Multiple Intelligences Translated in Students' Interest and Expertise

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The concept of multiple intelligences (MI), proposed by Howard Gardner, has significantly transformed the understanding of human potential and learning diversity. Introduced in 1983, Gardner's theory posits that intelligence is not a single entity but a spectrum of distinct capabilities, each representing unique ways of interacting with the world. These intelligences include linguistic, logical-mathematical, visual-spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalistic forms. Recognizing the multifaceted nature of intelligence allows educators to value the diverse strengths that students bring into the learning environment.

Despite this expanded view, many educational systems continue to rely heavily on traditional methods, often sidelining the wide range of abilities that students possess. This imbalance poses challenges for both

educators and learners. Students who excel in non-traditional intelligences may feel marginalized in classrooms that prioritize linguistic and logical skills above all else. Such neglect can lead to disengagement, lowered self-esteem, and reduced motivation among learners who do not thrive under conventional academic paradigms. Addressing this concern is vital, as schools must evolve to embrace a broader and more inclusive definition of intelligence and learning.

Exploring emerging patterns in students' skills and interests within the multiple intelligences framework can reveal how learners perceive and articulate their abilities. Early observations suggest that many students struggle to recognize and express their unique strengths, which may hinder both their engagement and academic performance. Research further indicates that students often underutilize problem-solving and creative abilities when these skills are neither recognized nor encouraged by educators. Understanding how learners identify and describe their capabilities in relation to MI can therefore inform instructional strategies that foster greater engagement and maximize learning outcomes.

It is equally important to consider multiple intelligences across both academic and extracurricular domains. Many students demonstrate their intelligence outside traditional classroom settings through sports, the arts, community service, and other activities. These experiences provide meaningful opportunities for learners to explore and develop their strengths. Examining how students express their intelligence in various contexts not only offers deeper insight into their learning processes and preferences but also helps educators design inclusive and engaging environments that reflect the diverse intelligences present in their classrooms.

Ultimately, recognizing multiple intelligences underscores the need for education systems to adapt to diverse learning styles. By investigating patterns in how students describe their skills and interests, and by acknowledging these intelligences in both academic and extracurricular contexts, schools can develop more effective, responsive, and holistic educational practices.

Multiple Intelligences and Student Learning

Gardner's theory of Multiple Intelligences (MI) identifies eight distinct domains of human capability linguistic, logical-mathematical, musical, bodily-kinesthetic, spatial-visual, interpersonal, intrapersonal, and naturalistic that provide a broader framework for understanding how students describe their skills and interests (Gardner, 1983). The theory asserts that each individual demonstrates varying degrees of these intelligences, with some emerging more strongly than others. Applied in education, this framework offers pathways for learners to develop their strengths and for teachers to design more inclusive pedagogical practices (Azmir et al., 2020). For example, Gupta and Kumar (2020), as cited in Bhagwan (2021), analyzed how students' self-perceptions align with the MI framework. Their findings indicate that students who enjoy writing stories typically exhibit linguistic intelligence, while those excelling in sports demonstrate bodily-kinesthetic intelligence. Similarly, Zaini and Razak (2013, as cited in Azmir et al., 2020) identified a significant correlation between visual-spatial intelligence and performance in Business Management, particularly in tasks involving reading comprehension and the interpretation of non-linear text formats. Such evidence illustrates how MI manifests across academic domains. Moreover, Asio et al. (2021)

emphasized the interconnection between multiple intelligences and extracurricular involvement, showing how MI shapes students' decisions related to activity participation, course selection, and career orientation. This underscores the potential of MI as a framework for guiding learners toward personal growth and professional development.

The relationship between MI and metacognition has also been a focus of research, highlighting how self-awareness and regulation influence the application of different intelligences. Mirzaei et al. (2013) identified metacognition as a mediating factor between MI and students' perceptions of their learning, suggesting that students with higher metacognitive awareness are more capable of recognizing how their experiences align with their strengths. Similarly, Veenman et al. (2006) demonstrated that metacognition supports self-regulation, shaping how learners mobilize their intelligences in diverse contexts. Complementing these findings, Liu et al. (2013) argued that metacognitive awareness enhances students' ability to select and apply appropriate learning strategies, thereby improving academic performance.

Each of Gardner's eight intelligences encompasses distinctive characteristics. Linguistic intelligence involves the effective use of language in written, spoken, and symbolic forms. Logical-mathematical intelligence refers to the capacity for reasoning, problem-solving, and systematic analysis. Musical intelligence reflects the ability to perceive, perform, and appreciate rhythm and sound. Bodily-kinesthetic intelligence denotes the purposeful and coordinated use of the body. Spatial-visual intelligence captures the ability to perceive and manipulate spatial relationships. Interpersonal intelligence represents the capacity to understand and interact effectively with others, while intrapersonal

intelligence refers to self-awareness and insight into one's emotions. Finally, naturalistic intelligence embodies the ability to recognize, classify, and connect with the natural environment (Gardner, 1999).

The MI framework continues to generate interest within educational research and practice because it emphasizes recognition and development of diverse learner profiles. Although some scholars critique the limited empirical evidence supporting the independence of all eight intelligences (Sternberg et al., 2020), others, such as Yang et al. (2012), have demonstrated positive outcomes when MI principles are integrated into instruction. Collectively, these findings suggest that engaging learners through strategies that align with varied cognitive strengths not only enhances motivation but also promotes more effective and equitable learning outcomes across academic domains.

Patterns of Students' Multiple Intelligences: A Case Study

This study explores emerging patterns in students' articulation of their skills and interests within the framework of multiple intelligences (MI). It examines how these intelligences influence students' engagement in academic and extracurricular activities, with the aim of informing instructional approaches that recognize, celebrate, and leverage diverse learner strengths.

Methodology

This qualitative inquiry investigated the influence of MI on students' academic and extracurricular experiences, focusing on their self-identified skills, interests, and levels of engagement. It sought to capture

authentic perspectives and lived experiences, producing nuanced and context-rich data. The study was conducted in a public high school in Candelaria, Quezon, Philippines, selected for its strong academic and extracurricular culture.

A sample of 24 Grade 11 students was drawn from various academic strands, Humanities and Social Sciences, Accountancy, Business, and Management, Science, Technology, Engineering, and Mathematics, Home Economics, and Information and Communications Technology, using systematic random sampling to ensure diverse representation.

Data were collected through semi-structured interviews designed to explore how different intelligences manifest in students' academic and extracurricular contexts. The interview guide was validated by an experienced educator to ensure clarity and relevance. All interviews were conducted privately on school premises, recorded with informed consent, and transcribed in accordance with established guidelines. Thematic analysis was employed to examine the transcripts. This process involved data familiarization, coding, identifying and refining themes, and naming them to capture overarching concepts. The analysis revealed patterns in how students applied their intelligences in various contexts, illuminating connections between MI, personal interests, and academic performance.

Ethical considerations included informed consent from both students and their guardians, confidentiality maintained through pseudonyms, and secure storage of data. Interviews were carried out in a supportive environment to minimize discomfort and ensure participant well-being.

Findings

Emerging Patterns in Students' Skills and Interests Within the Framework of Multiple Intelligences. The findings revealed distinct qualitative patterns in students' multiple intelligences. Participants who identified with visual-spatial intelligence demonstrated creativity, innovation, and strong visualization skills. Bodily-kinesthetic intelligence was observed in students' engagement with physical activities, while linguistic-verbal intelligence was evident in their capacity to exchange and interpret information effectively. Logical-mathematical intelligence, reported less frequently, was reflected in analytical and critical approaches to problem-solving. In contrast, bodily-kinesthetic learners tended to prefer physically active tasks over cognitively demanding ones.

Students with musical intelligence displayed proficiency in singing and performed more effectively when learning activities incorporated music. Those with interpersonal intelligence enjoyed communicating and collaborating with peers, while individuals with intrapersonal intelligence favored self-reflection and the analysis of theories and ideas. These findings suggest that students' abilities, talents, and cognitive dispositions play a central role in shaping their dominant intelligence types.

Articulation of Multiple Intelligences in Academic and Extracurricular Domains. Analysis further revealed that students' intelligences influenced both their academic performance and extracurricular participation. Each intelligence manifested in specific ways: bodily-kinesthetic intelligence supported physical engagement in academic and extracurricular tasks; visual-spatial intelligence promoted creativity within learning contexts; logical-mathematical intelligence facilitated

critical thinking; linguistic-verbal intelligence was reflected in communication skills; intrapersonal intelligence was expressed in reflective writing; and interpersonal intelligence was evident in leadership roles during extracurricular activities.

Given these variations, instructional strategies effective for one group of learners may be less applicable to another (Yavich & Rotnitsky, 2020). Accordingly, proper integration of multiple intelligences into teaching and learning can enhance academic achievement and contribute to overall student development and life success (Vadivukarasi & Gnanadevan, 2022).

Alignment of Learning Experiences to Dominant and Non-Dominant Intelligences. The study also revealed how students align their learning experiences and interests with their dominant and non-dominant intelligences. For instance, participants excelling in bodily-kinesthetic intelligence often displayed strong interpersonal intelligence, suggesting synergies between certain domains. Creative expression emerged as a common theme, with many students demonstrating passion for artistic pursuits. These findings are consistent with MI theory, which recognizes the importance of diverse intelligences, including spatial, musical, and intrapersonal forms, in shaping learning preferences.

Moreover, external studies reinforce the significance of interests in shaping educational choices. Tabigne and Musni (2022), for example, found that nearly half (47.35%) of students selected their academic courses based primarily on personal interests. Such findings highlight the critical role of aligning instructional practices with students' intrinsic motivations and intelligence profiles.

Recommendation

While this study primarily examined dominant intelligences, further exploration of methods to identify and cultivate non-dominant intelligences could provide a more holistic understanding of student capabilities. Developing targeted activities to nurture underrepresented intelligences may enhance motivation and engagement while mitigating potential negative effects—such as reduced interest or disengagement—associated with neglecting these areas.

Educators are encouraged to integrate MI principles into curriculum design by adopting diverse strategies tailored to different intelligences. For example, incorporating kinesthetic learning opportunities for bodily-kinesthetic learners or integrating music-based activities for students with musical intelligence can enhance participation and improve outcomes. Future research assessing the effectiveness of differentiated instructional approaches grounded in MI theory would provide valuable insights for optimizing teaching practices and creating inclusive, supportive learning environments.

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