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Multiple Intelligences in Philippine Secondary Education: An Integrative Review and Program Framework

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ABSTRACT

Research Problem: Multiple Intelligences (MI) theory has been widely applied in education to recognize learners' diverse intellectual strengths and inform instructional practices. However, evidence concerning its application in secondary education remains heterogeneous, particularly regarding intervention outcomes, contextual conditions, and its potential to inform structured educational programs.

Research Purposes: This study synthesizes recent evidence on the application of MI in secondary education and develops an evidence-informed framework for an MI-oriented educational program for Filipino high school students.

Research Methods: An integrative literature review was conducted using a structured search of the Scopus database. Three complementary search strategies addressing MI, education, secondary education, interventions, and teaching practices were applied to publications from 2024 to 2026. The search identified 184 records, of which 125 unique records remained after deduplication. Following full-text screening of 116 candidates, 82 studies were retained for evidence mapping and synthesis. The literature was classified into core, supporting/contextual, and conceptual/methodological evidence.

Results and Discussion: The findings reveal diverse applications of MI in learner profiling, instructional design, differentiated educational practices, teacher development, and intervention programs. However, the evidence presents heterogeneous outcomes, including positive, mixed, and null findings across educational contexts and measures. The synthesis further highlights teacher capacity, contextual adaptation, assessment practices, and cultural responsiveness as important considerations in translating MI-related concepts into educational practice. These findings suggest that MI can inform the diversification of educational opportunities, although claims regarding its effectiveness should remain proportionate to the available evidence.

Research Implications and Contributions: This study proposes an evidence-informed framework for an MI-oriented program in Philippine secondary education, integrating instructional activities, co-curricular experiences, contextual adaptation, and multiple forms of assessment. The framework provides a basis for developing educational programs that respond to diverse learner strengths while emphasizing context-sensitive implementation and systematic evaluation. It also offers directions for future empirical research examining the implementation and educational outcomes of MI-oriented practices in secondary schools.

Keywords: Educational Framework, Integrative Literature Review, Multiple Intelligences, Philippine Education, Secondary Education.

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INTRODUCTION

What counts as intelligence, and how it should be recognized in educational settings, has remained an unsettled question in psychology and education. Conventional approaches have often emphasized general cognitive ability and its measurement through standardized assessments. Such approaches have been useful for predicting and comparing aspects of academic performance, but they provide only one way of understanding what learners can do. In actual educational settings, students differ in how they communicate ideas, reason, create, collaborate, respond to their surroundings, and reflect on their own learning. This continuing tension between a relatively narrow measurement of intellectual ability and the diversity of learners' capabilities provides part of the context in which Gardner (2011) developed the Theory of Multiple Intelligences (MI), originally introduced in 1983.

Gardner's theory, first presented in *Frames of Mind* (2011), challenged the assumption that intelligence should be understood as a single general capacity. The theory proposed several relatively distinct intellectual capacities, initially including linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, and intrapersonal intelligence, with naturalistic intelligence subsequently incorporated into the framework. Rather than defining learners simply according to how much intelligence they possess, MI directs attention toward the different ways in which individuals can use intellectual capacities to solve problems and create products that are meaningful within particular cultural settings. This perspective has been attractive to educators because it provides a language for thinking about learner diversity and for designing learning experiences that are not restricted to conventional linguistic and logical forms of academic performance.

The educational appeal of MI, however, should not be confused with unqualified empirical support for all of its pedagogical applications. One of the most persistent misunderstandings is the tendency to treat MI as a theory of learning styles. Gardner has explicitly rejected this equivalence, arguing that intelligence and learning style are different constructs and should not be conflated (Gardner, 2013). This distinction matters because identifying a student's relatively strong intelligence does not, by itself, demonstrate that instruction should be matched to that intelligence or that such matching will improve learning outcomes. The distinction also matters for program development: an MI-informed educational framework should provide students with varied opportunities to engage with content rather than assign learners permanently to particular "types."

The empirical literature presents a similarly qualified picture. MI has been applied in learner profiling, instructional planning, differentiated educational practices, and subject-specific teaching, but the reported outcomes are not uniform. Recent school-based research includes studies reporting beneficial educational outcomes as well as studies in which relationships between MI profiles, teaching practices, and academic performance are weak or statistically non-significant. In the Philippines, for example, a 2024 study of junior high school students found that teaching styles and different MI dimensions did not significantly predict academic outcomes, despite the study's interest in the relationship between MI and academic performance (Macalangcom & Guillena, 2024). By contrast, a 2025 study involving 256 Grade 11 students examined significant relationships between multiple intelligence dimensions and academic performance, illustrating the continuing interest in MI as a possible explanatory framework for differences in student achievement (Malaran & Pañares, 2025). These findings should not be read as contradictory proof that MI either works or does not work; rather, they demonstrate the heterogeneity of the evidence and the importance of examining differences in research design, measurement, educational context, and the way MI is translated into practice.

The same issue can be seen in studies that use MI profiles to inform instructional planning. A recent Philippine study of 100 Grade 12 students, for instance, identified relatively strong intrapersonal and interpersonal profiles and proposed differentiated instruction as one possible educational response to learner diversity (Hamac & Oriola, 2025). Such profiling can be useful for understanding learners and generating instructional possibilities, but a profile is not equivalent to an intervention and does not establish that a particular instructional approach will improve academic outcomes. The distinction between profiling, implementation, and effectiveness is therefore central to the present

study.

This distinction becomes particularly important at the secondary level. Secondary students encounter more specialized subjects, increasingly complex academic tasks, examinations, and decisions concerning further education and employment. At this stage, educational programs need to accommodate learner diversity without reducing students to fixed categories. MI may offer one conceptual route for broadening educational opportunities, but its practical value depends on how the theory is interpreted, what teachers actually do with it, how learning is assessed, and whether the proposed practices are appropriate for the local educational context.

The Philippine educational context provides a meaningful setting for examining these questions. Republic Act No. 10533, the Enhanced Basic Education Act of 2013, established the K to 12 Basic Education Program and emphasized a curriculum that is learner-centered, inclusive, developmentally appropriate, relevant, responsive, research-based, culture-sensitive, contextualized, and flexible enough to be localized and indigenized. The law also identifies constructivist, inquiry-based, reflective, collaborative, and integrative approaches among the pedagogical principles for basic education (Republic Act No. 10533, 2013). These policy directions have continued through the MATATAG Curriculum Framework, launched by the Department of Education in 2023 as part of efforts to make the curriculum more relevant, strengthen foundational learning, and respond to learners' educational needs (Department of Education, 2023). These principles create a policy environment in which learner diversity and varied educational experiences are legitimate concerns. They should not, however, be interpreted as a formal endorsement of Gardner's MI theory. The relevance of MI to Philippine education therefore remains an empirical and conceptual question rather than a policy assumption.

Recent research confirms that MI has already entered discussions of Philippine secondary education. Studies have examined MI profiles in relation to academic achievement among junior and senior high school students, while other work has considered MI as a basis for differentiated educational practices (Macalangcom & Guillena, 2024; Malaran & Pañares, 2025; Hamac & Oriola, 2025). Yet the available studies differ considerably in purpose and design. Some identify students' intelligence profiles; some examine associations with academic outcomes; and others propose instructional applications. These different strands of research provide useful pieces of evidence, but they do not necessarily answer the practical question of how an MI-oriented program for secondary education should be structured.

The broader international literature reinforces this concern. A 2026 systematic review of MI implementation in school learning, covering research published from 2015 to 2025, found that existing studies were concentrated particularly at the elementary level, that qualitative designs were common, and that longitudinal and large-scale investigations remained limited. The review also identified uneven attention across different intelligence domains and characterized MI implementation as more often pedagogically adaptive than systematically transformative (Septianti et al., 2026). Thus, although MI has generated substantial educational interest, the evidence base remains uneven, particularly when the focus shifts from general classroom application toward coherent program development at the secondary level.

The recent literature also suggests that the question of MI effectiveness cannot be answered simply by counting studies that report positive outcomes. Some intervention-oriented studies report improvements in particular learning or developmental outcomes, whereas other studies report mixed or non-significant findings. The quality of the evidence also varies according to sample size, study design, measurement, comparison procedures, and duration of implementation. A recent review of MI-based educational research similarly emphasized methodological limitations and the importance of implementation quality and context when interpreting claims about effectiveness. This suggests that a useful synthesis should examine not only whether an MI-related practice was associated with an outcome, but also what was implemented, with whom, under what conditions, and what the study design actually permits researchers to conclude.

This is where the present study seeks to make its contribution. Rather than presenting

MI as an established solution to learner diversity, the study brings together recent evidence to examine how MI has been conceptualized and applied in education, what outcomes have been reported, where findings converge or diverge, and what contextual and methodological limitations need to be considered. Particular attention is given to secondary education and to the implications of the evidence for the Philippine context. The aim is not to claim that MI-based instruction necessarily improves academic achievement, but to identify educational practices and program components that can reasonably be considered when developing an MI-oriented framework.

The need for this synthesis is especially relevant because the recent literature already contains reviews of MI in school learning, including the 2015–2025 systematic review noted above (Septianti et al., 2026). The present review therefore adopts a narrower and more practice-oriented focus by examining recent evidence from 2024 to 2026, with particular attention to secondary education, educational applications and interventions, and the implications of that evidence for developing a program framework for Filipino high school students. In this way, the study complements rather than simply duplicates broader reviews of MI in school education.

Accordingly, this study addresses four questions: (1) What does recent research indicate about the educational application of Multiple Intelligences among school-age learners? (2) What educational practices, interventions, and outcomes have been reported in recent MI-related research? (3) What methodological, contextual, and evidentiary limitations characterize the existing literature? and (4) What evidence-informed components can be derived from the literature for designing an MI-oriented educational program for Filipino high school students?

On the basis of this synthesis, the study develops an evidence-informed program framework for Philippine secondary education. The framework is not presented as an empirically validated intervention, nor does it assume that identifying students' MI profiles automatically produces better educational outcomes. Instead, it translates relevant patterns in the recent literature into a structured set of program considerations while recognizing the theoretical debate surrounding MI, the heterogeneous quality of the evidence, and the importance of contextual adaptation in Philippine secondary education.

METHOD

Research Design

This study employed an integrative literature review with a structured Scopus-based search and evidence mapping. An integrative review was selected because the study aimed to synthesize evidence from literature employing different methodological approaches and to develop a broader understanding of the educational application of Multiple Intelligences (MI), rather than estimate a single pooled intervention effect. Integrative reviews are particularly suitable for combining empirical and theoretical literature and for systematically organizing diverse forms of evidence around a defined research problem (Whittemore & Knafl, 2005). The distinction between integrative reviews and other review approaches was also considered to avoid using systematic review terminology more broadly than warranted by the procedures undertaken (Grant & Booth, 2009).

The review addressed four research questions:

1. What does recent research indicate about the educational application of Multiple Intelligences among school-age learners?
2. What educational practices, interventions, and outcomes have been reported in recent MI-related research?
3. What methodological, contextual, and evidentiary limitations characterize the existing literature?
4. What evidence-informed components can be derived from the literature for designing an MI-oriented educational program for Filipino high school students?

The review was designed as an evidence-mapping and conceptual synthesis study, rather than a meta-analysis. The included studies varied substantially in educational level, research design, sample characteristics, MI applications, outcome measures, and contextual conditions. Consequently, the purpose of the synthesis was to identify patterns,

convergence, divergence, and contextual considerations across the literature rather than to calculate a pooled effect size.

Search Strategy

The literature search was conducted using the Scopus database. Scopus was selected as the primary database to identify recent peer-reviewed literature with international coverage and consistent bibliographic information. The search was restricted to publications from 2024 to 2026 to emphasize recent developments in research on the educational application of Multiple Intelligences.

Three complementary search strings were used:

1. "multiple intelligences" AND education
2. "multiple intelligences" AND ("secondary education" OR "high school" OR "secondary school")
3. "multiple intelligences" AND (program OR intervention OR "teaching strategy" OR pedagogy)

The search strategy was designed to capture both broad educational research on MI and studies more directly related to secondary education, instructional applications, interventions, and program development. The retrieved records were subsequently screened according to the eligibility criteria described below.

The three searches initially produced 184 records. Duplicate records were identified using the Scopus Electronic Identifier (EID) and other bibliographic information. After deduplication, 125 unique records remained for preliminary screening.

Eligibility and Screening

Eligibility was determined according to the substantive relevance of each publication to the research questions rather than solely according to the occurrence of the term “multiple intelligences” in the title or abstract. Studies were considered potentially eligible when they examined MI as a theoretical framework, educational approach, instructional practice, learner-profiling framework, intervention, or program-related construct.

Particular attention was given to studies involving school-age learners, especially middle school and high school students, because the proposed program is intended for Filipino high school students. Nevertheless, studies involving other educational levels were retained when they provided relevant evidence concerning intervention design, assessment, teacher preparation, instructional implementation, contextual adaptation, or theoretical development.

Studies were excluded when they were clearly unrelated to educational applications of MI, did not provide substantive information relevant to the research questions, or could not contribute meaningfully to the evidence synthesis. Records were also excluded when their primary focus was outside the educational problem addressed by the review. Access status was not used as an automatic substantive exclusion criterion. Thus, publications that were not openly accessible were not treated as scientifically irrelevant solely because their full text could not be freely retrieved. Accessibility was recorded separately from substantive eligibility.

Following deduplication and preliminary screening, 116 records were identified as candidates for full-text assessment. The full-text assessment considered the educational context, population, research purpose, research design, MI-related content, and relevance to the proposed program. Following this assessment, 82 studies were retained for evidence mapping and synthesis, while 34 records were excluded because they did not satisfy the substantive eligibility requirements.

The identification, screening, and eligibility process is summarized in Figure 1. The figure presents the sequence from the initial database records through deduplication, screening, full-text assessment, and final inclusion. The process was documented using the reporting logic of the PRISMA 2020 framework, particularly its emphasis on transparent reporting of identification, screening, eligibility assessment, and inclusion decisions (Page et al., 2021). PRISMA 2020 was used as a reporting aid rather than as a basis for reclassifying the present study as a systematic review. Figure 1 therefore provides a transparent account of the

study selection process while maintaining the methodological classification of this study as an integrative literature review.

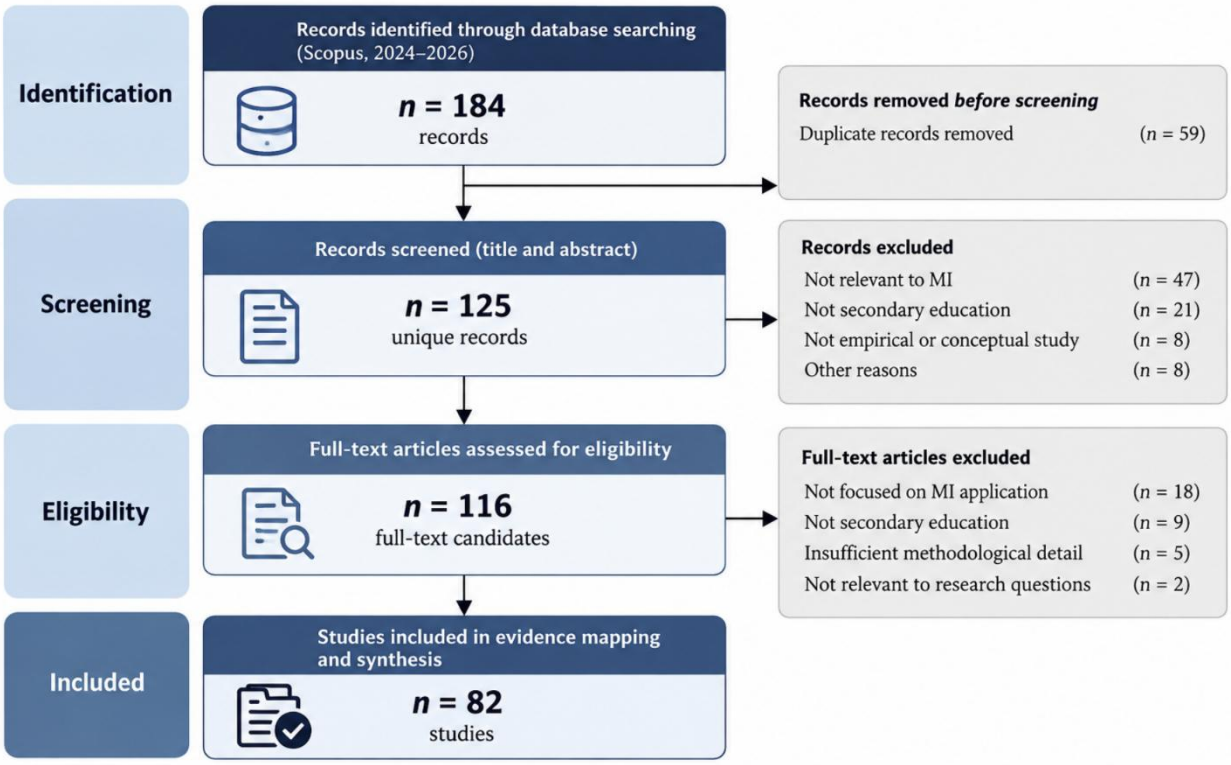


Figure 1. Study Selection Process

Source: Author's elaboration based on the study selection process, using PRISMA 2020 as a reporting aid.

Evidence Classification

The retained literature was classified according to the degree and type of relevance to the research questions. This classification was used to prevent studies with substantially different evidentiary functions from being interpreted as equivalent evidence.

Core evidence consisted of studies directly examining MI applications, interventions, educational practices, or outcomes among school-age learners, particularly secondary-level students. These studies constituted the primary evidence base for interpreting the educational application of MI.

Supporting and contextual evidence consisted of studies that did not necessarily evaluate an MI intervention among high school students but provided relevant information concerning learner profiling, differentiated educational practices, teacher capacity, curriculum implementation, assessment, cultural context, or other conditions influencing the application of MI.

Conceptual and methodological evidence consisted of studies contributing theoretical clarification, measurement considerations, program-design principles, or critical perspectives on MI. These studies were used to inform the conceptual framework but were not interpreted as direct evidence of intervention effectiveness.

This classification was important because MI-related studies differ considerably in their conceptualization and educational application. In particular, MI was not automatically treated as synonymous with learning styles or differentiated instruction. These constructs were considered analytically distinct unless a reviewed study explicitly established their relationship.

Data Extraction

A structured evidence-extraction framework was used to organize information from the

retained studies. The extracted fields included:

1. author and publication year;
2. country or educational context;
3. educational level;
4. participant or study population;
5. research design;
6. MI domains or dimensions examined;
7. type of educational application or intervention;
8. instructional or program characteristics;
9. outcome variables;
10. principal findings;
11. methodological or contextual limitations; and
12. relevance to the proposed MI program.

Where information was available, the extraction also recorded whether a study employed an experimental, quasi-experimental, correlational, descriptive, qualitative, mixed-methods, conceptual, or review design.

The extraction process was intended to distinguish among three analytically different questions: what MI practices were implemented, with whom they were implemented, and what outcomes were actually supported by the study design and evidence. This distinction follows the broader methodological principle that review synthesis should preserve important differences among the underlying sources rather than collapse heterogeneous evidence into a single conclusion (Whittemore & Knafl, 2005).

Data Synthesis

The extracted evidence was synthesized through descriptive and thematic evidence mapping. The synthesis proceeded in three stages.

First, the studies were compared according to educational level, geographical context, research design, type of MI application, and outcome examined. Second, findings were organized into recurring themes concerning educational application, learner development, instructional practice, teacher capacity, contextual adaptation, and program implementation. Third, findings were compared for convergence and divergence, with particular attention to positive, mixed, and null findings.

The synthesis did not assume that MI-based education was inherently effective. Studies reporting positive outcomes were considered alongside studies reporting limited, mixed, or statistically non-significant outcomes. This approach was adopted to reduce confirmation bias and to distinguish empirical evidence from conceptual propositions.

The synthesis also differentiated among evidence of association, evidence of implementation, and evidence of intervention effectiveness. For example, an observed relationship between students' MI profiles and academic performance was not interpreted as evidence that an MI-based program caused improved academic performance. Similarly, descriptions of MI-related classroom practices were not treated as experimental evidence of program effectiveness.

Finally, the synthesized evidence was used to identify design implications for an MI-oriented program for Filipino high school students. The proposed program was therefore treated as an evidence-informed conceptual framework, rather than as an empirically validated intervention. Its proposed components were derived from recurring patterns in the reviewed literature and considered in relation to the educational and contextual characteristics of Philippine secondary education.

Methodological and Interpretive Considerations

Because the retained literature included different research designs and forms of evidence, methodological quality was interpreted in relation to the purpose and design of each study rather than reduced to a single numerical quality score. Experimental and quasi-experimental studies were examined in relation to intervention design, comparison procedures, outcome measurement, and interpretation of effects. Descriptive and correlational studies were considered in relation to sampling, measurement, and analytical

procedures. Qualitative and conceptual studies were considered according to the relevance and clarity of their evidence and analytical arguments.

The review therefore avoided treating all retrieved studies as equivalent. In particular, correlational evidence was not interpreted as causal evidence, classroom implementation reports were not treated as evidence of intervention efficacy, and conceptual proposals were not treated as empirically established outcomes.

This distinction was necessary for constructing an evidence-informed program without overstating what the current literature can establish. It also reflects the broader methodological principle that review conclusions should remain proportionate to the characteristics and limitations of the underlying evidence (Grant & Booth, 2009; Whittemore & Knafl, 2005).

RESULTS AND DISCUSSION

Evidence Landscape and Research Patterns in Multiple Intelligences Education

The Scopus-based search identified a substantial but heterogeneous body of recent literature on Multiple Intelligences (MI) in education. Three complementary search strategies were used to capture studies discussing MI in education generally, MI in secondary or high school settings, and MI in relation to programs, interventions, teaching strategies, and pedagogy. The combined search yielded 184 records. After removing duplicate records, 125 unique records remained. Preliminary screening reduced this pool to 116 full-text candidates, which were subsequently assessed for substantive relevance to the review. The screening process is summarized in Figure 2.

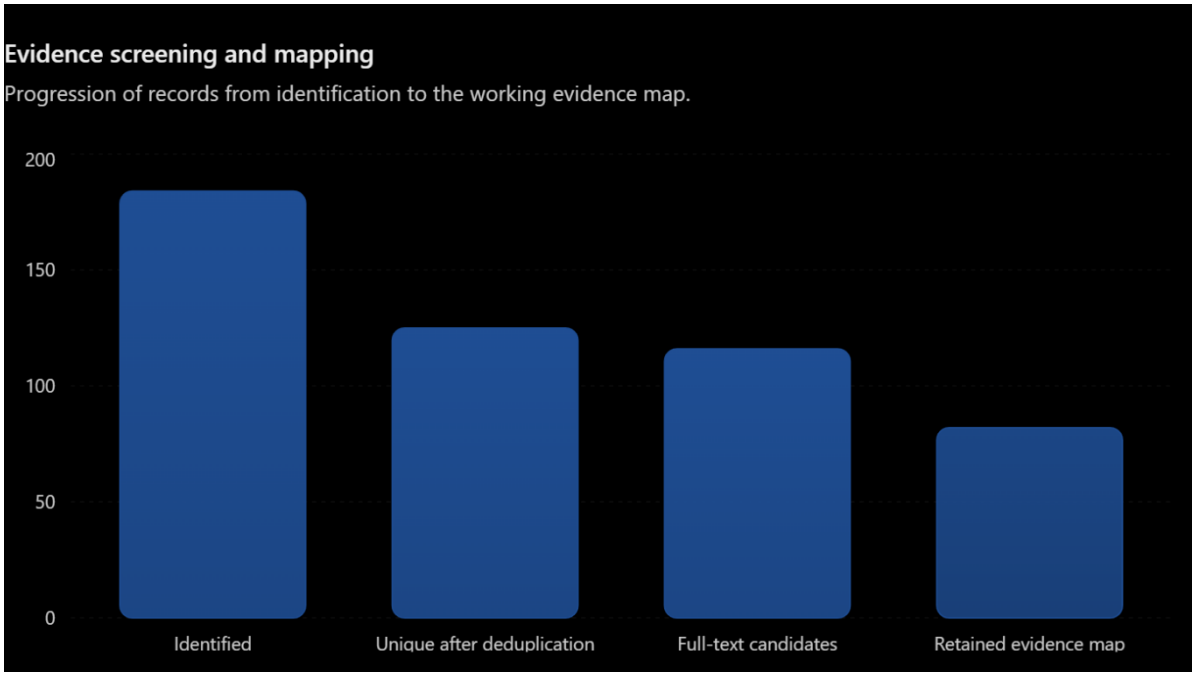


Figure 2. Scopus evidence screening and mapping.

Source: Authors' Scopus-based evidence mapping, 2024–2026.

The progression shown in Figure 2 is useful for understanding the character of the evidence base. The initial 184 records should not be interpreted as 184 independent studies directly addressing the same research problem. The overlap among the three search strategies was substantial, and the literature also varied considerably in educational level, research purpose, population, and study design. After screening, 82 studies were retained for the working evidence map and synthesis, while the remaining records were excluded because they did not provide sufficient substantive relevance to the review questions. This distinction is important because the purpose of the review is not simply to establish how frequently MI appears in the literature, but to determine what kinds of evidence can reasonably inform the development of a program framework for secondary education.

The retained literature was therefore organized into several evidence strands rather than treated as a single homogeneous body of research. As summarized in Table 1, these strands include learner profiling, MI-informed pedagogy, intervention and outcome studies, assessment, teacher and implementation factors, contextual or cultural considerations, and conceptual or theoretical work.

Table 1. Main Evidence Strands Identified in the Review

Evidence strand	Primary focus	Typical evidence	Relevance to the present study
Learner profiling	Identifying patterns and relative strengths across MI domains	Descriptive surveys, MI inventories, learner profiles	Provides information about learner diversity but does not establish causal effects
MI-informed pedagogy	Using varied instructional activities associated with different MI domains	Classroom strategies, differentiated instruction, multimodal learning activities	Directly informs possible instructional components
Intervention and outcomes	Examining changes associated with MI-informed teaching or programs	Experimental, quasi-experimental, correlational, and mixed-methods studies	Provides the main basis for judging possible educational outcomes
Assessment	Expanding ways in which learners demonstrate knowledge and competence	Performance tasks, portfolios, alternative or MI-related assessment	Relevant to program assessment and learner demonstration
Teacher and implementation factors	Examining teachers' understanding, preparation, and classroom use of MI	Teacher surveys, interviews, professional-development studies	Helps determine implementation feasibility
Context and culture	Examining how MI-related practices operate in particular educational and cultural settings	Context-specific empirical and qualitative studies	Important for Philippine adaptation
Conceptual and theoretical studies	Clarifying the meaning, assumptions, and educational use of MI	Theoretical papers, conceptual discussions, critical reviews	Provides the basis for interpreting evidence and avoiding overclaiming

Source: Authors' synthesis of the retained Scopus evidence, 2024–2026.

The evidence mapped in this review suggests that the educational use of Multiple Intelligences is broader than the question of whether MI-based instruction improves academic scores. Across the literature, MI has been used to shape learning materials, classroom activities, language instruction, learner profiling, assessment, and more structured interventions. This variety is important because these applications do not make the same claim. A learner profile describes patterns among students; an instructional design changes what happens in the classroom; and an intervention asks whether those changes are associated with measurable outcomes. Treating all three as evidence of "MI effectiveness"

would flatten important differences in the literature.

One useful line of evidence concerns the design of learning environments. Annamalai et al. (2025), for instance, examined the representation of MI in self-instructional materials delivered through learning management systems. Their work points to an aspect that is easily overlooked in discussions of MI: diversification does not necessarily begin with classifying students. It can begin with how learning materials are designed and how students are given different ways to interact with content. This is particularly relevant to secondary education, where learning increasingly takes place across face-to-face, digital, and blended environments. The implication is not that digital materials become effective simply because they contain several MI-related elements, but that instructional variety can be built into the learning environment itself.

Subject-specific studies provide another perspective. Doblon (2023), working with senior high school students in science, reported classroom experiences involving activities such as group work, drawing, acting, and laboratory-based tasks. The significance of this evidence lies less in demonstrating a universal MI effect than in showing how varied activities can alter classroom participation. Students who may be less visible in lecture-dominated settings can have additional ways to contribute when learning activities are broadened. This is consistent with the broader pedagogical argument that the value of MI may sometimes lie in expanding opportunities for participation rather than predicting who will achieve the highest grades.

A similar issue appears in the study by Nicolas and Talosig (2024), which examined differences in MI profiles among primary pupils and considered their relationship with academic performance. The study illustrates why learner profiling can be attractive to teachers: it makes differences among students more visible and can encourage teachers to think beyond a single model of classroom participation. Yet profiling also creates a methodological danger. Once a profile is converted into a fixed label, descriptive information can easily become an instructional prescription. The more defensible use is to treat learner information as one source for planning, alongside classroom observation, prior learning, interests, language, and the requirements of the curriculum.

Evidence from other educational settings reinforces the importance of context rather than a universal MI recipe. De Mello et al. (2024), examining the implementation of MI in English teaching among Orang Asli students in Malaysia, focused specifically on the challenges of applying MI in a culturally distinctive learning environment. This is relevant to the Philippine case because it demonstrates that MI-oriented teaching cannot be separated from the learners' linguistic and cultural circumstances. An activity that appears appropriate in one setting may have a very different meaning or feasibility in another. For Philippine secondary schools, therefore, cultural adaptation should not be treated as an optional addition to an MI program; it is part of determining whether the program is educationally workable in the first place.

The same point can be extended to Indigenous and culturally situated education. Miole (2024) examines the cultural interface in Philippine Indigenous educational policy, providing a useful reminder that educational programs operate within existing relationships among community, identity, policy, and schooling. Read alongside the evidence on culturally responsive practice, this suggests that an MI framework should not simply import a predetermined set of activities into Philippine classrooms. Instead, the framework needs room for local examples, community knowledge, language resources, and culturally meaningful forms of participation.

The literature also becomes more interesting when instructional variety is separated from the stronger claim of instructional matching. Pocaan (2022), for example, examined MI and perceptual learning-style preferences among education and engineering students. The study is relevant because MI and learning styles are frequently brought together in educational practice even though they are conceptually distinct. The evidence therefore supports a cautious position: students may show different patterns of strengths or preferences, but this does not by itself establish that instruction should be matched to one dominant profile. This distinction is particularly important given Gardner's (2013) explicit warning that MI should not be conflated with learning styles.

Evidence concerning specific intelligences can also illuminate the subject–intelligence relationship without requiring a fixed learner-type model. Šafranj (2016), for instance, examined logical-mathematical intelligence in relation to English as a second language. Such studies suggest that particular classroom activities may draw on particular forms of reasoning or representation. For program design, however, the more useful question is not whether a student "belongs" to a particular intelligence category, but whether a learning objective can reasonably be approached through more than one form of activity, representation, or expression.

Another strand concerns teacher implementation and the practical conditions under which MI ideas can be used. The existence of an attractive pedagogical framework does not guarantee that teachers can implement it consistently. De Mello et al. (2024) illustrates this problem directly, while the wider evidence base indicates that MI applications vary according to teacher understanding, instructional resources, curriculum demands, and classroom conditions. This is one reason the proposed E-MI Framework places teacher capacity and contextual mapping before the selection of activities. A program that asks teachers to provide multiple learning pathways without adequate preparation may simply increase workload without producing better learning.

Assessment is equally important. If instructional opportunities are diversified but student learning continues to be judged almost entirely through one narrow form of examination, the program risks reproducing the very limitation it is intended to address. McArthur (2023) provides a useful conceptual basis for considering authentic assessment in relation to work, well-being, and society, while Swaran Singh et al. (2022) examine the challenges faced by ESL teachers in implementing portfolio assessment as an alternative form of assessment. These studies do not constitute evidence that MI requires portfolios or authentic assessment. Their contribution is more practical: they show that alternative assessment requires teacher preparation, appropriate tasks, and clear purposes. For an MI-oriented program, varied assessment should therefore be selected because it captures the intended learning outcomes more appropriately, not simply because it corresponds to one of the eight intelligence domains.

Student engagement presents another potentially valuable outcome, but it also needs conceptual discipline. Martin et al. (2023) emphasize the importance of conceptual and empirical clarity when discussing motivation and engagement. This is relevant to MI research because classroom activities that students enjoy may increase participation without necessarily improving subject-matter learning. Consequently, engagement can be treated as an important program outcome or intermediate indicator, but it should not automatically be interpreted as evidence that MI has produced superior academic achievement.

At the intervention level, the evidence is similarly mixed. The existing literature includes studies reporting favorable outcomes as well as studies in which improvements were not statistically established. The meta-analytic work of Falguisana (2024) is particularly relevant to the Philippine evidence base because it attempts to synthesize recent studies conducted in the Philippine educational setting rather than treating individual classroom studies in isolation. Its presence in the evidence map is important precisely because the question of MI effectiveness is better addressed through patterns across studies than through selective attention to individual positive findings. The existence of a positive result should therefore be treated as one piece of evidence, not as the conclusion of the review.

The review-level evidence also indicates that MI research has developed along several different paths. Galarza Galarza et al. (2023), in their systematic review of MI in pedagogical processes, illustrate the breadth of educational applications. Kornhaber (2019), from a theoretical perspective, provides a useful account of the intellectual foundations and educational interpretation of MI. Together, these sources help explain why the literature contains such varied applications: MI operates simultaneously as a psychological theory, an educational language for discussing learner diversity, and a practical framework adopted by teachers. These functions should not be treated as interchangeable.

Taken together, the evidence points toward a more restrained but more useful

interpretation of MI. The literature does not establish that students should be permanently classified according to dominant intelligences, nor does it provide sufficient evidence that matching instruction to such profiles reliably improves achievement. What it does offer is a substantial body of experience with varied learning activities, multimodal materials, learner profiling, alternative assessment, culturally responsive implementation, and opportunities for students to participate in different ways. These elements provide a stronger foundation for program design than the assumption that each intelligence requires a corresponding teaching method.

For Philippine secondary education, this distinction is particularly important. The available evidence suggests that an MI-oriented program should begin with learning objectives and contextual knowledge of students rather than with intelligence labels. Learner profiles may inform planning, but they should remain flexible. Activities should vary when variation serves the learning objective. Language and cultural resources should be incorporated where they strengthen learning. Assessment should provide appropriate evidence of the intended competencies. Teacher preparation should be treated as an implementation condition rather than an afterthought. In this form, MI becomes less a system for sorting students and more a design lens for creating broader and more responsive opportunities to learn.

The evidence therefore supports the proposed E-MI Framework as a testable synthesis, not as a validated intervention. Its contribution is to bring together strands of evidence that are often discussed separately learner diversity, instructional design, cultural context, teacher implementation, engagement, and assessment and translate them into a sequence that can be implemented and evaluated in Philippine secondary schools.

Evidence of Multiple Intelligences Applications and Outcomes

The evidence mapped in this review shows that Multiple Intelligences (MI) has been applied in education in several distinct ways, and the reported outcomes vary accordingly. The most common applications involve learner profiling, differentiated or varied instruction, MI-informed classroom activities, alternative forms of assessment, and more structured interventions. These applications should not be treated as equivalent. A study that identifies students' MI profiles, for example, answers a different question from an experimental study that tests whether an MI-based instructional intervention improves learning outcomes. One of the clearest findings from the evidence synthesis is therefore that the educational outcomes associated with MI depend substantially on what is being implemented, for whom, and how the outcome is measured.

This pattern is particularly visible in the recent Philippine literature. Macalangcom and Guillena (2024) examined junior high school students and found that teaching styles and the different MI dimensions did not significantly predict academic performance. Their findings provide an important caution against treating an MI profile as a direct predictor of achievement. The study nevertheless supports the broader pedagogical argument that teachers need to recognize learner differences and use diverse instructional approaches. In other words, the absence of a significant statistical relationship between MI dimensions and academic performance does not necessarily invalidate the pedagogical value of instructional diversity; it does, however, limit the strength of any claim that MI itself causes better academic achievement.

A different pattern was reported by Malaran and Pañares (2025) among 256 Grade 11 students in the Philippines. Their analysis found significant relationships between naturalistic and visual-spatial intelligence and academic performance, while visual-spatial intelligence was the only MI dimension identified as influencing academic performance in their regression analysis. This finding is more specific than a general claim that "multiple intelligences improve achievement." It suggests that particular relationships may emerge in particular samples and educational contexts. At the same time, because the study used a descriptive-correlational and causal design rather than a randomized intervention, the result should be interpreted as evidence of association and predictive contribution within that sample, rather than as proof that developing visual-spatial intelligence will necessarily raise academic performance.

Learner profiling provides another important strand of evidence. Hamac and Oriola (2025), studying 100 Grade 12 students in a Philippine diocesan school, found relatively high intrapersonal and interpersonal scores, while logical-mathematical intelligence had the lowest mean among the eight domains assessed. The authors proposed these differences as a basis for differentiated instruction. The value of such profiling lies primarily in helping teachers recognize variation within a classroom. However, the results do not establish that students should be taught exclusively through their strongest intelligence. The distinction is important because profiling can support instructional planning without requiring the stronger—and empirically more difficult—claim that students learn more effectively when instruction is matched to a fixed intelligence type.

Table 2. Selected Evidence on Multiple Intelligences Applications and Reported Outcomes

Study/context	Educational level and design	MI application	Main outcome	Interpretation for the present review
Macalangcom & Guillena (2024), Philippines	Junior high school; descriptive-correlational	MI profiling and perceived teaching styles	MI dimensions and teaching styles did not significantly predict academic outcomes	MI profile alone should not be treated as a reliable predictor of achievement
Malaran & Pañares (2025), Philippines	Grade 11; descriptive-correlational/causal design	MI profiling and academic-performance analysis	Naturalistic and visual-spatial intelligence were significantly related to academic performance; visual-spatial intelligence was the only MI dimension identified as an influence in regression analysis	Some MI domains may show context-specific associations, but causal claims require intervention evidence
Hamac & Oriola (2025), Philippines	Grade 12; quantitative descriptive survey	MI profiling as a basis for differentiated instruction	Intrapersonal and interpersonal were highest; logical-mathematical was lowest	Profiling can inform differentiated opportunities, but does not establish instructional "matching" effects
Prasetyo et al. (2024), Indonesia	Secondary students; quasi-experimental	Eight-domain MI learning program	No statistically significant improvement in emotional intelligence, although most intervention participants showed higher post-test scores	Positive individual changes do not necessarily translate into statistically established program effects
Shahzada & Din (2025), Pakistan	Grade 10; pretest–posttest controlled-group experiment	MI-based instruction compared with	MI-based instruction groups outperformed the traditional instruction group	Provides stronger intervention evidence, but remains specific to the population,

Study/context	Educational level and design	MI application	Main outcome	Interpretation for the present review
		traditional instruction	on the study's learning-attainment measure	content, instrument, and intervention used
Other MI-informed educational studies	Various levels and contexts	Differentiated instruction, varied activities, assessment, learner-centered practices	Outcomes reported across engagement, participation, communication, achievement, and classroom experience	Evidence supports instructional diversification more consistently than a universal achievement effect

Source: Authors' synthesis of selected studies retained in the evidence map, 2024–2026.

The contrast in Table 2 is more informative than a simple count of "successful" and "unsuccessful" MI studies. The evidence includes positive, mixed, and null findings, and these categories often reflect differences in research design and outcome rather than a simple disagreement about whether MI is useful. For example, Prasetyo et al. (2024) conducted a quasi-experimental study involving 19 secondary students in two alternative schools in Jakarta. The MI learning program did not produce a statistically significant improvement in emotional intelligence, although most participants in the intervention group showed higher post-test scores. This is precisely the kind of finding that should not be converted into either "MI failed" or "MI worked." The more defensible interpretation is that the intervention showed some individual-level movement but did not provide sufficient statistical evidence of a program effect under the study conditions.

By contrast, Shahzada and Din (2025) provide a stronger experimental example from secondary education. Their study used a pretest–posttest controlled-group design with Grade 10 students and compared MI-based instruction with traditional instruction. The MI-based groups outperformed the traditional instruction group on the study's learning-attainment measure. This finding is relevant because it moves beyond learner profiling and tests an instructional intervention directly. Nevertheless, the result should still be interpreted within its methodological boundaries: the intervention involved a particular group of Grade 10 students, a particular instructional implementation, and a self-developed 25-item assessment. It therefore supports the proposition that MI-informed instruction can produce favorable learning outcomes under some conditions, rather than establishing a universal effect across subjects and student populations.

Taken together, these studies suggest that the strongest evidence is not necessarily concentrated in one particular intelligence domain. Instead, a recurring feature of the more promising applications is the diversification of learning experiences. MI-informed instruction may involve discussion, writing, visual representation, movement, experimentation, collaboration, reflection, performance, music, or problem-solving. The pedagogical value of this diversity is potentially broader than the claim that each activity activates a separate intelligence. It gives students more than one way to participate in a lesson and more than one way to demonstrate what they understand.

This interpretation also helps address an important theoretical problem in the literature. The original manuscript sometimes moves too quickly from the existence of different MI domains to the assumption that teaching should be matched to students' dominant intelligences. That assumption is difficult to defend as a general instructional rule. Gardner (2011) himself has explicitly distinguished Multiple Intelligences from the learning-styles framework, and the evidence summarized above does not establish that assigning students to fixed intelligence categories and matching instruction accordingly is consistently effective. The more cautious interpretation is to use MI as a design heuristic for expanding instructional possibilities, rather than as a diagnostic system that determines how each student should be taught.

The evidence also suggests that the outcome selected by researchers matters. Academic achievement is only one possible outcome. Some studies examine engagement, participation, communication, confidence, emotional development, or students' classroom experiences. These outcomes may be educationally meaningful, but they should not be presented as interchangeable. An increase in engagement, for instance, does not automatically demonstrate improved academic attainment; similarly, a favorable learner profile does not demonstrate that an intervention has developed the corresponding intelligence. A rigorous MI program therefore needs to specify in advance which outcome is expected to change and how that change will be measured.

This distinction is especially important for the proposed Philippine program. The original manuscript claims that a comprehensive MI program could improve academic performance, self-confidence, creativity, leadership, social competence, and lifelong learning. The evidence reviewed here does not justify presenting all of these outcomes as established effects. Some may be reasonable program objectives or intended developmental outcomes, but they remain propositions to be tested. The framework should consequently distinguish between outcomes supported by existing evidence, outcomes that are plausible but require further testing, and outcomes that should not be claimed without direct evaluation.

There is also a methodological lesson for program design. The positive experimental finding from Pakistan and the mixed/null findings from the Philippines and Indonesia indicate that an MI program cannot be evaluated simply by asking whether students “like” the activities or whether their MI scores are high after participation. A credible evaluation would need a clearly defined intervention, comparison condition where feasible, baseline and post-intervention measures, valid outcome instruments, and sufficient follow-up to determine whether observed changes persist. This is particularly important because the current article proposes a framework rather than reports an implemented intervention.

The overall synthesis therefore leads to a balanced conclusion. MI-informed educational practices show potential, but the evidence does not support a uniform or unconditional effect on academic achievement. The more consistent pedagogical implication is that students may benefit from learning environments that offer varied modes of engagement, expression, collaboration, and problem-solving. The less secure claim is that matching instruction to a student's dominant intelligence—or attempting to increase a specific intelligence through a short intervention—will reliably improve academic outcomes.

For the present study, this distinction is consequential. The proposed program should not be designed as a collection of activities intended to “activate” eight or nine fixed intelligences. Instead, it should translate the more defensible evidence into varied learning experiences, authentic tasks, collaborative and individual opportunities, multiple forms of demonstration, and contextualized activities, while allowing its effectiveness to be tested empirically. This provides a more credible bridge from MI theory to educational practice and prepares the analysis for the next subsection, which examines the contextual and pedagogical conditions under which such practices are more likely to be feasible and meaningful in Philippine secondary education.

Contextual and Pedagogical Conditions for Implementation

The mixed findings identified in the reviewed studies suggest that the value of Multiple Intelligences (MI) cannot be separated from how it is interpreted and implemented. An MI framework may encourage teachers to pay closer attention to differences among learners, but it does not prescribe a single way of teaching. Teachers still have to decide what students should learn, which activities are appropriate, how much variation can realistically be managed, and how learning will be assessed. This is consistent with the broader literature on MI-based instruction, which has identified both practical benefits and implementation difficulties when MI principles are translated into classroom practice (Bumen, 2007; Fudiyah & Harapan, 2021). The issue, therefore, is not simply whether MI is “effective,” but under what instructional conditions particular MI-informed practices become educationally useful.

Teacher preparation consequently deserves a central place in the proposed program. Knowing the eight intelligence categories is not enough to make classroom instruction genuinely MI-informed. Teachers need to understand how a particular learning objective can be approached through different forms of activity, representation, interaction, and expression. Research on teachers' use of MI has similarly suggested that implementation depends on teachers' understanding of the theory and their ability to translate it into workable classroom practices. For this reason, professional development should focus less on memorizing intelligence categories and more on lesson planning, differentiated instruction, assessment, and critical interpretation of learner evidence. The distinction is important because poorly understood MI can easily become a checklist of activities rather than a meaningful approach to instructional design.

A science concept, for example, might be explored through observation, discussion, data analysis, visual representation, experimentation, and written reflection. The purpose is not to create one activity for each intelligence, but to give students meaningful ways of engaging with the same academic content. Work on MI-informed pedagogy has similarly emphasized the use of varied classroom experiences rather than a rigid sequence in which every intelligence must appear in every lesson (Armstrong, 2020; Fudiyah & Harapan, 2021). In this sense, instructional variety should be understood as a resource for learning, not as an end in itself.

The same caution applies to learner profiling. MI inventories can provide teachers with information about students' perceived strengths and interests, and studies across different educational contexts have used such profiles to describe patterns among learners. However, a profile should not become a permanent label. A student who appears strong in interpersonal intelligence, for instance, does not necessarily need to learn every topic through group work. Likewise, a relatively low score in one domain should not be interpreted as an inability to participate in activities associated with that domain. Research that has examined MI profiles alongside learning preferences illustrates why these constructs need to be kept conceptually separate rather than converted into a single instructional prescription (Pocaan, 2022).

This distinction becomes particularly important because MI is sometimes confused with learning-styles theory. Gardner (2013) has explicitly distinguished multiple intelligences from learning styles, while critical scholarship has raised broader questions about the empirical basis for treating the intelligences as discrete cognitive systems (Waterhouse, 2023). The program proposed in this study should therefore avoid assigning students to fixed instructional categories. Profiling is more defensible when used formatively—to help teachers notice differences among learners and broaden the range of opportunities available to them—rather than prescriptively, as a basis for determining how an individual student must be taught.

The Philippine context makes this flexibility especially relevant. Students enter secondary classrooms with different linguistic resources, cultural experiences, family circumstances, and access to educational opportunities. These differences should not be treated as background information added after the program has been designed. They influence whether particular learning activities are meaningful, feasible, and accessible. Research on culturally situated education in the Philippines and neighboring contexts suggests that instructional approaches become more meaningful when they are responsive to learners' linguistic and cultural environments rather than simply transferred from one setting to another (Miole, 2024; De Mello et al., 2024).

Language provides one clear example. Philippine classrooms are multilingual, and students may move between local languages, Filipino, and English depending on the subject and learning situation. Research on translanguaging in Philippine classrooms indicates that students can draw on their existing linguistic resources to participate in classroom interaction and develop understanding (Casalan, 2022; De Los Reyes & Bagona, 2024). For the proposed program, however, multilingualism should not simply be treated as evidence of "linguistic intelligence." It is better understood as a classroom resource. Students can use available languages to explain an idea, discuss a problem, clarify meaning, conduct interviews, or communicate the results of a project.

Culture can serve a similar function. The manuscript identifies bayanihan, pakikipagkapwa-tao, collective responsibility, local literature, regional history, Indigenous Knowledge Systems and Practices (IKSP), and community traditions as possible resources for culturally responsive learning. These resources can connect academic content with students' lived experiences. Work on culturally sustaining pedagogy in the Philippines further supports the importance of incorporating local and Indigenous contexts into classroom practice (Gimpaya & Ligsanan, 2025). At the same time, cultural practices should not be presented as if they naturally correspond to particular intelligence domains. Their stronger educational value lies in providing authentic contexts through which students can investigate issues, communicate ideas, collaborate, create, and reflect.

This point is particularly important for Indigenous and culturally diverse settings. De Mello et al. (2024), for example, examined the implementation of MI in English teaching among Orang Asli students in Malaysia and highlighted the challenges of applying an MI-oriented approach within a culturally distinctive educational environment. The study is not evidence that MI is universally effective, but it illustrates why cultural context matters when an educational framework is transferred across settings. For Philippine secondary schools, local adaptation should therefore be treated as part of program design rather than as an adjustment made only after implementation problems arise.

Socio-economic differences place another practical limit on how an MI program can be designed. Students do not have equal access to technology, enrichment activities, learning materials, or other educational resources (OECD, 2023). This matters because an MI program can become unnecessarily resource-intensive if its implementation depends heavily on multimedia production, digital platforms, specialized equipment, or continuous internet access. A more equitable framework should therefore distinguish between pedagogical possibilities and resource requirements and ensure that important learning objectives remain achievable under different school conditions.

Technology can certainly expand the range of learning experiences, but access to educational technology is not equally distributed across schools and learners. Digital storytelling, multimedia presentations, virtual simulations, collaborative platforms, music production, and inquiry-based activities can provide additional ways for students to work with and communicate ideas. Research on MI and self-instructional materials in learning-management systems also suggests that MI can be considered at the level of learning-material design, rather than only at the level of learner classification (Annamalai et al., 2025). For the proposed program, however, technology should remain an option rather than a requirement, particularly where differences in access and infrastructure may constrain participation (UNESCO, 2023). The same learning objective should, where possible, be achievable through low-cost or non-digital alternatives.

Assessment presents another important consideration. The manuscript proposes projects, portfolios, performances, collaborative work, and community-based activities alongside more conventional examinations. Such approaches can broaden the kinds of evidence teachers collect about student learning, particularly when objectives involve application, communication, creativity, or performance. Yet alternative assessment should not automatically be assumed to be superior to conventional assessment. Portfolio-based assessment, for example, requires clear purposes, appropriate criteria, and teacher capacity if it is to produce credible evidence of learning (Swaran Singh et al., 2022).

The issue, therefore, is less about replacing examinations than about achieving alignment between learning objectives and assessment. Where the objective is factual recall or conceptual understanding, a conventional test may remain appropriate. Where students are expected to apply knowledge to a real-world problem, construct an argument, perform a skill, or produce a meaningful product, a project or performance may provide additional evidence. Broader work on authentic assessment supports this emphasis on matching assessment practices to what students are actually expected to demonstrate (McArthur, 2023). Rubrics, explicit criteria, and appropriate opportunities for individual accountability can further strengthen the credibility of alternative forms of assessment.

Another concern is the tendency to equate instructional variety with instructional quality. The reviewed literature provides support for varied, learner-centered activities, but

variation by itself does not guarantee better learning. A classroom can contain numerous activities and still lack conceptual coherence. This is particularly relevant in secondary education, where teachers already work within subject-specific curricula and limited instructional time. Differentiated-instruction research provides a useful complementary perspective here: variation is most defensible when it is connected to learning objectives, learner needs, and evidence of learning rather than introduced simply to increase the number of activities (Asriadi et al., 2023).

For this reason, the proposed program is better understood as an invitation to diversify meaningful learning opportunities rather than as a requirement to address all eight intelligences in every lesson. One unit might make extensive use of discussion and written analysis, while another might involve investigation, visual production, performance, or collaborative problem-solving. Over time, students would encounter different ways of engaging with content and demonstrating their understanding. Such an approach preserves the practical insight behind MI without requiring the stronger claim that students must be taught according to a fixed intelligence profile.

Teacher judgment remains important throughout this process. Teachers need to determine when variation is useful, when direct instruction is necessary, and when an activity adds little beyond what could be achieved more simply. Research on culturally responsive teaching also reinforces the importance of teacher competence in interpreting learner differences within their particular social and educational contexts (Caingcoy et al., 2022). Professional development for the proposed program should therefore extend beyond MI terminology and include differentiated planning, culturally responsive teaching, assessment, and the interpretation of evidence about student learning.

Taken together, these considerations lead to a more cautious interpretation of the educational contribution of MI. The evidence reviewed in this study does not justify claiming that identifying a student's dominant intelligence will reliably improve academic achievement. Nor does it establish that every intelligence can or should be deliberately "developed" through a corresponding classroom activity. The more defensible contribution is pedagogical: MI can provide one way for teachers to question a narrow reliance on a single mode of instruction and to consider whether students have sufficiently varied opportunities to engage with content and demonstrate what they know. This interpretation is consistent with the continuing debate surrounding MI and with the distinction between its practical educational use and stronger claims about its scientific status (Gardner, 2013; Waterhouse, 2023).

For Filipino secondary education, the implications are consequently practical rather than merely theoretical. A workable MI-informed program should be flexible enough to accommodate differences in language, culture, resources, and school conditions; purposeful enough to keep activities connected to curriculum objectives; and cautious enough not to turn learner profiles into fixed labels. It should also allow teachers to combine digital and non-digital activities and to use both conventional and alternative forms of assessment according to the learning objectives.

The resulting framework is therefore not presented as a validated intervention. Rather, it brings together conditions that recur across different strands of the literature: teacher preparedness, flexible understanding of learner differences, purposeful instructional variety, cultural and linguistic responsiveness, equitable access to learning resources, and assessment aligned with intended learning. These principles provide the basis for the Evidence-Informed Multiple Intelligences Program Framework (E-MI Framework), which can subsequently be implemented and empirically evaluated in Philippine secondary schools.

An Evidence-Informed Multiple Intelligences Program Framework for Filipino High School Students

The evidence reviewed in this study does not point to a single teaching method that can be labelled as the "MI approach." The literature is too diverse for such a conclusion. Some studies focus on learner profiling, others on differentiated instruction, classroom activities, teacher practices, or specific interventions. The results are also uneven. Some studies report

positive changes in learning attainment or classroom engagement, while others find weak or non-significant relationships between MI profiles and academic outcomes. The recent systematic review by Septianti et al. (2026) similarly found that MI research remains concentrated in elementary education, with qualitative studies predominating and longitudinal and large-scale evidence still limited.

For this reason, the contribution of the present study is not to claim that MI has been proven to improve academic achievement. Nor does the study propose another fixed model in which students are tested, assigned to a dominant intelligence, and then taught accordingly. Instead, the review is used to construct an Evidence-Informed Multiple Intelligences Program Framework (E-MI Framework) for secondary education. The framework translates the recurring findings of the literature into a sequence of decisions that teachers and schools can adapt, implement, and evaluate.

The central idea is simple: MI should function as a flexible design lens rather than a system for labelling students. A student's profile, interests, language, cultural background, and learning experiences can inform instructional planning, but they should not determine a student's educational possibilities. The framework therefore moves from understanding learners and their context, to selecting purposeful learning pathways, generating evidence of learning, and reviewing the effects of the program. The resulting Evidence-Informed Multiple Intelligences Program Framework (E-MI Framework) is presented in Table 3. It brings together the main design principles identified from the reviewed evidence, including flexible learner profiling, learning-objective alignment, contextual adaptation, varied assessment, and iterative evaluation.

Table 3. Evidence-Informed Multiple Intelligences Program Framework (E-MI Framework)

Framework component	Main question	Suggested practice in secondary education	Evidence of implementation
1. Evidence and Context Mapping	Who are the learners and what contextual factors shape their learning?	Use formative information about interests, strengths, language, cultural background, prior learning, and available resources.	Learner/context profile; teacher notes; baseline evidence
2. Flexible Learner Profiling	What patterns of strengths and interests can inform planning without becoming fixed labels?	Use MI inventories, observation, student reflection, and classroom evidence as complementary sources rather than as diagnostic labels.	Profile summary; student reflection; observation record
3. Learning-Objective Alignment	What must students actually learn?	Establish subject-specific knowledge, skills, and competencies before selecting MI-informed activities.	Explicit learning objectives and success criteria
4. Multiple Learning Pathways	How can the same objective be approached in more than one meaningful way?	Combine discussion, investigation, visualization, performance, collaboration, writing, problem solving, movement, or other appropriate	Lesson/activity plan linked to objectives

Framework component	Main question	Suggested practice in secondary education	Evidence of implementation
		activities according to the content and context.	
5. Cultural and Linguistic Adaptation	How can learning connect with students' identities and lived contexts?	Incorporate local examples, community issues, local literature, Indigenous Knowledge Systems and Practices where appropriate, and strategic use of students' linguistic resources.	Contextualized tasks; student participation; locally relevant products
6. Equitable Learning Access	Can students participate regardless of differences in resources?	Provide digital and non-digital alternatives and avoid making expensive technology a condition for completing learning tasks.	Accessible task options; participation records
7. Aligned and Varied Assessment	What evidence will demonstrate that the learning objective has been achieved?	Combine appropriate conventional assessment with projects, portfolios, performances, presentations, or authentic tasks when these better represent the intended learning.	Rubrics, assessment results, student products
8. Reflection and Iterative Evaluation	What worked, for whom, under what conditions, and what needs to change?	Review student evidence, teacher observations, participation, assessment results, and implementation challenges before revising subsequent learning cycles.	Reflection records; revised lesson/program plans

Source: Authors' synthesis of the evidence reviewed in this study, 2024–2026.

The first feature that distinguishes this framework from a conventional MI activity model is the starting point. The program does not begin by asking which intelligence is dominant. It begins by asking what students need to learn and what conditions shape their learning. This distinction is important because recent Philippine research has shown that MI profiling can describe differences among senior high school students, but profiling itself does not establish that one intelligence should determine the way a student is taught. Hamac and Oriola (2025), for example, identified relatively higher interpersonal and intrapersonal scores among Grade 12 students while recommending the findings as a basis for differentiated instruction

rather than as evidence of causal effects.

The second feature is the separation of learner profiling from instructional prescription. In the E-MI Framework, profiling is formative. It can help teachers recognize patterns that might otherwise be overlooked, but the information is interpreted alongside classroom observation, student reflection, prior learning, and contextual factors. This responds directly to one of the central concerns identified in the review: the evidence does not justify treating MI scores as fixed characteristics that determine how students learn best. The framework therefore avoids the simple sequence of "test the intelligence → identify the dominant intelligence → match the teaching method."

The third feature is learning-objective alignment. This is perhaps the most important safeguard against turning MI into a collection of entertaining classroom activities. Before choosing an activity, teachers identify the knowledge or competency that students are expected to develop. Only then do they consider whether a different representation, activity, interaction, or form of expression could provide a meaningful pathway toward that objective. In this sense, MI-informed teaching is not about using more activities; it is about having more than one reasonable way for students to engage with important learning.

The fourth feature is the use of multiple learning pathways. These pathways can involve linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, or naturalistic forms of activity where appropriate. The framework does not require all domains to appear in every lesson. Instead, they can be distributed across a unit, subject, or sequence of learning experiences. This is consistent with evidence showing that MI-based interventions can produce positive outcomes under particular instructional conditions, while recognizing that the evidence remains context-specific. For example, a 2025 controlled study with Grade 10 students reported higher learning attainment for students receiving MI-based teaching than for those receiving traditional instruction, but the study used a specific intervention and assessment context; its findings should not be generalized into a universal MI effect.

The fifth feature is cultural and linguistic adaptation, which gives the framework a specifically Philippine dimension. The program should not simply import activities developed in other educational systems. Local literature, community issues, regional history, Indigenous Knowledge Systems and Practices, and students' linguistic resources can provide meaningful contexts for learning when they are relevant to the subject and learning objective. This extends the manuscript's earlier discussion of culturally responsive pedagogy and translanguaging while avoiding the unsupported assumption that a particular Filipino cultural practice automatically represents a particular intelligence.

The sixth feature is equitable access. This component is deliberately included because an apparently innovative MI program could unintentionally increase inequality if participation depends on digital devices, internet connectivity, specialized materials, or enrichment opportunities. The framework therefore treats technology as an optional means of expanding learning opportunities rather than as a defining feature of MI instruction. A digital storytelling activity, for example, should have a reasonable non-digital alternative when technology is unavailable.

The seventh feature concerns assessment. The framework does not reject examinations. Instead, it asks whether the form of assessment provides adequate evidence for the learning objective. A written test may be appropriate for some outcomes; a project, performance, presentation, portfolio, or investigation may provide additional evidence for others. This distinction is important because the literature sometimes moves too quickly from the idea of diverse intelligences to the assumption that alternative assessment is automatically more valid. The framework instead places assessment under the same principle of alignment that governs instruction.

The final feature is reflection and iterative evaluation. This is where the proposed framework moves beyond a list of teaching strategies and becomes a program model. Teachers are expected to examine what happened after implementation: which students participated, what evidence of learning was produced, which activities were feasible, where difficulties occurred, and whether the intended outcomes were actually observed. The next cycle can then be adjusted. Such an approach is particularly important because the current

evidence base contains relatively few longitudinal and large-scale studies. The proposed framework therefore treats implementation as something to be tested and refined rather than assumed to be effective from the outset.

What the Present Study Adds

The novelty of this study lies in the integration of these elements into one secondary-education framework specifically adapted to the Philippine context. Existing studies have commonly examined one part of the problem at a time: MI profiling, differentiated instruction, specific classroom strategies, or the effects of particular interventions. Recent Philippine work, for example, has used MI profiling to inform differentiated instruction, while other studies have tested differentiated instruction or MI-based teaching in particular subjects or groups of students. The present study brings these strands together and adds two elements that are often treated separately: contextual adaptation and iterative evaluation. The proposed contribution can therefore be summarized in four propositions:

1. MI profiling should inform, not determine, instructional decisions.
2. Instructional diversity should be organized around learning objectives rather than around a requirement to "teach all intelligences."
3. An MI-informed program for Filipino secondary students should be culturally, linguistically, and resource responsive.
4. The framework should be evaluated iteratively rather than treated as an already validated intervention.

These propositions give the study a more precise contribution than the claim that MI can "develop students' full potential." That earlier formulation is too broad for the available evidence. The present review instead proposes a framework whose individual components can be empirically examined.

This distinction also creates a clearer research agenda. Future studies can test the framework at different levels: a single subject, a grade level, a school-wide program, or a cluster of schools. Researchers can compare different implementation conditions, examine whether teacher preparation affects fidelity, investigate whether culturally adapted activities influence engagement or learning, and determine which combinations of learning pathways are most feasible in particular subjects. Longitudinal research could further examine whether repeated exposure to varied learning opportunities is associated with changes in students' engagement, self-regulation, achievement, or other outcomes. These are empirical questions for future studies, not findings claimed by the present review.

In this sense, the E-MI Framework is proposed as a testable research and practice model, not as a proven intervention. Its value will ultimately depend on whether subsequent research can examine its assumptions, identify which components matter most, and determine under what conditions they produce meaningful educational outcomes. That distinction is important for maintaining a credible position on MI while still offering something concrete for teachers, schools, and researchers.

For Filipino high school education, the framework offers a practical starting point: understand the learners and their context, establish what they need to learn, provide more than one meaningful pathway toward that objective, assess learning through appropriate evidence, and use the results to improve the next instructional cycle. Rather than asking teachers to implement "eight intelligences" as eight separate teaching methods, the framework asks a more manageable question: Are students being given meaningful, equitable, and contextually relevant ways to engage with important learning and demonstrate what they know?

That question captures the main contribution of the present review. It retains the educational usefulness that has made MI influential while acknowledging the scientific and empirical limitations surrounding the theory. More importantly, it converts a broad and contested idea into a framework that can be examined, adapted, and improved through future research.

CONCLUSION

This review shows that Multiple Intelligences (MI) offers a potentially useful, although

contested, perspective for addressing learner diversity in secondary education. The evidence is heterogeneous: MI has been applied to learner profiling, differentiated instruction, classroom activities, assessment, and intervention, but the reported outcomes are not consistently positive. The findings therefore do not support treating MI profiles as fixed labels or assuming that matching instruction to students' dominant intelligences will automatically improve academic achievement. For Philippine secondary education, a more cautious approach is to use MI as a flexible pedagogical lens, supported by teacher preparedness, purposeful instructional variety, cultural and linguistic responsiveness, equitable access to learning resources, and assessment aligned with learning objectives.

The main contribution of this study is the Evidence-Informed Multiple Intelligences Program Framework (E-MI Framework), which brings these elements together into a coherent and testable model for Filipino high school education. The framework connects flexible learner profiling with learning-objective alignment, multiple learning pathways, contextual adaptation, varied assessment, and iterative evaluation. It is proposed as an evidence-informed framework rather than a validated intervention; its effectiveness therefore remains to be established through empirical research. Future studies can test, refine, and compare the framework across subjects, grade levels, and school contexts, providing evidence on which components are most feasible and educationally meaningful.

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Author 1,2: Conceptualization, Methodology, Formal Analysis, Writing – Original Draft.
Author 3,4: Data Collection, Investigation, Writing – Review and Editing.
Author 5,6,7: Supervision, Validation, Writing – Review and Editing.

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Authors declare that there is no conflict of interest related to the research, authorship, and publication of this article.

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The data supporting the findings of this study are available from the corresponding author upon reasonable request.

AI USE DECLARATION

The authors declare that no generative artificial intelligence (AI) tools were used in the preparation, analysis, or writing of this manuscript.

ETHICAL CLEARANCE

Ethical clearance was not required for this study because the research did not involve human participants, identifiable personal data, or procedures requiring formal ethical approval.

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