Rethinking Dance Pedagogy through Multiple Intelligences: A POMAT-Based Conceptual Framework for Vocational Undergraduate Dance Education

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ABSTRACT

Vocational undergraduate dance education in China is increasingly expected to move beyond narrowly technique-centred instruction and to support multidimensional professional competence. Yet dance pedagogy remains strongly associated with demonstration, imitation, correction, and repetition, while conceptual tools for examining how broader learning opportunities are coordinated across a lesson remain limited. This conceptual review examines how the Multiple Intelligences Teaching Approach (MITA) can be interpreted as a flexible pedagogical orientation and how POMAT (Procedure, Objective, Materials, Assessment, and Technology) can provide an analytical framework for vocational undergraduate dance education. The review synthesised foundational MI and POMAT literature, peer-reviewed research on dance and higher education pedagogy, scholarship on Chinese tertiary dance education, and relevant policy and international framework documents. Rather than treating multiple intelligences as a learner-typing system or claiming that MI-based instruction is empirically superior, the paper adopts a cautious interpretation informed by methodological critiques of MI intervention research. The conceptual synthesis produced three central propositions: dance repertoire learning is multidimensional; MITA is most defensible when used to diversify learning opportunities rather than classify learners; and POMAT makes instructional coherence visible by examining relationships among pedagogical procedures, intended outcomes, materials, assessment and feedback, and technology. On this basis, the paper proposes a POMAT-based framework in which bodily-kinaesthetic, musical, spatial, interpersonal, and intrapersonal learning opportunities are considered across the five instructional dimensions. The framework retains the pedagogical value of demonstration and technical correction while extending analysis to interpretation, collaboration, reflection, cultural meaning, and technology-supported learning. It offers a context-sensitive analytical framework for dance teachers, curriculum designers, and researchers and provides a foundation for future empirical examination in vocational undergraduate dance classrooms.

Keywords: dance pedagogy, multiple intelligences teaching approach, POMAT framework, vocational undergraduate education, dance repertoire education

INTRODUCTION

Higher education has increasingly shifted from a narrow emphasis on content transmission towards the design of learning environments in which students develop disciplinary knowledge together with judgement, participation, reflection, adaptability, and the capacity to apply learning in complex contexts. Barr and Tagg (1995) described this change as a movement from an instruction paradigm to a learning paradigm. In arts education, the same shift has been reinforced by the UNESCO Framework for Culture and Arts Education, which positions culture and the arts as integral to inclusive, holistic, lifelong learning and calls for diverse pedagogies, learner participation, culturally relevant curricula, and responsible uses of technology (UNESCO, 2024). These expectations are especially significant for higher dance education because dance learning is simultaneously embodied, musical, spatial, interpersonal, reflective, cultural, and artistic.

Within vocational undergraduate education in China, the policy context further strengthens the expectation that professional preparation should integrate technical capability with broader professional competence. The revised Vocational Education Law defines vocational education in terms of the comprehensive qualities and capacities required for occupational and continuing professional development rather than isolated technical performance (Standing Committee of the National People's Congress, 2022). The 2021 vocational education programme catalogue also reflects the continuing development of higher vocational undergraduate pathways and the alignment of programmes with changing professional fields (Ministry of Education of the People's Republic of China, 2021). For dance programmes, this policy direction raises an important pedagogical question: how can highly disciplined technical training be connected with artistic interpretation, cultural understanding, collaboration, reflection, problem-solving, and professional judgement?

Dance training has traditionally relied on teacher explanation, demonstration, imitation, correction, and repeated practice. These practices remain pedagogically necessary in many contexts. Technical accuracy, safe movement execution, stylistic consistency, coordination, and the acquisition of complex movement vocabulary often require expert modelling and repeated embodied practice. The problem is therefore not that teacher-guided instruction exists. Rather, the problem arises when the organisation of instruction is reduced to movement reproduction and when opportunities for students to interpret, discuss, collaborate, reflect, make artistic decisions, or use technology purposefully remain peripheral. Research in dance education suggests that teacher-centred and student-centred practices need not be treated as mutually exclusive. Brown (2023), for example, found technical improvement under both direct and student-centred conditions, while the student-centred condition did not produce superior technical outcomes. This finding is important because it cautions against replacing one pedagogical orthodoxy with another.

A growing body of dance education research nevertheless shows the value of extending the repertoire of teaching practices beyond demonstration and correction. Studies have examined mobile technologies and collaborative learning in the dance studio (Alexander et al., 2023), teacher perspectives on improvisation and flow (Biasutti & Habe, 2023), creative movement tasks (Engdahl et al., 2023), virtual teaching and learner autonomy (Li, 2024), and the forms of instruction and feedback used by dance teachers (Soerel et al., 2023). Research on Chinese tertiary dance education has similarly documented tensions between established performance-oriented traditions and efforts to develop more creative, inclusive, and educationally responsive forms of dance pedagogy (Jin & Snook, 2022; Rowe et al., 2020). Taken together, these studies demonstrate that contemporary dance teaching involves multiple pedagogical concerns. However, they also tend to focus on particular practices, outcomes, or contexts. Less attention has been given to a framework that allows teachers and researchers to examine how objectives, procedures, materials, assessment, and technology operate together as an instructional system. Schupp (2024) further argues for dance pedagogy that moves beyond decontextualised "best practices" and attends more explicitly to ethical, cultural, and disciplinary contexts.

Multiple Intelligences (MI) Theory offers one possible conceptual language for describing the multidimensional character of dance learning. Gardner (1983, 1999) proposed that human capacities cannot be adequately represented by a single unitary conception of intelligence and identified several relatively distinct intelligences. Dance repertoire learning has obvious affinities with bodily-kinaesthetic, musical, spatial, interpersonal, and intrapersonal capacities. Nevertheless, the educational use of MI Theory requires caution. MI should not be conflated with learning styles, used to assign students to fixed intelligence types, or presented as a validated prescription for matching instruction to supposed cognitive profiles. Attwood (2022) has highlighted semantic and conceptual problems surrounding educational uses of MI, while Ferrero et al. (2021) concluded that methodological weaknesses in MI intervention research prevent strong claims about the effectiveness of MI-based instruction. These critiques make it necessary to distinguish between using MI as a rigid theory of learner classification and using it more modestly as a pedagogical prompt for diversifying opportunities to engage with learning.

The Multiple Intelligences Teaching Approach (MITA), as developed in educational practice, can be interpreted in this more cautious manner. Rather than assuming that each student has a fixed instructional type, MITA can encourage teachers to consider whether learning experiences provide varied modes of participation, representation, reflection, interaction, and performance (Armstrong, 2017). The POMAT framework adds a second and complementary contribution. POMAT comprises five instructional dimensions: Procedure,

Objective, Materials, Assessment, and Technology. It was developed to support coherent planning for MI-informed teaching (McKenzie, 2005; Sulaiman et al., 2011). Sulaiman and Sulaiman (2012) subsequently used the framework to analyse the application of MI-related teaching in authentic classroom instruction, demonstrating its potential as an analytical structure rather than merely a lesson-planning checklist.

Against this background, the article reconsiders how MITA and POMAT can be brought together to examine multidimensional learning and instructional coherence in vocational undergraduate dance education.

Purpose, Objectives And Research Questions

The purpose of this conceptual review is to develop a conceptually defensible and context-sensitive framework for examining how multidimensional learning opportunities can be organised coherently in vocational undergraduate dance repertoire education. The article does not test whether MI Theory is true, measure students' intelligence profiles, or claim that MITA produces superior learning outcomes. Instead, MITA is used as a pedagogical lens and POMAT as an analytical structure for conceptual synthesis.

To achieve this purpose, the article has three objectives: (1) to conceptualise the multidimensional learning demands of dance repertoire education; (2) to clarify a defensible educational interpretation of the Multiple Intelligences Teaching Approach (MITA) in light of current critiques of MI Theory; and (3) to propose a POMAT-based conceptual framework for analysing how varied learning opportunities are embedded across the principal dimensions of dance teaching.

Accordingly, the conceptual review is guided by the following research questions:

RQ1. What forms of multidimensional learning are involved in vocational undergraduate dance repertoire education?

RQ2. How can MITA be interpreted and used in dance education without classifying learners into fixed intelligence types or making unsupported claims about instructional effectiveness?

RQ3. How can the five POMAT dimensions (Procedure, Objective, Materials, Assessment, and Technology) be used to analyse the coherence of MITA-related learning opportunities in vocational undergraduate dance repertoire teaching?

METHODOLOGY

Given the aim of clarifying key constructs, connecting previously separated strands of scholarship, and proposing an organising framework, this article adopted a conceptual review and framework-building approach. The methodology was designed for conceptual integration rather than statistical generalisation or exhaustive systematic mapping. The review therefore focused on literature that could clarify the article's constructs, contextualise the pedagogical problem, and inform the development of the proposed framework.

The literature base was organised into four source groups. The first group comprised foundational and critical work on Multiple Intelligences Theory, MITA, and POMAT, including Gardner's theoretical formulation, Armstrong's educational interpretation, McKenzie's POMAT model, the POMAT studies by Sulaiman and colleagues, and contemporary critiques by Attwood (2022) and Ferrero et al. (2021). The second group comprised peer-reviewed studies in dance and higher education that addressed instructional practices relevant to multidimensional learning, including embodiment, creativity, feedback, collaboration, technology, and learner autonomy. The third group focused on Chinese tertiary dance education and the pedagogical tensions associated with reform. The fourth group comprised policy and international framework documents relevant to vocational undergraduate education and culture and arts education.

Sources were selected purposively for conceptual relevance to the problem addressed in this article. Priority was given to peer-reviewed journal articles, scholarly books, and official policy or intergovernmental documents that directly informed at least one of the following questions: What forms of learning are involved in dance repertoire

education? How can MI-related ideas be used without classifying students into fixed types? How has POMAT been defined and applied? What pedagogical tensions are documented in higher and Chinese dance education? How might the five POMAT dimensions be translated into the context of repertoire teaching? This purposive strategy is consistent with the purpose of a conceptual paper, but it does not constitute a systematic review and no claim is made that the literature set is exhaustive.

The conceptual synthesis proceeded in three stages. First, the literature was read for recurring pedagogical demands in dance education. These demands included technical acquisition, musical and spatial understanding, artistic interpretation, collaboration, reflection, creativity, cultural understanding, assessment and feedback, and technology-supported learning. Second, MI-related concepts were examined critically to distinguish a pedagogical orientation towards varied learning opportunities from claims about fixed intelligence profiles or learning-style matching. Five intelligence domains, namely bodily-kinaesthetic, musical, spatial, interpersonal, and intrapersonal, were retained because they have clear conceptual relevance to repertoire learning; they were not treated as measurable student categories. Third, the five POMAT dimensions were reinterpreted as analytical questions for dance education. The resulting framework was designed to examine alignment, emphasis, omission, tension, and contextual adaptation across instructional components rather than to score teaching quality or prescribe a single ideal method.

The use of the term ‘results’ in the following section therefore refers to the outcomes of this conceptual synthesis, not to empirical findings generated from new participants or classroom data. The framework is a proposition for analysis and pedagogical reflection. Its value must ultimately be examined through future empirical research in actual dance education settings.

RESULTS

Dance repertoire learning as a multidimensional educational process

The first result of the conceptual synthesis is that dance repertoire learning is better understood as a multidimensional educational process than as the acquisition of a sequence of movements. Technique remains central, but it operates within a broader network of musical, spatial, interpretive, collaborative, reflective, and cultural demands. A dancer must coordinate bodily action with timing, rhythm, dynamics, phrasing, and spatial organisation; respond to partners and ensemble formations; understand stylistic and cultural conventions; interpret choreographic intention; and evaluate the quality of performance. In higher education, these processes also involve increasingly independent rehearsal, problem-solving, self-regulation, and professional judgement. The body is therefore not merely the instrument through which previously formed cognition is displayed. Embodied activity is itself part of how knowledge is developed, tested, and refined. This interpretation is consistent with Hegna and Ørbæk’s (2024) review of embodied teaching and learning in higher education, which highlights the importance of bodily, sensory, and intersubjective dimensions that conventional academic discourse can leave in the background.

The continuing role of teacher guidance

A multidimensional view does not imply that demonstration, imitation, correction, or repetition should be abandoned. Professional dance learning differs from many classroom subjects because movement knowledge is partly tacit, embodied, temporal, and stylistically specific. Students often need to see, feel, repeat, and physically calibrate movement before they can analyse or reinterpret it effectively. Research on dance instruction reinforces the importance of expert guidance. Soerel et al. (2023) showed that dance teachers use substantial amounts of instruction and feedback, with considerable variation across classes and teachers. Brown (2023) also found that both direct and student-centred instruction improved technical ability. The conceptual implication is that the relevant pedagogical question is not whether teaching should be teacher-centred or student-centred in an absolute sense, but how teacher guidance and learner participation are sequenced and aligned with different purposes.

MITA as a pedagogical orientation rather than a learner-typing system

The second conceptual result is that MITA is most defensible when treated as a pedagogical orientation towards varied learning opportunities. Gardner's framework provides a vocabulary for noticing that meaningful learning can involve different kinds of human capacity. For dance repertoire education, five domains are especially salient. Bodily-kinaesthetic capacity is implicated in movement control, coordination, kinaesthetic awareness, and the refinement of technique. Musical capacity is implicated in rhythm, phrasing, accent, dynamics, and the relationship between movement and sound. Spatial capacity is implicated in direction, level, pathway, formation, orientation, and visual composition. Interpersonal capacity is implicated in partnering, ensemble coordination, peer feedback, rehearsal communication, and responsiveness to others. Intrapersonal capacity is implicated in self-awareness, reflection, self-assessment, emotional regulation, and the interpretation of personal performance experience.

Critical boundaries for the use of MI in dance education

These domains should not be used to label students as 'bodily learners', 'musical learners', or any other fixed type. Such categorisation would reproduce the conceptual problem identified by Attwood (2022), who distinguishes MI from learning-style claims and cautions against imprecise educational usage. It would also go beyond what can be justified by the intervention literature. Ferrero et al. (2021) identified substantial methodological weaknesses in studies that attempted to demonstrate the academic effectiveness of MI-inspired interventions. Accordingly, the framework proposed here makes no claim that identifying an intelligence profile and matching instruction to that profile will improve achievement. Instead, the intelligence domains function as sensitising concepts: they direct attention to the range of embodied, musical, spatial, social, and reflective opportunities that may or may not be available within a lesson.

POMAT as a framework for instructional coherence

The third conceptual result is that POMAT offers a practical way to move from the idea of multidimensional learning to the analysis of actual instructional organisation. McKenzie (2005) introduced POMAT as a structure for thinking across Procedure, Objective, Materials, Assessment, and Technology. Sulaiman et al. (2011) further explained the framework as a means of integrating multiple intelligences and technology while maintaining consistency among instructional components. Sulaiman and Sulaiman (2012) applied the POMAT model in qualitative classroom research, showing that it could be used to examine how MI-related teaching was enacted rather than simply whether particular activities were present. This analytical development is particularly relevant to dance education because the educational meaning of a classroom activity depends on its relationship with purpose, resources, feedback, and context.

Procedure

Procedure concerns what teachers and students actually do and how activity is sequenced. In a repertoire class, procedures may include teacher demonstration, phrase-by-phrase imitation, rhythmic drilling, full-run rehearsals, questioning, movement analysis, partner work, peer observation, improvisational exploration, reflective discussion, video review, and repeated performance. The same activity can serve different educational purposes. Demonstration may support bodily accuracy, musical phrasing, stylistic understanding, or visual-spatial orientation. Peer work may support interpersonal communication, but it may also deepen technical observation and intrapersonal reflection. POMAT therefore discourages the assumption that an activity automatically represents a particular intelligence. The analytical task is to ask what the activity is intended to accomplish, how students participate, and how it connects to other instructional dimensions.

Objective

Objective concerns the abilities, understandings, and forms of judgement that a lesson intends to develop. If objectives are limited to accurate reproduction, the instructional system is likely to privilege bodily performance while underrepresenting interpretation, reflection, collaboration, or cultural understanding. A multidimensional objective structure might include technical accuracy, musical responsiveness, spatial organisation, stylistic

interpretation, expressive communication, ensemble coordination, reflective self-evaluation, rehearsal leadership, and professional decision-making. The objective dimension is particularly important because it prevents MITA from becoming a list of entertaining activities. Varied activities are educationally meaningful only when they contribute to legitimate course outcomes.

Materials

Materials include the resources through which learning is represented, supported, and extended. In dance repertoire education, materials may include the teacher's body as a live model, music, recorded performances, rehearsal videos, choreographic notes, images, stage diagrams, cultural or historical materials, reflective prompts, and digital annotations. Materials can open different pathways into the same repertoire. A video may support visual-spatial analysis; a musical recording may support rhythmic and phrasing awareness; a written reflection prompt may support intrapersonal analysis; and historical or cultural materials may deepen interpretation. The key question is not whether many materials are used, but whether the chosen resources are coherent with the objectives and procedures of the lesson.

Assessment

Assessment includes formal evaluation as well as the ongoing feedback processes through which students understand quality and make adjustments. Dance education commonly relies on immediate teacher correction, but a broader assessment system may also include formative feedback, peer feedback, self-assessment, rehearsal journals, video-based review, criteria-referenced performance evaluation, and guided reflection. Brown (2023) illustrates the potential and limitations of peer feedback within dance technique, while Soerel et al. (2023) show the centrality of teacher instructions and feedback in professional-level dance training. From a POMAT perspective, assessment should align with intended outcomes. If collaboration, interpretation, or reflection are valued objectives but only technical accuracy is assessed, the instructional system sends students a contradictory message about what counts as learning.

Technology

Technology is not treated as an independent solution but as an instructional resource whose value depends on pedagogical alignment. Mobile devices, recording and playback, online repositories, digital annotation, learning platforms, and virtual rehearsal spaces can support observation, repetition, self-review, collaboration, and access to contextual materials. Alexander et al. (2023) found that mobile technologies could enhance collaborative and discursive opportunities in a dance repertoire module. Li (2024) showed that virtual dance teaching could shift pedagogical relationships and learner autonomy, while Zeitner (2023) described technology as enabling new interdisciplinary and embodied possibilities in virtual improvisation. These studies suggest that technology can extend the learning environment, but its presence alone does not guarantee pedagogical value. Under POMAT, technology is analysed in relation to the objectives, procedures, materials, assessment, and forms of student participation it enables.

Evidence from fields beyond dance reinforces this principle. In Malaysian classroom research, Sulaiman et al. (2011) integrated multiple intelligences and instructional technology across non-dance teaching and argued that technology should be coordinated with objectives, activities, materials, and assessment rather than added as an isolated feature. At a broader international level, the UNESCO Global Education Monitoring Report (2023), drawing on evidence across countries and subject areas, similarly cautions that educational technology contributes to learning only when it is appropriate to pedagogical purposes, context, access conditions, and human interaction. These cross-disciplinary and cross-context perspectives strengthen the rationale for treating Technology as one interdependent POMAT dimension rather than as a stand-alone marker of innovation.

Proposed POMAT-MITA framework for vocational undergraduate dance education

Figure 1 presents the proposed conceptual framework. The framework begins with the contextual demands of vocational undergraduate dance education, where technical precision must coexist with wider artistic and professional development. POMAT forms the central analytical structure. Across each of its five dimensions,

the framework asks whether and how teaching creates opportunities for bodily-kinaesthetic, musical, spatial, interpersonal, and intrapersonal engagement. These opportunities are considered in relation to multidimensional repertoire learning, including technical development, musical-spatial understanding, artistic interpretation, collaboration, reflection, and professional judgement. The arrows indicate the proposed analytical relationships among the framework components and should not be interpreted as evidence of causal effects. The framework is intended to reveal how instructional components are coordinated and where there may be imbalance, omission, tension, or context-dependent adaptation.

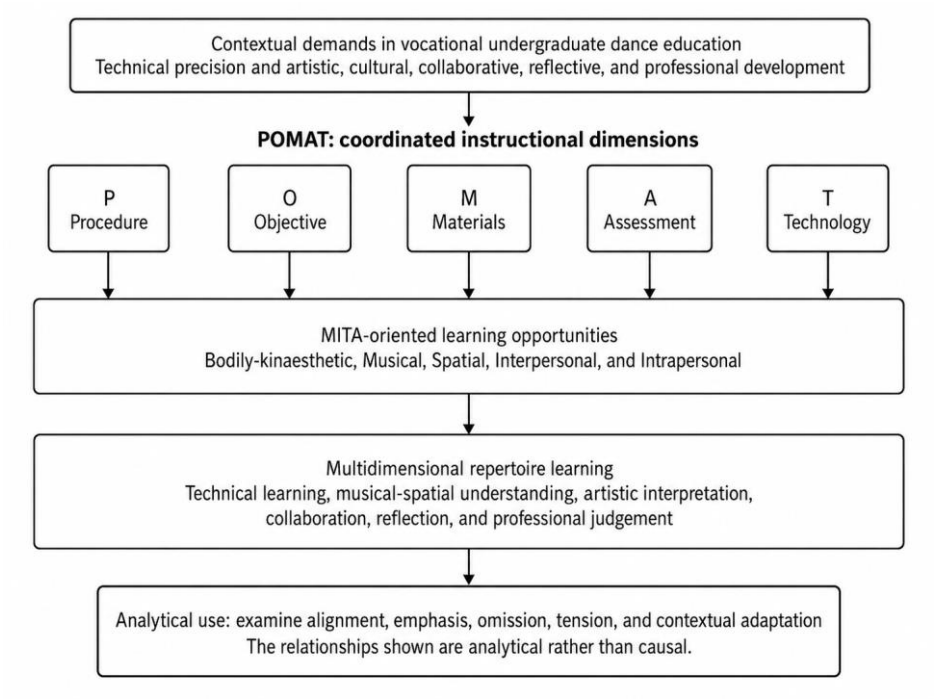

Figure 1: Proposed POMAT-MITA framework for vocational undergraduate dance education

Analytical guide for practical application

Table 1 translates the framework into guiding questions for dance teachers and researchers. The matrix is deliberately non-prescriptive. It does not require every lesson to address all five intelligence domains equally or to use technology continuously. A technical correction session may legitimately foreground bodily-kinaesthetic learning and direct teacher feedback. A later rehearsal may foreground interpersonal coordination and artistic interpretation. A reflective review may foreground intrapersonal analysis and visual-spatial observation. Coherence therefore depends on the relationship between instructional choices and the purposes of a particular lesson or rehearsal stage, not on numerical balance across categories.

Table 1: POMAT dimensions translated into analytical questions for dance repertoire education

POMAT dimension	**Analytical focus in dance repertoire teaching**	**Illustrative MITA-related learning opportunities**
Procedure	How are activities sequenced and how do teacher guidance and student participation interact?	Demonstration, embodied practice, musical analysis, spatial rehearsal, peer observation, collaboration, reflection.
Objective	What forms of knowledge, skill and judgement is the lesson intended to develop?	Technical control, musicality, spatial awareness, interpretation, interpersonal coordination, self-evaluation.

POMAT dimension	Analytical focus in dance repertoire teaching	Illustrative MITA-related learning opportunities
Materials	What resources mediate learning and how are they connected to the objectives?	Teacher modelling, music, video, stage diagrams, cultural sources, rehearsal notes, reflective prompts.
Assessment	What counts as evidence of learning and how is feedback used to improve performance?	Expert correction, formative feedback, peer feedback, self-assessment, video review, criteria-referenced evaluation.
Technology	What pedagogical functions are enabled by digital tools rather than technology being used for its own sake?	Recording/playback, annotation, digital archives, online collaboration, reflective documentation, virtual rehearsal support.

DISCUSSION

From pedagogical variety to pedagogical coherence

The main contribution of the proposed framework is its shift from pedagogical variety to pedagogical coherence. Dance teachers are often encouraged to diversify activities, use technology, increase student participation, or incorporate reflection. These recommendations can be useful, but they can also remain fragmented. A teacher may add peer feedback without clarifying criteria, show videos without connecting them to a learning objective, or use group work without considering whether students have sufficient technical understanding to provide meaningful support to one another. POMAT changes the unit of analysis from the isolated activity to the relationship among instructional components. In this sense, the framework is not a catalogue of 'MI activities'; it is a structure for asking whether a lesson's procedures, objectives, materials, assessment, and technology mutually reinforce the intended forms of learning.

Balancing technical authority and learner agency

The framework also offers a way to move beyond the common binary between teacher-centred and student-centred dance pedagogy. Chinese tertiary dance education has been shaped by strong performance traditions and hierarchical teacher-student relationships. Rowe et al. (2020) documented the institutional and cultural pressures experienced by dance educators attempting to shift towards more student-centred practices, while Jin and Snook (2022) described the difficulty of moving from a performance-dominant conception of dance towards more creative and educationally inclusive approaches. These studies indicate that pedagogical change is not achieved simply by reducing teacher authority. In professional dance training, teacher expertise remains essential for safety, technical detail, stylistic accuracy, and the transmission of disciplinary knowledge. The more productive question is how expertise can be used to scaffold increasingly sophisticated forms of student participation.

A POMAT-informed lesson may therefore move through different levels of teacher and student responsibility. Early learning of a technically demanding phrase may require explicit modelling and corrective feedback. Once basic movement organisation becomes stable, students can be asked to analyse musical phrasing, compare spatial choices, observe peers, interpret expressive intention, or justify rehearsal decisions. The pedagogical sequence can thus move from demonstration to guided practice, from guided practice to analytical participation, and from participation to increasingly independent artistic judgement. This progression is consistent with a multidimensional understanding of learning because it treats agency as something that is structured and developed rather than simply granted.

Reframing MI for a discipline in which the body matters

Dance education is an unusually productive context in which to reconsider the educational use of MI Theory because the discipline visibly integrates bodily, musical, spatial, social, and reflective activity. At the same time, precisely because these connections appear intuitive, dance educators must avoid turning them into unsupported

psychological claims. The proposed framework therefore uses MI-related domains descriptively rather than diagnostically. A lesson may create a musical learning opportunity without assuming that some students possess a fixed 'musical intelligence profile'; it may use peer rehearsal to stimulate interpersonal learning without implying that interpersonal intelligence is an independently measurable learner type. This distinction responds directly to the concerns raised by Attwood (2022) and Ferrero et al. (2021). It also allows dance educators to retain the practical value of asking whether learning is represented and enacted in varied ways without claiming an evidence base that the MI effectiveness literature does not currently provide.

Implications for vocational undergraduate dance curriculum

For vocational undergraduate programmes, the framework has implications beyond the individual lesson. Curriculum designers can use the five POMAT dimensions to examine whether broader programme outcomes are actually visible in course design. If a programme expects graduates to demonstrate performance technique, rehearsal leadership, artistic interpretation, collaboration, cultural understanding, and digital competence, these outcomes need corresponding procedures, materials, assessment practices, and technology-supported experiences. A curriculum that states broad outcomes but repeatedly assesses only movement accuracy is not constructively aligned in practice. Similarly, a programme that promotes digital competence but uses technology only to distribute files may not provide meaningful opportunities for digital analysis, feedback, documentation, or creative problem-solving.

The framework may be especially useful for the Dance Repertoire Performance and Direction type of course because such courses sit at the intersection of performance, interpretation, rehearsal, and leadership. Repertoire study requires the faithful learning of established movement material, but direction and rehearsal work also require students to analyse works, communicate intentions, diagnose problems, coordinate performers, and make artistic decisions. The POMAT-MITA framework helps make these multiple demands explicit. Teachers can examine, for example, whether a rehearsal procedure that is highly effective for technical precision also provides opportunities for musical analysis or collaborative problem-solving, and whether these opportunities are recognised in assessment.

Assessment and feedback as a leverage point

Assessment is likely to be a particularly important leverage point for pedagogical change. Dance teachers may already value creativity, reflection, communication, and collaboration, yet students often orient their effort towards what is formally evaluated. Expanding assessment does not require abandoning technical standards. Instead, rubrics and feedback processes can distinguish among technical execution, musicality, spatial awareness, interpretation, rehearsal contribution, self-evaluation, and professional responsibility where these outcomes are relevant. Formative video review can support intrapersonal reflection; peer observation can support interpersonal learning; and teacher feedback can remain the principal source of expert technical correction. The key is that assessment criteria make the multidimensional purposes of the course visible.

Technology as pedagogical infrastructure, not decoration

The technology dimension is also increasingly significant. Research in dance education shows that recording, playback, mobile devices, and virtual platforms can change how students observe, discuss, and take responsibility for learning (Alexander et al., 2023; Li, 2024; Zeitner, 2023). Cross-disciplinary evidence points in the same direction. Malaysian research on MI-informed classroom instruction shows that digital tools are most meaningful when coordinated with the wider instructional design (Sulaiman et al., 2011), while UNESCO's global review of technology in education stresses relevance, contextual appropriateness, equitable access, and the continuing importance of human interaction (UNESCO, 2023). The comparison is useful because it shows that the central issue is not unique to dance: across subjects and regions, technology becomes educationally valuable through alignment with pedagogical purposes. The framework therefore asks what technology enables that would otherwise be difficult: repeated self-observation, asynchronous feedback, comparison across rehearsals, annotation of performance, access to cultural context, collaborative planning, or reflective documentation. Technology becomes pedagogically meaningful when it is integrated with the other POMAT dimensions rather than treated as evidence of innovation by itself.

Limitations and future research

This paper is conceptual and has several limitations. First, it does not provide empirical evidence that the proposed framework improves student learning. Figure 1 is conceptual and does not imply causal relationships among the framework components. Second, the review was purposive rather than systematic, and relevant scholarship may exist outside the literature included here. Third, the five MI-related domains were selected because of their conceptual relevance to repertoire learning; the framework does not claim that these domains exhaust the forms of cognition, emotion, culture, or embodiment involved in dance. Fourth, POMAT was originally developed within a different educational context, so its adaptation to vocational undergraduate dance education requires empirical examination rather than assumed transferability.

Future research should therefore test the analytical usefulness of the framework in authentic classrooms. Qualitative case studies could combine teacher interviews, classroom observations, and course documents to examine how the five POMAT dimensions interact in repertoire teaching. Comparative studies could explore differences across dance genres, teachers, rehearsal stages, or institutions. Student-focused research could investigate whether specific combinations of procedures, feedback, reflection, and technology are associated with perceived autonomy, engagement, or professional learning. Instrument-development research could also translate the framework into an observation protocol while preserving its qualitative, context-sensitive character. Importantly, such studies should avoid using POMAT as a simplistic implementation score or MITA as a causal treatment unless the relevant constructs are defined and validated rigorously.

CONCLUSION

Vocational undergraduate dance education requires a pedagogy capable of preserving the rigour of technical training while supporting the wider artistic, cultural, collaborative, reflective, and professional capacities expected of contemporary graduates. This conceptual review has argued that the challenge is not solved by replacing teacher-centred instruction with student-centred activity, nor by labelling students according to intelligence types. Instead, the more useful task is to examine how different forms of learning are deliberately organised across the instructional system.

MITA can contribute to this task when it is treated as a flexible pedagogical orientation that sensitises teachers to bodily-kinaesthetic, musical, spatial, interpersonal, and intrapersonal learning opportunities. POMAT contributes an analytical structure for examining where and how those opportunities are embedded across Procedure, Objective, Materials, Assessment, and Technology. Together, the two perspectives make it possible to ask whether a dance lesson or course is coherent: whether intended outcomes are reflected in classroom procedures, supported by appropriate materials, made visible through assessment and feedback, and extended through purposeful technology use.

The proposed POMAT-MITA framework is therefore not an instructional recipe and does not establish the effectiveness of MI-based teaching. Its contribution is analytical and pedagogical. It provides dance teachers, curriculum designers, and researchers with a structured way to examine how technical instruction can be connected with musical-spatial understanding, artistic interpretation, collaboration, reflection, and professional judgement. Future empirical research can determine how useful this framework is across different vocational undergraduate dance contexts and how it may need to be refined in response to disciplinary, institutional, and cultural variation.

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