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Development of a Multiple Intelligence-Based Learning Management Model for Elementary Schools

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Abstract

Objective: This research aimed to (1) produce information about the components needed for the development of multiple intelligence-based learning management, (2) produce a model of multiple intelligence-based learning management, and (3) provide information on the model's effectiveness. **Novelty:** The study offers a structured model of learning management specifically designed to integrate multiple intelligences, addressing the diverse abilities of students in elementary schools. **Methods:** The research involved three stages—preliminary study, model development, and testing—conducted in several provinces with tryouts in thirteen elementary schools, using data from headmasters and teachers collected through questionnaires, interviews, and observations, and analyzed descriptively. **Results:** The research produced a multiple intelligence-based learning management model characterized by materials and groupings tailored to students' intelligences, thematic and active learning approaches, comprehensive evaluation, outing class activities, collaboration with parents and stakeholders, and visionary leadership. The model showed very good results, with content testing scoring 91.58% and applicability testing 92.20%. **Conclusions:** The findings demonstrate that the developed model is both effective and practical, offering a comprehensive framework for implementing multiple intelligence-based learning management in elementary schools.

Keywords: Multiple Intelligences, Learning Management, Elementary Education.

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INTRODUCTION

Education is legally defined as a conscious and deliberate effort to create a learning atmosphere and process that enables learners to actively develop their potential in order to acquire spiritual-religious strength, self-control, personality, intelligence, noble character, and the skills required for personal fulfillment as well as for participation in society, the nation, and the state (Law No. 20 of 2003, Article 1). In this regard, the national education system serves not merely as a mechanism for knowledge transmission but as a constitutional instrument to develop human capabilities and to shape the character and civilization of a dignified nation, thereby fulfilling the constitutional mandate to educate the life of the nation. The overarching purpose, as stipulated by law, is to cultivate learners into human beings who are faithful and devoted to God Almighty, who embody noble character, health, knowledge, competence, creativity, and independence, and who are ultimately capable of exercising democratic values and assuming responsible citizenship (Law No. 20 of 2003, Article 3).

From the definition of education and the function of national education above, it can be observed that the development of students' potential is of paramount importance. It also asserts that intelligence is one of the essential strengths students must possess (Lu, 2019). The development of students' intelligence should begin as early as possible, at least from elementary school age (de Hond et al., 2022). This is because the elementary school years (ages 6–12) are considered the most critical period for children, as the knowledge and experiences gained during this phase serve as a foundation for their subsequent development (L. Chen et al., 2023).

According to Government Regulation No. 19 of 2005 concerning National Education Standards, Chapter IV Article 19 regarding Process Standards, paragraphs 1 through 3 state:

1. The learning process in educational units should be interactive, inspiring, joyful, and challenging, encouraging students to actively participate while providing space for initiative, creativity, and independence in line with their talents, interests, and developmental needs.
2. In addition to the provisions referred to in paragraph (1), educators shall provide exemplary conduct during the learning process.
3. Every educational unit must plan, implement, assess, and supervise the learning process to ensure that it is effective and efficient (Government Regulation, 2005).

Paragraph 1 emphasizes that learning should be enjoyable and provide space tailored to students' talents and interests (Mishra & Tyagi, 2022). Paragraph 3 mandates that each educational unit plans, executes, evaluates, and monitors the learning process to ensure its effectiveness and efficiency. Joyful learning that accommodates students' interests and talents reflects the essence of multiple intelligences-based education (Priyadarshi, 2024). Meanwhile, paragraph 3 underscores the implementation of learning management functions by educational units (Gupta et al., 2023). It can thus be concluded that Indonesia's national education standards offer space for multiple intelligences-based learning and regulate that educational units perform learning management functions (Belhadi et al., 2022).

Regarding intelligence, Howard Gardner introduced the theory of multiple intelligences in 1983 in his book *Frames of Mind*, which has been translated into twelve languages. He later published *Multiple Intelligences: The Theory in Practice* in 1993 as an enhancement of his previous work, following extensive research on the implications and applications of the theory

in American educational contexts. This theory was further refined in his book *Intelligence Reframed*, published in 2000 (Cai et al., 2024) The discourse on multiple intelligences was further expanded in *Multiple Intelligences: New Horizons* (2007). In *Frames of Mind*, Gardner defined intelligence as "the ability to find and solve problems and create products of value in one's own culture." According to Gardner, a person's intelligence is not determined by standard psychological tests but can be observed through two habits: first, the ability to independently solve problems (problem-solving); second, the tendency to create culturally valuable products (creativity).

Currently, the theory of multiple intelligences encompasses nine types of intelligence, which are inherent in every individual. However, these intelligences operate in diverse ways and combine uniquely within each person. One individual may exhibit high levels of all nine intelligences, while another may display only a few at a relatively lower level.

The nine multiple intelligences as defined by Gardner (2014: 48–60) in (Pardamean et al., 2022) are:

1. Linguistic Intelligence (Word Smart) – the ability to use and manipulate language effectively, both orally and in writing.
2. Logical-Mathematical Intelligence – the capacity to work with numbers and perform logical and scientific reasoning.
3. Visual-Spatial Intelligence – the ability to accurately perceive the visual-spatial world.
4. Musical Intelligence – the talent for developing, expressing, and enjoying musical forms and sounds.
5. Bodily-Kinesthetic Intelligence – the ability to use one's body or physical movement to express ideas and emotions.
6. Interpersonal Intelligence – the capacity to understand and empathize with the feelings, intentions, motivations, character, and temperaments of others.
7. Intrapersonal Intelligence – the capacity for self-awareness and the ability to act adaptively based on such knowledge.
8. Naturalist Intelligence – the ability to understand flora and fauna, differentiate between natural phenomena, and use this ability productively.
9. Existential Intelligence – the sensitivity and ability to contemplate deep existential questions of human existence (Suparno, 2008: 26–44).

The diversity in students' intelligence potentials demands that teachers be creative and innovative in adapting teaching activities to accommodate learners' styles and characteristics. Sharma et al (2022) asserts that various types of intelligence influence the learning process. Each intelligence type corresponds with a distinct learning style.

With the development and increasing acceptance of the multiple intelligences theory in education, educators are expected to nurture children's growth through curriculum planning, implementation, and evaluation that accommodate the development of all types of student intelligence. This responsibility is crucial, considering that the development and realization of each type of intelligence are essential for students to navigate life's challenges and to achieve a fulfilling life.

Within the concept of multiple intelligences, individual differences among learners are acknowledged and addressed based on Gardner's belief: "we are all so different because we all have a unique combination of intelligences. If we recognize this, we have a better chance of

dealing appropriately with the many problems that we face in the world" (Gardner, 1999). Applying the multiple intelligences theory in education leads teachers to become more insightful, appreciative, and capable of facilitating student development.

Kim et al (2023) propose incorporating the multiple intelligences theory into the elementary school curriculum. VerMilyea et al (2020) argues that teaching aligned with students' learning styles helps them process information more effectively. Lazaroiu et al., (2022) demonstrates that multiple intelligences-based teaching fosters student success, improved interest and motivation, deeper understanding, higher achievement, greater self-esteem, and more enjoyable classroom experiences. Bhatt & Muduli (2023) emphasizes that the multiple intelligences theory can transform monotonous teaching into engaging learning experiences, making students more than passive recipients of theory. Chen et al (2022) notes that activities supporting the development of multiple intelligences enhance students' competencies. Goodarzian et al (2023) affirms that the multiple intelligences theory influences learning orientation, as students understand material more easily when it aligns with their dominant intelligences. Rocha et al (2021) contends that applying the theory in teaching enhances children's skills and strengthens their natural talents. Zhang et al (2021) states that e-learning tools based on multiple intelligences, developed through valid and reliable instruments and models (e.g., Moodle), can improve learning outcomes. William et al (2023) affirms the effectiveness of smart learning solutions based on multiple intelligences in maximizing children's potential in early childhood education (ECE).

Amir (2013: 12) asserts that the multiple intelligences theory can transform tedious mathematics learning into an enjoyable experience. Sharma et al (2022) conclude that implementing the theory in teaching is more effective than traditional teaching models. Cai et al (2024) states that applying the theory within learning management systems enhances students' learning interest, talents, and creativity.

Based on the aforementioned studies focusing on *multiple intelligences* as the research object—whether as a learning method, model, instructional basis, or a theory to be implemented—learning outcomes appear to be significantly improved compared to learning approaches that are not based on the theory of multiple intelligences. However, research that explores multiple intelligences from the perspective of learning management remains limited. The role of the principal as a leader and teachers as managers in instructional management is essential to optimizing learning objectives.

Optimizing the role of the principal as a leader within an educational institution and of teachers as managers in instructional delivery—serving as planners, organizers, directors, and controllers in learning management—positions both actors as *learning leaders* and *learning managers* who create a learning climate conducive to student engagement and comfort. Through the effective application of instructional management, principals and teachers can maintain a supportive and productive learning environment for all students. The application of planning functions in instructional activities is key to achieving educational goals, through deliberate actions in setting, maintaining, and managing a responsive environment that contributes economically, psychologically, socially, politically, and technically. The core elements of educational management processes—also referred to as management functions—include planning, organizing, directing, and controlling.

Findings from both prior studies and field observations at elementary schools implementing multiple intelligences-based learning, such as SDIT Insan Mandiri Jakarta, Islamic School Buah Hati Jakarta, SDIT Nidaul Hikmah Salatiga, Madrasah Ibtidaiyah Program Khusus Kartasura, and SDIT Harapan Bunda Purwokerto, revealed the following issues: (1) the absence of a standardized learning management model based on multiple intelligences; (2) learning design based on multiple intelligences typically includes only three stages: input, process, and output; (3) conceptual confusion in using the term *multiple intelligences*—whether as a theory, method, strategy, or model; (4) management functions within the instructional process are not explicitly integrated from planning to evaluation; (5) some schools initially based on multiple intelligences reverted to conventional models due to weak leadership in promoting the multiple intelligences paradigm; (6) regardless of whether multiple intelligences theory is implemented, there remains partial understanding, conservative mindsets, and pragmatic tendencies among policymakers and education managers; and (7) the quality of teachers—particularly the lack of creativity and innovation—has hindered the successful application of multiple intelligences theory in schools.

The application of management concepts to instructional activities highlights that learning management involves efforts by school principals as instructional managers and teachers as classroom learning managers, carried out to realize the objectives of school and learning programs.

The effectiveness of planning functions in instructional activities can be indicated through the application of the following planning principles: (1) defining what the teacher will do, when, and how, during the implementation of learning; (2) setting instructional goals and establishing a clear work plan to achieve optimal results; (3) developing appropriate learning strategy alternatives; (4) collecting and analyzing relevant information to support instructional activities; and (5) preparing and communicating instructional plans and decisions to relevant stakeholders.

Referring to the implementation of planning functions in learning activities, a number of research indicators have been developed around instructional planning, which include: developing instructional activities, determining and limiting learning objectives, developing learning strategies, collecting supporting data and information, and communicating the instructional plans to relevant parties. Instructional planning is measured through the development of the *Lesson Plan*, consisting of components such as learning objectives, teaching materials, teaching methods, learning resources, and assessment of learning outcomes. With well-structured planning, teachers can prepare everything students need for effective learning.

In addition to planning, the organizing function in instructional management involves clearly defining roles for school personnel based on their expertise, authority, subjects taught, and responsibilities. Clarifying roles and responsibilities ensures that instructional activities—both process and quality—occur as intended.

Effective instructional management includes planning for multiple intelligences-based learning with the goal of preparing students for the next stage of education. Planning in this context includes: (1) identifying and selecting learning materials based on multiple intelligences; (2) grouping students according to intelligence types; (3) designing instruction with a thematic approach aligned with multiple intelligences; and (4) planning collaboration

between schools, families, and other stakeholders. Effective implementation of this approach requires careful coordination of all parties involved, both internal and external to the school.

Because multiple intelligences-based learning involves many stakeholders, schools must develop collaborative frameworks with these parties. Stakeholders contribute by helping to identify appropriate materials that align with students' intelligence types, thereby increasing compatibility between instruction and students' strengths.

This comprehensive planning requires principals with a clear vision and strong mission to prepare students for higher education. The involvement of both internal and external stakeholders necessitates strategic policies to ensure all parties contribute to the planning process. A principal with foresight and leadership skills is crucial for establishing networks and engaging stakeholders in the planning of multiple intelligences-based instruction.

The organizing function in instructional management can be indicated by several indicators: (1) providing facilities, equipment, and personnel necessary to implement plans effectively; (2) structuring learning components within the school system; (3) establishing an authority structure and coordination mechanism; (4) defining instructional methods and procedures; and (5) selecting, training, and developing teaching staff, along with other necessary resources.

These indicators have been developed as benchmarks for evaluating the effectiveness of organizing functions in instructional activities. Organizing follows thorough planning and is essential for the smooth implementation of multiple intelligences-based learning. Involving multiple parties requires organized human resource management, task distribution, and facilities management. All stakeholders must be adequately prepared and informed of their roles and responsibilities. In this context, the principal must be capable of turning available human resources into a collaborative force, focusing all efforts on multiple intelligences-based learning to prepare students for future academic levels.

Another function of instructional management is *actuating* (mobilization). Actuating includes: (1) outlining a clear and detailed timeline and budget for both institutional and instructional activities; (2) initiating leadership in implementing plans and decision-making; (3) issuing specific instructions to achieve objectives; (4) guiding, motivating, and supervising teachers; and (5) guiding and providing clear direction to students to enhance the learning process.

The teacher-student relationship places teachers in a strategic role as instructional managers who prepare all aspects of the learning process, including goals, content, student engagement, implementation methods, conducive learning environments, and assessment of outcomes. Teachers must manage the learning process in a way that maintains student interest and promotes the achievement of learning goals.

The actuating function is jointly applied by principals and teachers to ensure students engage actively in learning and reach pre-established goals. In this context, the principal plays a key role in mobilizing teachers to function effectively as classroom managers.

Implementation follows planning and organizing. Multiple intelligences-based learning is carried out by teachers, parents, related public and private institutions, and other stakeholders. Teachers implement the plan by: (1) delivering collaboratively developed multiple intelligences-based learning materials; (2) organizing students into learning groups

based on their intelligence types; (3) conducting thematic instruction related to specific intelligence types; and (4) fostering collaboration between school, families, and stakeholders.

In addition to classroom and subject teachers, the principal plays a crucial role in leading the implementation process and coordinating all involved parties. As the top authority in the school, the principal facilitates and encourages cooperation to ensure the successful execution of multiple intelligences-based learning.

Supervision in instructional contexts is carried out by the principal, overseeing classroom activities and ensuring all stakeholders fulfill their educational responsibilities. Teachers are responsible for collecting, analyzing, and evaluating learning activity data to guide and control the learning process toward the achievement of planned goals.

Supervisory functions are reflected in several indicators: (1) evaluating instructional implementation against planned activities; (2) reporting deviations and proposing corrective actions; (3) establishing instructional standards and targets; (4) assessing performance; and so forth.

METHODS

The research method employed in this study is Research and Development (R&D), referring to the Borg & Gall development model, which consists of ten steps but has been adapted into three main stages: preliminary study, model development, and model testing. The preliminary study was conducted through literature review, surveys, observations, interviews, Focus Group Discussions (FGDs), and the distribution of questionnaires to map the conditions of multiple intelligences-based learning management and its development needs. The development stage included the drafting of the model, validation by prospective users and expert teams, and model revision based on the feedback received. The data collection instruments—questionnaires, observation guidelines, and interview protocols—were validated and tested for reliability. Data analysis was carried out both quantitatively and qualitatively to obtain accurate and scientifically accountable results

RESULTS AND DISCUSSION

Result

The research and development of a learning management model based on Multiple Intelligences (MI) was conducted through a series of stages, including field studies, model draft formulation, validation, and gradual trials. Field studies—comprising surveys at several MI-based elementary schools in Jakarta and Central Java—revealed variations in the implementation of MI-based learning, with the absence of a standardized management model. Questionnaire results from five principals showed an average score of 2.07 (70.09%), with the planning function receiving the highest score (2.75 or 91.67%), while the existence of an MI model scored 0 (0.00%) as shown in Table 1. Meanwhile, results from 30 teachers showed an average of 2.63 (87.81%), with professional competence scoring highest (2.83 or 94.44%) and the MI model's existence again scoring 0 (0.00%) (Table 2). The combined average from both groups was 2.35 (78.33%), indicating the need for the development of an MI learning management model..

Table 1. Description of Principal Responses (N=5)

No	Function/Competency	Mean	(%)
1	Planning	2.75	91.67%
2	Organizing	2.47	82.22%
3	Implementation	2.42	80.74%
4	Evaluation	2.45	81.67%
5	Managerial	2.56	85.42%
6	Supervision	2.07	68.89%
7	Existence of MI Model	0.00	0.00%
	Average	**2.07**	**70.09%**

The responses of school principals (N=5) indicate relatively high competencies in planning (M=2.75; 91.67%) and managerial functions (M=2.56; 85.42%), while lower scores were recorded for supervision (M=2.07; 68.89%). Overall, the average score across competencies was 2.07 (70.09%), suggesting that principals demonstrate adequate management competencies; however, the absence of an implemented Multiple Intelligences (MI) model (0.00%) highlights the necessity for its development to strengthen school management practices.

Table 2. Description of Teacher Responses (N=30)

No	Function/Competency	Mean	(%)
1	Planning	2.46	81.85%
2	Organizing	2.38	79.44%
3	Implementation	2.68	89.44%
4	Evaluation	2.68	89.17%
5	Pedagogical	2.67	89.00%
6	Professional	2.83	94.44%
7	Existence of MI Model	0.00	0.00%
	Average	**2.63**	**87.81%**

Teacher responses (N=30) reveal strong competencies across professional functions, with particularly high scores in professional competence (M=2.83; 94.44%) and pedagogical implementation (M=2.67; 89.00%). Planning and organizing competencies were slightly lower but still at adequate levels (81.85% and 79.44%, respectively). The overall average of 2.63 (87.81%) demonstrates that teachers perceive themselves as competent in executing their roles; nevertheless, the absence of the MI model (0.00%) underscores the need for its systematic integration into instructional practices.

Table 3. Principals' Needs for the MI Model

Response	Average (%)
Strongly Needed	83.77%
Needed	16.23%
Not Needed	0.00%

Table 4. Teachers' Needs for the MI Model

Response	Average (%)
Strongly Needed	65.45%
Needed	34.55%
Not Needed	0.00%

Teacher responses reflect a similarly strong demand for the MI-based model, with 65.45% rating it as "strongly needed" and 34.55% as "needed," and no responses indicating that the model was "not needed." These findings highlight a shared recognition among educators of the relevance and potential contribution of the MI model in improving teaching and learning practices.

Table 5. Expert Validation

Aspect	Mean	(%)
Systematics	4.55	90.93%
Substance	4.56	91.24%
Language	4.49	89.87%
Graphical	4.42	88.44%
Average	4.51	90.12%

Expert validation results demonstrate high levels of agreement across all assessed aspects, with the highest scores in substance (M=4.56; 91.24%) and systematics (M=4.55; 90.93%). Language and graphical aspects were also rated positively (89.87% and 88.44%, respectively). The overall average score of 4.51 (90.12%) suggests that the proposed model is well-structured and conceptually sound according to expert judgment.

Table 6. Expert Validation

Aspect	Mean	(%)
Systematics	4.46	89.20%
Substance	4.50	90.00%
Language	4.38	87.60%
Graphical	4.37	87.30%
Average	4.43	88.53%

In the second validation phase, experts reaffirmed the strength of the model, particularly in substance (M=4.50; 90.00%) and systematics (M=4.46; 89.20%). Language (87.60%) and graphical design (87.30%) scored slightly lower, but still within acceptable ranges. The overall average of 4.43 (88.53%) confirms the model's feasibility and relevance, although refinement in presentation and linguistic clarity may be beneficial.

Tabel 7. Model Content Assessment – Limited Trial

Aspect	Mean	(%)
Systematics	4.55	91.00%
Substance	4.54	90.71%
Language	4.67	93.33%
Graphical	4.58	91.67%
Average	4.58	91.68%

Findings from the limited trial indicate highly positive evaluations of the model's content, with language receiving the highest score (M=4.67; 93.33%). Systematics, substance, and graphical aspects were all rated above 90%, yielding an overall average of 4.58 (91.68%). These results suggest that the model is both comprehensible and well-organized, ensuring clarity and usability for practical application.

Tabel 8. Model Applicability – Limited Trial

Aspect	Mean	(%)
Model is needed	4.67	93.33%
Important for schools	4.92	91.67%
Expected by schools	4.58	93.33%
Beneficial	4.67	93.33%
Helpful	4.67	93.33%
Facilitates processes	4.42	88.33%
Practical	4.75	95.00%
Focused on MI development	4.67	93.33%
Average	4.67	93.33%

Teachers and school stakeholders in the limited trial rated the model as highly applicable, with practicality (M=4.75; 95.00%) and importance for schools (M=4.92; 91.67%) being emphasized. All assessed aspects exceeded 88%, with an overall applicability score of 4.67 (93.33%). This confirms the model's strong potential to address educational needs and support MI-based learning processes effectively.

Tabel 9. Content Assessment – Small-Group Trial

Aspect	Mean	(%)
Systematics	4.48	89.17%
Substance	4.43	88.57%
Language	4.44	88.71%
Graphical	4.57	91.31%
Average	4.48	89.54%

The small-group trial produced consistently positive ratings, with graphical aspects scoring the highest (M=4.57; 91.31%). Other dimensions, including systematics, substance, and language, all scored above 88%. The overall average of 4.48 (89.54%) demonstrates that the model's content was perceived as relevant, clear, and aligned with instructional needs by participants.

Tabel 10. Model Applicability – Small-Group Trial

Aspect	Mean	(%)
Model is needed	4.61	92.14%
Important for schools	4.75	95.00%
Expected by schools	4.50	90.00%
Beneficial	4.64	92.86%
Helpful	4.61	92.14%
Facilitates processes	4.50	90.00%
Practical	4.61	92.14%
Focused on MI development	4.54	90.71%
Average	4.58	91.67%

The small-group trial confirmed the model's applicability, with the highest score assigned to its importance for schools (M=4.75; 95.00%), followed by beneficial use (M=4.64; 92.86%) and practicality (M=4.61; 92.14%). The overall average score of 4.58 (91.67%) underscores that the model is perceived as highly valuable and effective in fostering MI-based learning environments.

Tabel 11. Content Assessment – Expanded Trial

Aspect	Mean	(%)
Systematics	4.45	89.06%
Substance	4.46	89.21%
Language	4.52	92.37%
Graphical	4.47	89.39%
Average	4.48	89.39%

During the expanded trial, the model continued to receive strong evaluations across dimensions, with language scoring the highest (M=4.52; 92.37%). Systematics, substance, and graphical aspects all achieved scores near 89%. The overall average of 4.48 (89.39%) indicates that the model maintains its structural integrity and instructional relevance at a broader implementation scale.

Tabel 12. Model Applicability – Expanded Trial

Aspect	Mean	(%)
Model is needed	4.80	95.92%
Important for schools	4.71	94.29%
Expected by schools	4.65	93.06%
Beneficial	4.41	88.16%
Helpful	4.59	86.94%
Facilitates processes	4.35	89.39%
Practical	4.47	88.39%
Focused on MI development	4.65	91.67%
Average	4.58	91.58%

In the expanded trial, applicability ratings remained high, with "model is needed" achieving the strongest agreement (M=4.80; 95.92%). Other dimensions, such as importance for schools (94.29%) and expectation by schools (93.06%), further confirm its perceived relevance. Although slightly lower ratings were given for beneficial (88.16%) and practical (88.39%) aspects, the overall average of 4.58 (91.58%) substantiates the model's effectiveness and potential for sustainable implementation in diverse educational contexts.

Discussion

The Learning Management Model Based on Multiple Intelligences (MI) is the result of research and development aimed at designing a holistic management system integrated with the national curriculum. This model consists of four key sections: introduction, model mechanisms, model indicators, and conclusion. The approach emphasizes the mapping and grouping of student cohorts according to their dominant intelligence types and learning styles. The model's principles include aligning content with students' intelligence types, using thematic approaches, conducting outing classes, implementing portfolio assessments as authentic evaluations, and actively involving parents and stakeholders in supporting the learning process.

Planning within this model occurs at both the institutional leadership level (principals) and technical implementation level (teachers). Principals formulate the vision, mission, goals, strategies, and annual work and budgeting plans (RKT and RKAS), design organizational structures to support MI model implementation, and build partnerships with stakeholders. Teachers are responsible for designing learning tools such as themes, syllabi, lesson plans

(RPP), and scheduling thematic and outing class activities tailored to students' intelligence types. They also conduct preliminary assessments to align learning content and approaches.

Organization in the MI model involves all educational elements, including principals, teachers, parents, school committees, and stakeholders. Principals guide and coordinate all activities, while teachers ensure implementation aligns with MI-based thematic planning. Parents provide information about their children's potential and support learning activities, especially during outing classes. School committees offer policy advice and voluntary financial support. Stakeholders contribute by providing outing class venues and practical information as needed.

The implementation of this model demands readiness across institutional, curricular, instructional, assessment, student affairs, personnel, infrastructure, funding, and community engagement aspects. Principals ensure all positions are filled and administrative tools are complete. Schools analyze curricula and student characteristics as the basis for program planning. Teachers carry out instruction based on students' learning styles and dominant intelligences, document daily progress, and conduct periodic evaluations. Community involvement is reflected in program socialization, cooperation, and participation in regular meetings.

Evaluation is a crucial component to ensure alignment between implementation and planning. Evaluation activities include planning, implementation, analysis, and follow-up of monitoring and evaluation results. Success indicators of this model are seen in the effectiveness of planning, organizing, implementation, and evaluation by both principals and teachers. This model is considered innovative for positioning MI learning management as the primary research subject and involving active participation from all school elements. Although the research was limited to private schools in Java and has not yet reached wider implementation, the model has been tested in several schools and shows potential for broader application in the future.

Based on the research conducted by Agustin (2021), early identification and targeted stimulation of multiple intelligences in early childhood settings significantly increase the alignment between instructional activities and individual learners' strengths. Agustin's collaborative action-research with kindergarten teachers demonstrated practical assessment instruments and classroom routines that detected varied intelligence profiles and then mapped specific pedagogical activities (e.g., music, movement, interpersonal projects) to those profiles; importantly, the study reported measurable gains in engagement and developmental markers when teachers intentionally implemented MI-aligned tasks. This foundational work implies that any learning-management model aiming to operationalize MI must include robust, age-appropriate diagnostics and activity libraries that link assessment outputs to concrete learning tasks.

In the other side, research conducted by Attwood (2022), a careful conceptual analysis of the semantic and theoretical basis of Multiple Intelligences (MI) highlights both the pedagogical affordances and the definitional ambiguities that model builders must confront. Attwood's review argues that MI is best framed as a pragmatic taxonomy for designing differentiated instruction rather than a strict neuroscientific partitioning of cognition; consequently, a well-designed MI-based learning management model should explicitly document its operational definitions, map MI categories to observable learning outcomes, and

provide teacher training modules that translate theory into classroom practice. Integrating these conceptual clarifications into the model reduces misapplication and improves fidelity of implementation across contexts.

Research conducted by Chu (2023), applied implementations of MI theory within technology-mediated English teaching environments demonstrate that LMS features can be adapted to deliver differentiated, intelligence-aligned learning pathways. Chu's experimental design described an MI-oriented course architecture in which the LMS delivered multimodal resources (audio, kinesthetic tasks, visual-spatial exercises) and used student self-reports plus formative task performance to recommend subsequent activities. The study found improvements in both language achievement and learner satisfaction when the LMS orchestration respected individual MI profiles, which supports the feasibility of embedding MI logic directly into learning management workflows (assessment → recommendation → multimodal content delivery). This applied evidence provides a template for designing the model's core runtime: diagnostic intake, recommendation engine, and multimodal content repository.

CONCLUSION

Based on the research findings, the Learning Management Model Based on Multiple Intelligences proves to be an innovative solution to the absence of a comprehensive, integrated, and functional model that accommodates diverse learning styles and intelligence types. The model actively involves principals, teachers, students, and parents. Developed through a systematic process and validated in terms of content and applicability, the model is feasible for phased implementation in ready elementary schools. It is therefore recommended that schools establish implementation teams led by the principal, teachers continuously improve their competencies, parents actively support their children, and the government and stakeholders provide support through appropriate policies, training, and infrastructure to enable the model's refinement and broader adoption in Indonesia's primary education system.

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