:

> "We have to prepare the media ourselves, so it requires additional time outside teaching hours."

The statement indicates that the use of simple media does not necessarily eliminate teachers' workload because teachers still need to prepare, adapt, and organize the materials before they can be used in the classroom.

Limited instructional materials were another challenge. The head of the madrasah stated:

> "We try to provide support, but the available facilities are indeed still limited."

The interview data were consistent with the documentation and observation findings, which showed that some instructional materials were available only in limited quantities. As a result, several students had to share materials with their peers.

Observations also showed that the simple media did not always accommodate the learning needs of all students equally. Five of the 18 students observed required additional explanations from the teacher regarding the instructions or assigned tasks. In these situations, teachers provided additional guidance individually or in turns while continuing to manage the other grade-level group.

The findings demonstrate that the use of simple instructional media was accompanied by practical constraints involving preparation time, availability of materials, unequal access to media, and differences in students' ability to understand instructions. Teachers responded to these constraints by providing additional explanations, adjusting task arrangements, and allowing students to share materials or discuss tasks with peers.

Students' Learning Independence in the Use of Simple Instructional Media

The fourth finding concerns students' learning independence as observed during the implementation of simple instructional media. In this study, learning independence was

identified through observable learning behaviors rather than through a quantitative measurement of increased independence. The indicators observed included students' ability to begin tasks without repeated teacher instructions, follow written or visual directions, complete assigned tasks with limited direct assistance, seek solutions before asking the teacher, and manage the time allocated for learning activities.

Interview data indicated that teachers observed students becoming accustomed to completing learning tasks without continuously waiting for direct explanations. Teacher AN stated:

> "The students are now more accustomed to completing tasks on their own without always having to wait for an explanation."

Student MF similarly stated:

> "I can try to do it myself first before asking the teacher."

These statements indicate that students were encouraged to attempt learning tasks independently before seeking direct assistance from the teacher. The findings were further supported by classroom observations.

Of the 18 students observed, 13 completed their assigned tasks within the time allocated by the teacher, while 5 students required additional time. When encountering difficulties, several students reread the learning materials, examined the examples provided in the worksheets, or discussed the problems with their peers before asking the teacher for assistance. These behaviors represent observable indicators of learning independence in the context of the study.

The findings do not establish a statistically measured increase in students' learning independence. Rather, they demonstrate that the implementation of simple instructional media provided learning conditions and opportunities that enabled students to perform several independent learning behaviors. The degree of independence varied among students, as reflected in differences in task completion, use of learning materials, peer interaction, and the need for additional teacher guidance.

Cross-Source Findings

The findings from observations, interviews, and documentation showed generally consistent patterns. Teachers described simple instructional media as practical resources for organizing simultaneous learning activities. At the same time, observations showed that students used these materials to follow instructions and complete assigned tasks during periods when the teacher was working with another grade-level group. Students' statements

further indicated that worksheets and visual materials provided guidance for beginning or continuing tasks without immediately waiting for teacher assistance.

The triangulated data therefore indicate a relationship between the use of simple instructional media and students' learning independence at the level of learning opportunities and observable behaviors. The media provided students with structured instructions and accessible learning resources, while the multigrade setting required students to work with less continuous direct supervision. However, the findings also show that this relationship was not uniform across all students. Some students still required additional explanations, additional time, or peer assistance.

Overall, the empirical findings demonstrate that teachers at MI Mambaul Falah Bondowoso employed simple instructional media as an adaptive strategy for managing multigrade learning. The media supported the organization of simultaneous learning activities and provided students with opportunities to engage in tasks with varying degrees of independence. At the same time, the implementation was shaped by limitations in time, materials, and differences in students' learning abilities. These findings provide the empirical basis for the subsequent discussion of teachers' adaptive strategies, the role of simple instructional media, and students' learning independence in multigrade classrooms.

Table 1. Relevance of Research Findings to the References

No.	Research Focus	Interview Findings	Observation Findings	Documentation Findings	Relevance to References
1	Teachers' strategies in multi-grade learning	Teachers utilized simple media such as used paper and teacher-made teaching aids.	The teacher divided the class and assigned independent tasks.	Photographs documented the teacher using simple learning media during instruction, including teacher-made visual aids, small whiteboards, and worksheets used by students. The documentation also showed students working independently with the provided learning materials.	Consistent with the concepts of contextual and adaptive learning (Utami et al., 2022).

No.	Research Focus	Interview Findings	Observation Findings	Documentation Findings	Relevance to References
2	Implementation of simple learning media	Media helped the teacher manage two classes simultaneously.	Students followed instructions independently through the media.	Question cards and simple teaching materials were available.	Supports the theory of independent learning (Muzakki et al., 2021)).
3	Student interaction	Students engaged in independent learning and peer discussions.	12 of 18 students actively participated in discussions.	Group activity records were available.	Consistent with collaborative learning (Wiartis, 2021)
4	Teacher challenges	Limited time and materials were reported as challenges.	Several students experienced difficulties understanding the instructions.	The number of available media was limited.	Consistent with limitations in educational resources (Achadah et al., 2022; Kurnia & Suryana, 2020)
5	Learning independence	Students demonstrated greater confidence in learning independently.	13 students completed their tasks on time.	Documentation indicated increased student participation.	Supports the concept of self-directed learning (Panggabean & Misykah, 2025)

As shown in Table 3.1, the findings indicate that teachers' strategies in multigrade learning are adaptive and contextual. Rather than relying on sophisticated technological resources, teachers maximize simple instructional media available within their immediate environment, including used paper, worksheets, question cards, and visual materials. This finding suggests that instructional innovation is not necessarily determined by technological sophistication but by teachers' ability to select, adapt, and organize available resources according to learning objectives, students' needs, and classroom conditions. The findings are consistent with the view that effective learning can be supported through contextual approaches that are relevant to students' circumstances. In this context, the use of simple instructional media reflects teachers' flexibility in responding to resource constraints while maintaining the continuity of learning activities. Such practices can therefore be understood as a form of adaptive pedagogy in resource-constrained elementary education.

The implementation of simple instructional media was also found to provide opportunities for students to engage in learning activities with reduced direct teacher assistance. Worksheets, question cards, and visual materials helped students understand instructions, access learning content, and complete assigned tasks while the teacher was working with another grade-level group. These findings indicate that simple instructional media can function as a form of learning support or scaffolding by providing students with structured guidance during periods of limited direct teacher interaction. At the same time, these media enabled teachers to organize activities for two groups of students simultaneously. The findings therefore suggest that, within multigrade classrooms, simple instructional media can contribute to creating learning conditions that encourage students to initiate and complete tasks with greater independence, although the degree of independence varied across students.

Peer interaction also emerged as an important feature of the learning process. Observations showed that some students discussed tasks with their peers, exchanged information, and sought assistance before asking the teacher for direct guidance. This pattern indicates that independent learning in the observed multigrade classroom did not necessarily mean learning in isolation. Instead, students' independence was accompanied by opportunities for peer interaction and collaborative problem solving. Such interaction may be particularly relevant in multigrade settings, where the teacher's attention must be distributed across different groups of students. The finding is consistent with social constructivist perspectives, which emphasize the role of interaction in constructing understanding. Thus, the multigrade learning environment observed in this study provided opportunities for both individual task completion and collaborative engagement.

Several challenges were also identified in the implementation of simple instructional media. Limited preparation time and the availability of instructional materials were the main challenges reported by teachers. Teachers often had to prepare or adapt learning media themselves, requiring additional time beyond classroom instruction. In addition, some students needed further explanation because they could not immediately understand the instructions presented through the media. These findings indicate that simple instructional media cannot completely replace teacher guidance, particularly when students have different levels of ability and readiness. Teachers therefore responded through flexible strategies, including individual guidance, rotating assistance between groups, adjustment of tasks, and opportunities for students to share materials with peers. The findings highlight that the effectiveness of simple instructional media depends not only on the media themselves but also

on teachers' capacity to manage their use within the specific conditions of multigrade classrooms.

The relationship between simple instructional media and students' learning independence was reflected in several observable learning behaviors. Students were observed beginning tasks without repeatedly waiting for teacher explanations, following written or visual instructions, completing assignments with limited direct assistance, attempting to find solutions before asking the teacher, and managing the time allocated for learning activities. Interviews with teachers and students supported these observations, particularly regarding students' increasing familiarity with completing tasks on their own. However, these findings should not be interpreted as evidence of a statistically measured increase in learning independence. Rather, they demonstrate that the use of structured and accessible instructional media can create learning conditions that provide opportunities for students to practice independent learning behaviors. Variations among students were also evident, as some students still required additional explanations, peer assistance, or extended time to complete their tasks.

Overall, the findings demonstrate that teachers' use of simple instructional media in multigrade classrooms is characterized by adaptation, resource optimization, and flexible task organization. The media supported the organization of simultaneous learning activities and provided students with structured opportunities to engage in tasks with reduced immediate teacher assistance. Nevertheless, the findings also show that students' learning independence was not uniform and remained influenced by differences in students' abilities, the clarity of instructions, and the availability of teacher support. Peer interaction further complemented the learning process by providing students with opportunities to discuss and solve learning tasks collaboratively. These findings were derived from the convergence of classroom observations, interviews, and documentation, thereby providing a grounded account of how simple instructional media are utilized in the actual conditions of multigrade learning. Rather than demonstrating a causal increase in students' learning independence, the study highlights how teachers' adaptive practices and the strategic use of available resources can create supportive conditions for students to develop and demonstrate independent learning behaviors in resource-constrained Madrasah Ibtidaiyah settings.

Discussion

The findings of this study indicate that teachers' strategies in multigrade learning at MI Mambaul Falah Bondowoso are adaptive and contextualized to the existing limitations in

educational facilities. Rather than treating limited resources as a barrier that prevents meaningful learning, teachers adapted their instructional practices by selecting and modifying materials that were readily available. This finding is consistent with the student-centered learning perspective, which emphasizes the teacher's role as a facilitator who creates conditions for students to actively participate in the learning process. In the context of this study, teachers did not simply transfer knowledge to students but organized learning tasks and instructional resources in ways that allowed one group of students to remain engaged while the teacher provided direct instruction to another group. Thus, the significance of simple instructional media lies not primarily in the physical characteristics of the media, but in how teachers integrate them into classroom organization and students' learning activities.

The relationship between teachers' strategies, the use of simple learning media, classroom management, and students' learning independence is illustrated in Figure 1.

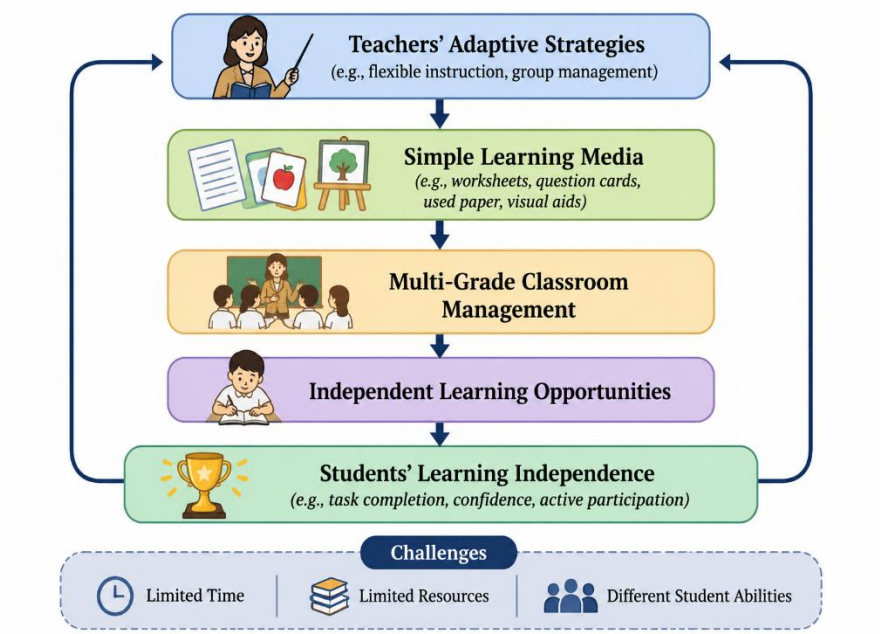


Figure 1. Relationship between Teachers' Strategies, Simple Learning Media, and Students' Learning Independence

As illustrated in Figure 1, simple instructional media functioned not only as instructional aids but also as supporting tools for classroom management. Teachers distributed tasks according to students' grade levels and provided activities that could be completed with limited immediate teacher assistance. Classroom observations showed that students continued working on assigned tasks while the teacher provided guidance to another group. This finding reinforces Munsif et al., who emphasize the importance of effective classroom management in

multigrade learning(Munsif et al., 2025). However, the present study adds a contextual dimension by showing that classroom management in a resource-constrained Madrasah Ibtidaiyah can be supported through the strategic use of accessible instructional materials. The important factor, therefore, is not simply the availability of media but the alignment between the media, the structure of the learning task, and the teacher's management of simultaneous learning activities. When instructions are sufficiently clear and tasks are appropriately structured, simple media can reduce students' immediate dependence on the teacher; when instructions are unclear or students have difficulty interpreting the task, additional teacher guidance remains necessary.

This finding also helps explain why simple instructional media may support students' learning independence. The observed media provided students with concrete references, written directions, examples, or questions that could guide them while the teacher was attending to another group. In this sense, the media operated as a form of instructional scaffolding because they provided temporary support that enabled students to continue learning without requiring continuous teacher intervention. From a student-centered perspective, such an arrangement creates opportunities for students to take greater responsibility for initiating and completing learning tasks. However, the findings also show that scaffolding through simple media has limitations. Some students still required additional explanations, peer assistance, or extended time to complete their assignments. This suggests that learning independence does not automatically emerge from the presence of instructional media. Rather, it depends on the clarity of instructions, the suitability of the task to students' abilities, students' prior learning experiences, and the availability of responsive teacher support.

The findings are broadly consistent with Bukit et al., who reported a relationship between teachers' strategies and students' learning independence(Bukit et al., 2022). The similarity lies in the role of teachers' instructional practices in creating conditions that encourage students to take responsibility for learning activities. Nevertheless, the present study extends this perspective by identifying a more specific mechanism within multigrade learning: teachers' strategies were implemented through simple instructional media that enabled students to continue working when the teacher's attention was temporarily directed toward another grade-level group. Therefore, the contribution of the present study is not simply to confirm that teacher strategies are related to learning independence, but to show how the organization of learning tasks and accessible instructional resources can create

opportunities for independent learning in a classroom where teacher attention is necessarily divided.

Peer interaction also emerged as an important component of students' learning processes. Students did not always demonstrate independence through individual work; some discussed tasks, exchanged explanations, and sought assistance from peers before approaching the teacher. This finding is important because it indicates that learning independence in the observed multigrade classroom should not be understood as complete separation from others. Instead, students' independence may involve the ability to initiate learning tasks, attempt to solve problems, seek appropriate assistance, and use available social resources. This interpretation is consistent with social constructivist perspectives, which view interaction with others as an important component of knowledge construction. In the context of MI Mambaul Falah Bondowoso, peer interaction may also be partly explained by the structural characteristics of multigrade learning: because teachers must distribute attention across different groups, students have opportunities to rely on peers as additional sources of assistance. Thus, peer interaction does not necessarily indicate a lack of independence; under appropriate conditions, it may function as a complementary resource that supports students' efforts to complete learning tasks.

The relationship between simple instructional media and learning independence also differs from approaches that rely heavily on technology-based learning resources. Ekosantoso et al., for example, discuss the potential of technology-based media in supporting students' learning independence(Ekosantoso et al., 2025). The present findings demonstrate that opportunities for independent learning can also emerge through non-digital resources when those resources are deliberately designed and integrated into classroom activities. The difference is therefore not necessarily between "digital" and "non-digital" media in terms of which is more effective, but in how the instructional resource is used to structure students' learning activities. In the context of MI Mambaul Falah, where access to sophisticated digital facilities is limited, used paper, worksheets, question cards, and visual materials can perform an important pedagogical function because they are accessible, inexpensive, easy to modify, and immediately available to teachers and students. This contextual factor helps explain why simple media were practical in this setting, even though they may provide fewer interactive features than technology-based media.

The findings further indicate that the contribution of simple instructional media to learning independence is conditional rather than automatic. Limited instructional time, differences in students' abilities, and limited availability of materials affected the extent to

which students could work independently. Some students were able to follow instructions and complete tasks with limited direct assistance, whereas others required additional explanations or more time. This finding is important because it challenges an overly simplistic assumption that providing learning media automatically produces independent learners. Instead, the effectiveness of the media depends on the interaction among instructional design, student readiness, teacher support, and classroom conditions. In the multigrade context, these factors become particularly significant because teachers must simultaneously respond to different grade-level expectations and different levels of student understanding.

The contextual characteristics of Madrasah Ibtidaiyah also help explain the particular form of innovation identified in this study. Teachers' creativity was shaped by practical constraints rather than by access to advanced technological infrastructure. The use of locally available materials enabled teachers to prepare differentiated tasks without requiring substantial financial resources. At the same time, the need to prepare media independently created an additional workload for teachers. This dual character is important: simple instructional media can reduce dependence on sophisticated facilities, but their preparation still requires teachers' time, creativity, and pedagogical judgment. Consequently, resource constraints can stimulate adaptive practices while simultaneously creating additional demands on teachers. This finding provides a more nuanced understanding of instructional innovation in resource-constrained schools because innovation is not presented as an uncomplicated solution but as a process shaped by both opportunities and limitations.

The findings also have implications for understanding learning independence in multigrade classrooms. Students' learning independence was reflected in observable behaviors such as beginning tasks without repeatedly waiting for teacher explanations, following written or visual instructions, attempting to solve problems before requesting assistance, completing assignments with limited direct guidance, and managing the time allocated for learning. These behaviors are consistent with the broader concept of learner autonomy, but the present study does not establish that students' independence increased as a causal consequence of using simple instructional media. Rather, the findings suggest that teachers' strategies and media use created conditions in which independent learning behaviors could be practiced and observed. The variation among students further demonstrates that independence develops differently according to individual readiness and the quality of instructional support provided.

Overall, the findings suggest that the pedagogical value of simple instructional media in multigrade classrooms lies in their integration with teachers' adaptive strategies rather than in

the media themselves. Simple media can support classroom management by structuring tasks, reducing students' need for continuous direct explanation, and creating opportunities for individual and peer-supported learning. At the same time, their contribution is constrained by students' different abilities, the clarity of instructions, limited preparation time, and the availability of materials. Compared with previous studies that emphasize teacher strategies, technology-based media, or general classroom management, this study brings these dimensions together within the specific context of a resource-constrained Madrasah Ibtidaiyah. The findings therefore reinforce the student-centered learning perspective while demonstrating that meaningful opportunities for independent learning can be created through contextually appropriate and locally available resources. The study's contribution lies not in demonstrating that simple media are inherently superior to digital technologies, but in showing how teachers' pedagogical judgment can transform limited resources into practical supports for multigrade classroom management and students' independent learning behaviors.

CONCLUSION

This study concludes that teachers' strategies in utilizing simple instructional media in multigrade learning at MI Mambaul Falah Bondowoso were adaptive, flexible, and contextual. Teachers selected and modified accessible resources, including used paper, worksheets, question cards, and visual materials, according to learning objectives, students' needs, and the conditions of the multigrade classroom. These strategies enabled teachers to organize learning activities for different grade-level groups simultaneously through structured tasks, clear instructions, and the flexible distribution of teacher attention. The findings indicate that the effectiveness of simple instructional media was not determined primarily by the sophistication of the media, but by how teachers integrated them into the organization of learning activities.

The implementation of simple instructional media also provided opportunities for students to engage in learning activities with reduced immediate teacher assistance. Students demonstrated observable behaviors associated with learning independence, including beginning tasks without repeatedly waiting for teacher explanations, following written or visual instructions, attempting to solve learning problems before requesting assistance, completing assignments with limited direct guidance, and managing the time allocated for learning activities. Peer interaction also complemented these processes, as some students discussed tasks and sought assistance from peers before approaching the teacher. However, students' learning independence was not uniform. Some students still required additional

explanations, peer assistance, or extended time to complete learning tasks. Therefore, the findings should not be interpreted as evidence of a statistically measured increase in learning independence; rather, they demonstrate that teachers' strategies and the use of simple instructional media created learning conditions that provided opportunities for students to practice and demonstrate independent learning behaviors.

The study also identified several challenges in implementing simple instructional media. The main challenges involved limited preparation time, limited availability of instructional materials, and differences in students' abilities and readiness to understand instructions and complete learning tasks. These constraints required teachers to provide individual or rotating guidance, adjust learning tasks, and encourage students to share available materials and support one another. The findings therefore indicate that simple instructional media cannot replace teacher guidance entirely. Their contribution to multigrade learning depends on the clarity of the instructions, the suitability of learning tasks, students' readiness, and teachers' ability to manage different groups within the same classroom.

Theoretically, this study reinforces the student-centered learning perspective by demonstrating that students can be provided with opportunities to take an active role in learning even when instructional resources are limited. The findings also extend the understanding of instructional scaffolding by showing that simple and accessible learning materials can function as temporary supports that enable students to continue learning when direct teacher assistance is limited. In addition, the findings contribute to the understanding of multigrade pedagogy by highlighting the interaction among teacher adaptability, instructional media, classroom management, and students' learning independence. The study therefore suggests that pedagogical innovation in resource-constrained settings should not be conceptualized exclusively in terms of technological advancement but also in terms of teachers' capacity to creatively organize available resources to support meaningful and increasingly independent learning activities.

This study has several limitations. First, it was conducted at a single Madrasah Ibtidaiyah, namely MI Mambaul Falah Bondowoso, so the findings are context-specific and should not be generalized to all Madrasah Ibtidaiyah or multigrade schools. Second, the study employed a qualitative case study design; therefore, the findings describe patterns, experiences, and observable learning behaviors rather than statistically measuring changes in students' learning independence. Third, the study focused primarily on simple instructional media and teachers' adaptive practices and did not systematically compare these practices with technology-based instructional media. Finally, differences in students' individual

abilities and learning readiness may have influenced the extent to which students were able to complete tasks independently.

Future research could examine the use of simple instructional media across multiple Madrasah Ibtidaiyah or other resource-constrained schools to determine whether similar patterns emerge in different educational contexts. Comparative studies could also investigate the differences between simple non-digital media and digital instructional media in supporting students' learning independence in multigrade classrooms. Further research using mixed-method or quantitative designs could examine specific indicators of learning independence and investigate changes in these behaviors over a longer period. Future studies could also explore teachers' preparation workload, students' readiness, peer interaction, and parental support as contextual factors that may influence the effectiveness of simple instructional media. Such studies would provide a broader empirical basis for developing context-sensitive models of multigrade learning and instructional innovation in resource-constrained educational settings.

ACKNOWLEDGE

The authors would like to express their sincere gratitude to the leadership, teachers, and students of MI Mambaul Falah Bondowoso for their valuable support, cooperation, and participation throughout the research process. The authors also acknowledge all individuals who contributed to the data collection and completion of this study.

REFERENCES

Achadah, A., Wahidmurni, W., & Yasin, A. F. (2022). Internalization of Character Education Values in Shaping Elementary School Students' Religious Behavior. *AL-ISHLAH: Jurnal Pendidikan, 14*(4), 4723–4734. https://doi.org/10.35445/alishlah.v14i4.2509

Agung, B., & Sopiansyah, D. (2022). Strategi Peningkatan Kemandirian Belajar Peserta Didik Melalui Program Edmodo Di Madrasah Aliyah. *Islamic Journal of Education*, *1*(1), 48–56. https://doi.org/10.54801/ijed.v1i1.68

Alif Utama, M. M., Lestari, D. A., Khodijah, D. N., Sirait, S., Karwadi, K., Sa'adi, S., Nursikin, M., & Mansur, M. (2025). Integrating Religious Moderation into Education: A Qualitative Analysis of the ASSTA Curriculum in Madrasahs. *AL-ISHLAH: Jurnal Pendidikan*, *17*(3). https://doi.org/10.35445/alishlah.v17i3.6648

Arif, M., Aziz, M. K. N. A., & Ma'arif, M. A. (2025). A Recent Study on Islamic Religious Education Teachers' Competencies in the Digital Age: A Systematic Literature Review. *Journal of Education and Learning*, *19*(2), 587–596. https://doi.org/10.11591/edulearn.v19i2.21311

Arimbawa, G. P. A., Ni Putu Eva Yuliawati, Windhu, I. P. T., Agustini, K., & Sudatha, I. G. W. (2025). Effectiveness of Differentiated Explorative Flipbooks to Improve The Learning Independence of Junior High School Student. *Jurnal Nasional Pendidikan Teknik Informatika (JANAPATI)*, *14*(1), 96–106. https://doi.org/10.23887/janapati.v14i1.83918

Asipi, L. S., Rosalina, U., & Nopiyadi, D. (2022). The Analysis of Reading Habits Using Miles and Huberman Interactive Model to Empower Students' Literacy at IPB Cirebon. *International Journal of Education and Humanities*, *2*(3), 117–125. https://doi.org/10.58557/ijeh.v2i3.98

Bayu, E. P. S., Fauzan, A., & Armiati, A. (2023). The Development of Teacher and Student's Book Based on Realistic Mathematics Education in Statistics for A package Program. *European Journal of Educational Research*, *volume–12–2023*(volume–12–issue–1–january–2023), 119–131. https://doi.org/10.12973/eu-jer.12.1.119

Bogdan, R. (1982). *Qualitative Research for Education*. Allyn and Bacon.

Bojos, W., Almerez, Q. L., Trinidad, A., Arnado, J. A., & Arnado5, J. A. (2025). Leadership Complexities of School Heads in Multigrade Education. *Journal of Interdisciplinary Perspectives*, *3*(6). https://doi.org/10.69569/jip.2025.240

Bukit, S., Perangin-Angin, R. B. B., & Murad, A. (2022). Strategi Guru dalam Menumbuhkan Kemandirian Belajar Siswa Sekolah Dasar. *Jurnal Basicedu*, *6*(5), 7858–7864. https://doi.org/10.31004/basicedu.v6i5.3633

Casane, L. (2025). Teacher's Attitude and Challenges in Teaching Multi-Grade Classes. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.5266065

Cornish, L. (2021). Quality Practices for Multigrade Teaching. In L. Cornish & M. J. Taole (Eds.), *Perspectives on Multigrade Teaching* (pp. 165–184). Springer International Publishing. https://doi.org/10.1007/978-3-030-84803-3_9

Ekosantoso, F., Cholik, M., Soeryanto, S., & Arizal, H. (2025). Pengaruh Penggunaan Media Pembelajaran Interaktif Google Sites terhadap Kemandirian Belajar Siswa Teknik Kendaraan Ringan. *JIPI (Jurnal Ilmiah Penelitian Dan Pembelajaran Informatika)*, *10*(2), 1565–1572. https://doi.org/10.29100/jipi.v10i2.7615

Fajri, Z., Toba, R., Muali, C., Ulfah, M., & Zahro, F. (2022). The Implications of Naturalist Illustration Image Media on Early Childhood Learning Concentration and Motivation. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, *6*(4), 3278–3290. https://doi.org/10.31004/obsesi.v6i4.2092

Hariri, N., Suhardi, I., & Syahrul. (2026). Evaluation of multigrade teaching implementation at CLC SLDB Inandung TKB Punteh in Sabah, Malaysia. *Indonesian Journal of Educational Development (IJED)*, *6*(4), 1367–1381. https://doi.org/10.59672/ijed.v6i4.6047

Hendren, K., Newcomer, K., Pandey, S. K., Smith, M., & Sumner, N. (2023). How qualitative research methods can be leveraged to strengthen mixed methods research in public policy and public administration? *Public Administration Review*, *83*(3), 468–485. https://doi.org/10.1111/puar.13528

Khalid, M. U., Manzoor, A., & Rashid, A. (2024). The Experiences of Teachers at Multi Grade Classrooms at Special Education Schools. *Annals of Human and Social Sciences*, *5*(I). https://doi.org/10.35484/ahss.2024(5-I)30

Kurnia, T., & Suryana, S. (2020). Implemantasi Fungsi Manajerial Kepala Madrasah dalam Meningkatkan Mutu Pendidikan di MAN 2 Karawang. *Al-Fikrah: Jurnal Manajemen Pendidikan*, *8*(2), 119. https://doi.org/10.31958/jaf.v8i2.2471

Lillihata, S., Karesina, D. M., Alfons, A., & Pulung, R. (2023). Pemanfataan Media Pembelajaran Berbasis IT dalam meningkatkan Kemandirian Belajar siswa di era digital. *Jurnal Pendidikan DIDAXEI*, *3*(2), 377.

Lopez, R. P., McCarthy, E. P., Mazor, K. M., Hendricksen, M., McLennon, S., Johnson, K. S., & Mitchell, S. L. (2021). ADVANCE: Methodology of a qualitative study. *Journal of the American Geriatrics Society*, *69*(8), 2132–2142. https://doi.org/10.1111/jgs.17217

Mahmud, R. (Ed.). (2024). Analysis of The Need for Development of A Multigrade Management Model In The Era of Independent Learning in Souths Sulawesi Elementary School. In *Proceedings of the 2nd International Conference of Science and Technology in Elementary Education (ICSTEE 2023)* (Vol. 826, pp. 202–211). Atlantis Press SARL. https://doi.org/10.2991/978-2-38476-210-1_17

Milles, M. B. & Huberman. (2014). *Qualitative Data Analysis: A Methods Sourcebook*. Los Angeles (USA): Sage Publications.

Munsif, A., Maksal, M., Ghazala Naheed, B., & Mehwish, H. (2025). *Correlation Study of Teaching Competencies of Multi-Grade Teachers and Classroom Performance of Elementary School Students*. https://doi.org/10.5281/ZENODO.16757729

Mustofa, A. (Ed.). (2023). Multigrade Learning in Elementary Schools: A Bibliometric Analysis. In *Proceedings of the International Joint Conference on Arts and Humanities 2023 (IJCAH 2023)* (Vol. 785, pp. 1302–1313). Atlantis Press SARL. https://doi.org/10.2991/978-2-38476-152-4_132

Muzakki, H., Yulia Hidayatul Umah, R., & Mudawinun Nisa', K. (2021). Teori Belajar Konstruktivisme Maria Montessori Dan Penerapannya Di Masa Pandemi Covid-19. *Ibriez : Jurnal Kependidikan Dasar Islam Berbasis Sains*, *6*(1), 76–86. https://doi.org/10.21154/ibriez.v6i2.164

Naparan, G. B., & Alinsug, V. G. (2021). Classroom strategies of multigrade teachers. *Social Sciences & Humanities Open*, *3*(1), 100109. https://doi.org/10.1016/j.ssaho.2021.100109

Nurhamidah, S., & Nurachadijat, K. (2023). Project Based Learning dalam Meningkatkan Kemandirian Belajar Siswa. *Jurnal Inovasi, Evaluasi Dan Pengembangan Pembelajaran (JIEPP)*, *3*(2), 42–50. https://doi.org/10.54371/jiepp.v3i2.272

Panggabean, D. S., & Misykah, Z. (2025). Strategi Guru sebagai Fasilitator dalam Meningkatkan Literasi dan Kemandirian Belajar di Era Digital. *JURNAL PENDIDIKAN BAHASA*, *15*(1), 34–39. https://doi.org/10.37630/jpb.v15i1.3299

Putri, O. N., & Hudah, M. (2019). Pengaruh Model Pembelajaran Role Playing Materi Bola Basket Terhadap Pembentukan Karakter Siswa Kelas VIII SMP Negeri 2 Ketanggungan. *Jendela Olahraga*, *4*(2), 57. https://doi.org/10.26877/jo.v4i2.4005

Sakinah, T. A., Mardatilah, W. Z., & Gusmaneli, G. (2026). Strategi Pembelajaran Aktif sebagai Upaya Meningkatkan Kemandirian Belajar Siswa. *Maximal Journal : Jurnal Ilmiah Bidang Sosial, Ekonomi, Budaya Dan Pendidikan*, *3*(4), 156.

Suarmita, S., Suarman, S., & Gusnardi, G. (2025). Development of Multimedia-Based Interactive Module Teaching Materials to Increase Learning Independence Learners.

Journal of Education and Learning Research, *2*(2), 141–151. https://doi.org/10.62208/jelr.2.2.p.141-151

Suayan-Bondad, C. B. (2026). Teachers' Participation in the Guidance Services in Elementary Multigrade Schools. *International Journal of Sustainability and Advanced Integrated Research*, *2*(2), 910–917. https://doi.org/10.65339/ijsair.V2.I2.271

Utami, T., Apriliaswati, R., & Sumarni, S. (2022). A Case Study of a Student's Reading Habits on Academic Texts. *Acitya: Journal of Teaching and Education*, *4*(2), 436–457. https://doi.org/10.30650/ajte.v4i2.3226

Wiartis, W. (2021). Penerapan Model Pembelajaran Project Based Learning Untuk Meningkatkan Kemampuan Belajar Siswa Melalui Kegiatan Kolaborasi Mata Pelajaran Bahasa Inggris Di Smp Negeri 6 Batam. *Daiwi Widya*, *7*(5), 17. https://doi.org/10.37637/dw.v7i5.673