



Participation-Demand Progression in Kindergarten Traditional Dance: From Individual Imitation to Coordinated Collective Performance

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ABSTRAK. Partisipasi dalam pendidikan seni anak usia dini tidak cukup dibaca sebagai kehadiran atau keterlibatan yang meningkat dan menurun, sebab kriteria partisipasi berubah ketika anak harus mengoordinasikan gerak dengan musik, ruang, peran, dan teman sebaya. Penelitian ini menganalisis perubahan tuntutan partisipasi dalam kurikulum Tari Merak Dai tiga tahap. Design-Based Research (DBR) digunakan dengan analisis proses deskriptif-konfigurasional terhadap 30 anak usia 5–6 tahun selama 12 sesi. Bukti berasal dari observasi kelas terstruktur, catatan penyelesaian tugas, kehadiran, rute dan peran, dokumen kurikulum, serta catatan guru dan asisten pengajar; analisis menggunakan matriks tahap–tuntutan dan aturan dua sumber bukti. Dari 360 kemungkinan kehadiran anak-sesi, tercatat 349 (96,94%). Pada Tahap 1, 20 dari 30 anak menyelesaikan gerak dasar utama; pada Tahap 2, 21 menyelesaikan rangkaian gerak terhubung; dan pada Tahap 3, 25 mengikuti penampilan kelompok kecil. Temuan menunjukkan bahwa kesulitan tidak hilang, melainkan berpindah dari pengenalan tugas dan eksekusi individual menuju koordinasi temporal-spasial, interdependensi peran, dan penampilan kolektif. Pola ini dirumuskan sebagai participation-demand progression (PDP), yaitu perubahan progresif pada apa yang harus dikoordinasikan anak agar dapat berpartisipasi secara berhasil ketika tugas kurikulum menjadi semakin saling bergantung.

Kata Kunci : Progresi Tuntutan Partisipasi; Tari Tradisional; Pembelajaran Berbasis Tubuh

ABSTRACT. Participation in early-childhood dance cannot be reduced to attendance or engagement that simply rises or falls, because the criteria for successful participation change when children must coordinate movement with music, space, roles, and peers. This study examined changing participation demands across a three-stage Dai Peacock Dance curriculum. A Design-Based Research (DBR) approach was used with descriptive configurational process analysis of 30 children aged 5–6 years across 12 sessions. Evidence comprised structured classroom observations, task-completion records, attendance, route and role records, curriculum documents, and teacher and teaching-assistant records; analysis used a stage-by-demand matrix and a two-source rule. Of 360 expected child-session attendances, 349 were recorded (96.94%). In Stage 1, 20 of 30 children completed the principal basic movements; in Stage 2, 21 completed a connected movement combination; and in Stage 3, 25 participated in a small-group presentation. Difficulty did not disappear. It migrated from task entry and individual execution toward temporal-spatial coordination, role interdependence, and collective performance. We conceptualise this pattern as participation-demand progression (PDP): the progressive reconfiguration of what children must coordinate for participation to remain successful as curricular tasks become increasingly interdependent.

Keyword : Participation-Demand Progression; Traditional Dance; Embodied Learning

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INTRODUCTION

Dance participation in early childhood is an embodied curricular act: children must interpret cues, organise movement in time and space, and, increasingly, adjust to other bodies. Recent research links preschool dance with sensorimotor coordination, balance, social development, emotional learning, and motor competence [1], [2], [3], [4]. Synchronized movement also has a relational dimension because coordinated action can strengthen peer cooperation [5]. These findings establish the educational value of dance, but they say less about how the conditions for successful participation change inside a sustained curriculum.

Traditional-dance studies sharpen the issue by adding cultural form, age-appropriate adaptation, teacher usability, and media-supported instruction. Recent work has examined the developmental contribution of traditional dance [6], the design of preschool-appropriate modules and teacher support [7], [8], contextual and content requirements for model development [8], and video-supported training strategies [9]. Their emphasis is largely on outcomes, resource design, or implementation feasibility. What remains less explicit is how a child's participation must be reorganised when familiar movement is progressively tied to rhythm, routes, waiting, partner roles, and collective presentation.

That distinction matters because participation is often compressed into a single label engagement, activity, cooperation, attendance, or willingness to join. Such labels can obscure a curricular change in the task itself. Imitating a demonstrated movement, initiating it on a musical cue, navigating a marked route, holding a waiting position, exchanging leader-follower roles, and presenting with peers are not equivalent accomplishments. Each redistributes the child's attentional, bodily, temporal, spatial, and social workload.

Arts-education scholarship gives reason to resist outcome-only accounts. The arts can be weakened when they are valued mainly for generalised social-emotional or academic transfer, or when integration leaves disciplinary forms of knowing implicit [10], [11], [12], [13], [14], [15]. In dance, participation should therefore be examined as an artistic and curricular accomplishment in its own right: not merely whether the child is present or active, but what relations must be coordinated for the dance task to hold together.

Adjacent concepts do not fully answer this question. Task complexity describes the number or difficulty of task features; scaffolding describes supports that make performance more executable; engagement describes observable involvement. None of these, by itself, identifies how the criterion for successful participation is reconstituted when an already learned action must remain stable while a new constraint is introduced. A curriculum can become more complex without producing a coherent progression, and additional teacher support can be offered without clarifying which coordination demand has actually become unstable.

Baseline observations made the participation problem more concrete at child level. Before the formal curriculum began, only 7 of 30 children completed a basic movement combination relatively fully after one demonstration; 13 omitted movements,

reversed the order, or stopped when movements had to be linked, and 18 required two or more verbal or movement prompts from the teacher. When rhythm changed, 14 children started too early, responded late, or stopped to watch peers; in the route task, 16 followed the designated route, but only nine maintained the movement after turning and seven still required additional prompting. These observations indicated that the central issue was not willingness to join but the coordination of movement sequence, timing, spatial direction, and cue use, providing an empirical basis for examining how participation demands would be reconfigured as the curriculum progressed.

This task-centred view is consistent with evidence that guidance is most productive when aligned with the learning goal and that bodily activity is educationally meaningful when action is functionally coupled to what is being learned [16], [17]. Gamification and digital-play research reaches a similar conclusion: effects depend on configuration and context rather than on the mere presence of a game-like or digital feature [18], [19], [20], [21]. Curriculum enactment is likewise shaped by planning, classroom ecology, technology use, professional support, and collaboration [22], [23], [24], [25], [26], [27]. Participation is therefore situated in the relation between task design, learner action, environment, and other participants.

Two questions guide the analysis: RQ1, how did the form of children's participation change across individual, temporal-spatial, and peer-coordinated activity? RQ2, what participation demands became visible as movement, rhythm, space, waiting, role exchange, and peer coordination were combined? The study's novelty lies in making participation demand not engagement level or outcome change the primary analytic object and tracing how earlier capabilities had to be retained while new coordination relations were added.

Table 1. Literature positioning and the specific gap addressed by this study

Literature strand	What is established	What remains unresolved for this article	PDP response
Preschool dance outcomes	Motor, balance, social, prosocial, and emotional outcomes are documented.	Outcome change does not explain how the criterion for successful participation changes inside a curriculum.	Make changing participation demand, not only outcome change, the analytic object.
Traditional dance in early childhood	Age-appropriate content, teacher usability, cultural grounding, and media/training conditions are important.	How familiar cultural movement becomes progressively interdependent across sustained lessons remains underexplained.	Trace cumulative coordination demands while retaining recognisable dance content.
Guided play and activity-based learning	Guidance and functionally relevant bodily activity matter; effects depend on task design.	The label 'active participation' can conceal different coordination requirements.	Identify the relation that must be coordinated at each stage.
Gamification and digital play	Design configuration and context matter more than labels or feature quantity.	Engagement does not reveal the bodily, temporal, spatial, or social problem the learner must solve.	Evaluate supports by whether they clarify the current participation demand.
Arts curriculum integration	Integration can support learning but may weaken disciplinary knowledge when artistic work is left	Integrated activities can obscure what counts as participation in the art form itself.	Specify dance-specific participation demands before adding supporting elements.

implicit.

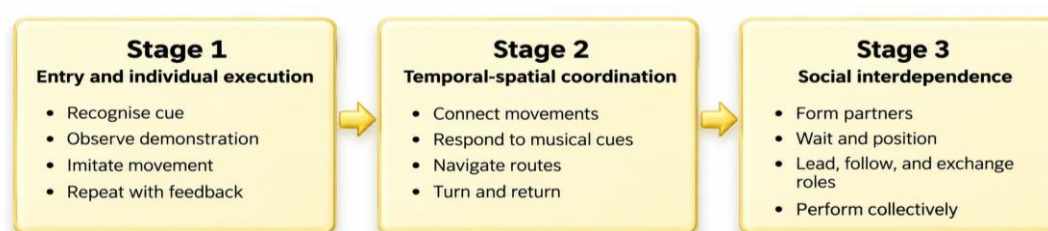
PDP begins from a relational premise. A child may execute a movement successfully under one configuration and require support when the same movement is tied to a musical entry, a route, a waiting rule, or a partner. Later participation therefore does not merely add tasks; it reorganises what earlier movement knowledge must do inside a wider coordination system.

In this sense, progression is different from a simple hierarchy of difficulty. Difficulty can migrate. Once movement form becomes familiar, the dominant problem may shift to timing, then to spatial navigation, and later to inhibition, role exchange, or peer coordination. Repeated and goal-directed motor practice can stabilise movement competence, yet performance remains sensitive to intervention form and task conditions [4], [28], [29]. The relevant question is therefore where the breakdown has moved.

For culturally situated dance, the same logic must remain accountable to artistic form. Preschool adaptation should reduce information and movement load without dissolving recognisable cultural content into generic movement play. Traditional-dance research emphasises age-appropriate movement, cultural grounding, teacher usability, and meaningful representation [6], [7], [8], [30]. PDP therefore asks both what new demand is introduced and which earlier artistic requirement must remain intact.

Figure 1 summarises the resulting logic. Stage 1 foregrounds entry and individual execution; Stage 2 retains these demands while adding temporal-spatial coordination; Stage 3 retains the earlier demands while adding social interdependence and collective performance. The arrows should be read as cumulative curricular reorganisation, not as age-linked developmental stages.

The figure is therefore an analytic map of the case. It anticipates the later stage-by-demand analysis by making one principle explicit: successful participation is constituted by the relations a learner must coordinate, and those relations can change even when the underlying movement vocabulary remains familiar.



Cumulative progression: later stages retain earlier movement demands while adding new temporal, spatial, and social coordination requirements.

Figure 1. Participation-Demand Progression across the three-stage curriculum

Note. The figure is an analytic synthesis of the curriculum and implementation evidence; it is not a psychometric scale or universal developmental sequence.

METHOD

Research design and analytic orientation. This study used Design-Based Research (DBR) with a descriptive configurational process analysis. The wider project connected problem analysis, curriculum development, pre-implementation refinement, authentic

classroom implementation, and the generation of usable design knowledge [31]. DBR was appropriate because the research problem concerned the design and enactment of a culturally situated movement curriculum under ordinary classroom conditions rather than the testing of a decontextualised treatment. Clear phase boundaries and traceable links between design decisions and implementation evidence are particularly important in early-childhood DBR [32].

The present article reports a question-led analysis of the implementation and process evidence generated within that completed DBR case. It does not estimate an intervention effect or test whether participation increased statistically. Instead, it asks how the requirements for successful participation changed across three predesigned curriculum stages. These stages were instructional phases, not three redesign cycles, and the stage-specific T1 and T2 records were not treated as equivalent repeated-measures occasions because the indicators changed with the demands being taught. Figure 2 shows the design sequence and identifies the point at which the article-specific PDP analysis was conducted.

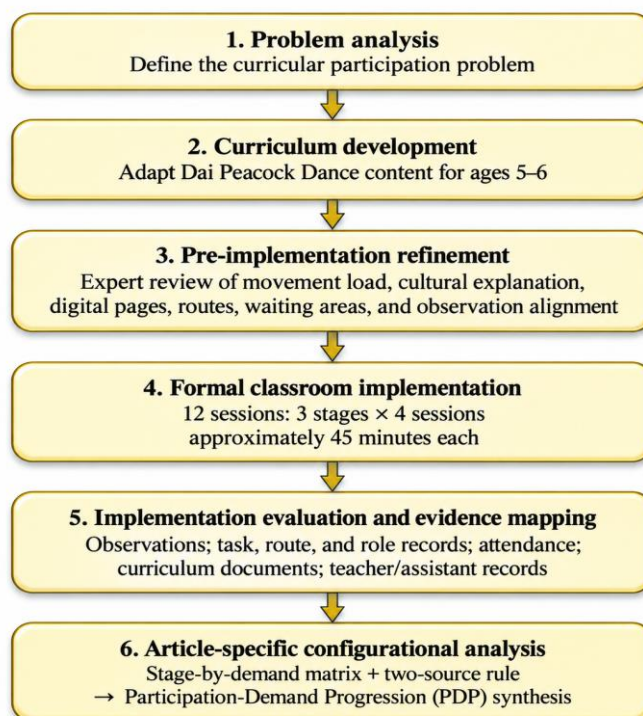


Figure 2. Research design and article-specific analytic sequence

Note. Pre-implementation preparation and refinement were completed from October to December 2025. Formal classroom implementation then ran from 9 March to 15 May 2026 using one stable curriculum model across 12 sessions. The article-specific PDP analysis was conducted on implementation and process evidence generated within the completed DBR case.

Setting and participants. Formal implementation was conducted during the March–May 2026 implementation period, from 9 March to 15 May 2026, in one senior-kindergarten class in Nanchang City, Jiangxi Province, China. The class comprised 30 children aged 5–6 years. One lead kindergarten teacher delivered 12 formal lessons,

supported by one assistant teacher and two senior undergraduate teaching assistants in preschool education. The researcher designed and coordinated the wider study, organised the research materials, and observed implementation but did not serve as the principal classroom instructor. Other classes in the senior-kindergarten grade provided institutional context only and were not comparison groups. The analytic unit in this article is the changing configuration of participation demands embedded in the curriculum and visible in enactment, not a child-level treatment effect.

Curriculum and pre-implementation refinement. Dai Peacock Dance served as the culturally specific curriculum case. Preparation and pre-implementation refinement were undertaken from October to December 2025. During this period, movement and cultural content were selected, simplified, and reorganised for children aged 5–6 years, while the model, digital materials, and research instruments were prepared and refined. Two expert supervisors reviewed the curriculum and research materials before formal implementation. Their feedback resulted in shorter movement combinations, more concrete cultural explanations, reduced information load on shared digital pages, clearer route boundaries and waiting areas, and closer alignment between classroom tasks and observation dimensions. After this refinement, the core movement system, digital-material framework, and three-stage progression were held stable during the formal implementation. This stability allowed the analysis to examine changing participation demands within a fixed curricular sequence rather than confounding them with ongoing redesign.

The curriculum comprised 12 sessions of approximately 45 minutes, organised into three four-session stages. Stage 1 was implemented in March 2026 and established cultural and narrative entry, peacock imagery, basic movement experience, and introductory music and rhythm. Children were expected to recognise cues, observe teacher demonstration, imitate identifiable movement units, and repeat movements after brief feedback. Stage 2 was implemented in April 2026; it retained those requirements while adding movement connections, musical start-and-stop cues, directional changes, and straight, curved, and circular routes marked in the classroom. Stage 3 was implemented in May 2026 and retained movement, timing, and route demands while adding partner work, leader–follower roles, role exchange, waiting positions, cooperative expression, and small-group presentation. The sequence was cumulative: later stages did not replace earlier movement requirements; they required children to keep those requirements available while coordinating additional temporal, spatial, and social constraints.

Evidence sources. The analysis drew on structured classroom observations, stage-specific task-completion records, attendance records, lesson and session records, route and role records, curriculum documents, and teacher and teaching-assistant implementation materials. Structured observations documented task entry, repeated movement practice, response to musical cues, route use, spatial positioning, waiting and transition, peer cooperation, role exchange, teacher scaffolding, and adult support. Task-completion, route, and role records provided stage-specific counts for named curriculum requirements. Curriculum documents established what had been planned at each stage,

while teacher and teaching-assistant materials clarified pacing, support needs, spatial organisation, and transition difficulties. Adult interview and journal material was used contextually to interpret implementation conditions and was not treated as independent evidence of a causal mechanism. No separate pre-intervention participation score was constructed; preliminary problem analysis was documented through the pre-implementation review and refinement records described above.

Analytic procedure. Analysis proceeded in three linked passes. First, planned curriculum tasks and observation categories were mapped by stage to identify what children had to coordinate for participation to count as successful at that point in the curriculum. Second, implementation records were examined for evidence that each requirement was enacted, completed, partially completed, or remained a recurrent point of prompting or support. Third, the cross-stage pattern was synthesised by tracing which earlier demands had to be retained as new ones were introduced. At the operational matrix level, six dimensions were tracked: task entry, individual execution, temporal coordination, spatial coordination, role interdependence, and collective performance. In the article-level PDP framework, temporal and spatial coordination were represented as a combined domain because Stage 2 required children to integrate timing and route information within the same movement sequences.

Ethics and participant protection. The university approved the study and participant-protection procedures before formal implementation. Parents or legal guardians provided written informed consent before child-level research data were collected. Children's willingness to participate was respected throughout the classroom activities, and withdrawal was permitted without academic or classroom penalty. Child records were anonymised using coded identifiers, and adult participant materials were also coded. The researcher's role was separated from principal classroom teaching and principal outcome rating in order to preserve the distinction between research coordination and everyday instructional delivery.

Table 2. Evidence architecture for the article-specific analysis

Evidence source	What it documents	Use in PDP analysis	Boundary
Curriculum scripts and task tables	Planned movement, rhythm, route, partner and presentation requirements	Defines the intended coordination demands by stage	Design evidence, not outcome evidence
Structured classroom observations	Task entry, movement practice, route use, waiting, transitions, cooperation, scaffolding	Locates where demands became visible in enactment	Descriptive process evidence; no causal mechanism claim
Task-completion, route, and role records	Stage-specific completion of named tasks	Anchors interpretation with counts	Indicators differ by stage; not repeated measures
Attendance	Exposure and sustained implementation	Feasibility and context	Not treated as proof of motivation or effectiveness
Teacher and teaching-assistant records and interviews	Pacing, support needs, spatial organization, transitions	Contextual interpretation of demand points	Adult perceptions supplement but do not replace child observation

RESULTS AND DISCUSSION

Stage 1: participation as entry, recognition, and individual execution. In Stage 1, participation was organized around entering a culturally framed movement task and converting a shared cue into an individual bodily attempt. After the first four sessions, 24 of 30 children entered the narrative context, 22 recognized the basic movement icons, and 20 completed the principal basic movements. Ten children still required prompting when cues had to be connected into a sequence. The important feature is not that Stage 1 was 'simple'; it already required coordination between attention, visual recognition, teacher demonstration, body shape, rhythm, and persistence. However, the principal unit of accomplishment remained the individual child executing an identifiable movement after a cue and demonstration.

Stage 2: participation becomes temporal-spatial coordination. Stage 2 changed the participation demand by retaining basic movement content while adding continuous timing and spatial navigation. Twenty-five children responded to the musical start cue, 23 completed the principal route, and 21 completed a relatively full connected movement combination. Nine still needed reminders during turning, circling, or returning. The difficulty therefore shifted from recognizing what movement to perform toward coordinating when, where, and in what sequence to perform it. A child could know the movement vocabulary yet still lose the route, mistime a transition, or fail to return to the designated position. Successful participation now required the child to integrate movement memory with temporal cues and environmental information.

Stage 3: participation becomes socially interdependent. Stage 3 added requirements that could not be completed by individual competence alone. Twenty-six children completed the core movement combination, 24 entered partner tasks, 23 completed role exchange with teacher prompting, and 25 participated in small-group presentation. The continuing support need was concentrated around waiting, maintaining position, exchanging leader and follower roles, and coordinating with another child. These are qualitatively different demands because the success of one participant becomes partly dependent on the timing and position of others. The child must not only execute a movement but also monitor a partner, inhibit premature action, preserve spacing, respond to role cues, and re-enter the movement sequence at an appropriate moment.

Cross-stage synthesis: difficulty changed form rather than disappearing. Across the three stages, the pattern was not a simple reduction in difficulty. Children became more familiar with the movement system, but new participation requirements emerged as the curriculum layered rhythm, route, waiting, and peer roles. Stage 1 foregrounded task entry and individual execution; Stage 2 foregrounded temporal-spatial integration; Stage 3 foregrounded social interdependence. The curriculum therefore altered what counted as successful participation. Later stages were cumulative: they did not replace earlier movement demands but embedded them within more complex coordination problems.

Participation-Demand Progression as an analytic construct. The cross-stage pattern supports the construct of participation-demand progression. PDP is defined here

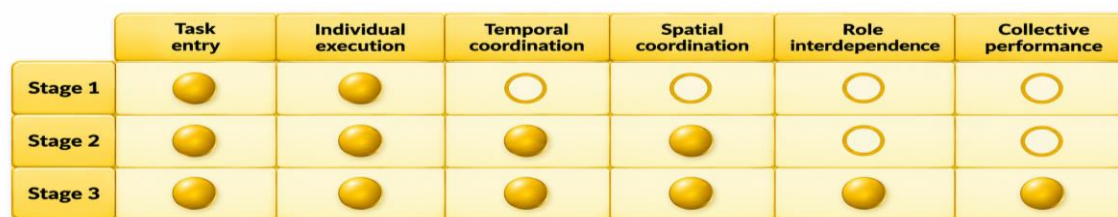
as the progressive reconstitution of successful participation as learners must coordinate embodied, temporal, spatial, and social constraints in increasingly interdependent configurations. The construct has five analytically distinguishable demand domains: task recognition and entry, individual execution, temporal-spatial coordination, role interdependence, and collective performance. These domains are not proposed as fixed developmental ages or universal steps. Rather, they describe how a curriculum can redistribute the sources of participation difficulty as task architecture changes. The cumulative configuration is summarised in Figure 3. The matrix should not be read as a child-development scale; it represents which demand domains were foregrounded and retained by the curriculum. Its purpose is to make visible why later-stage participation could remain challenging even when earlier movement content had become familiar.

Sustained participation and bounded interpretation. Of 360 expected child-session attendances, 349 were recorded (96.94%). Twenty-one children attended all 12 sessions, seven missed one session, and two missed two sessions. This high attendance supports the feasibility of sustained curriculum implementation but should not be interpreted as evidence that any single component caused engagement. The curriculum combined cultural narrative, music, bodily practice, peer roles, feedback, and shared cues. Likewise, the stage-specific counts cannot establish causal development because there was no control group and the indicators were intentionally different across stages.

Table 3. Stage-specific participation evidence (n = 30)

Stage	Stage-specific indicator	n	%
Stage 1	Narrative entry	24	80.0
Stage 1	Basic-movement icon recognition	22	73.3
Stage 1	Principal basic movements	20	66.7
Stage 2	Musical start cue	25	83.3
Stage 2	Principal route	23	76.7
Stage 2	Connected movement combination	21	70.0
Stage 3	Core movement combination	26	86.7
Stage 3	Partner task entry	24	80.0
Stage 3	Role exchange (with prompting)	23	76.7
Stage 3	Small-group presentation	25	83.3

Note. Indicators are intentionally stage-specific and non-equivalent. Percentages describe implementation records and should not be interpreted as repeated-measures growth rates.



Filled circles = demand foregrounded and retained; open circles = not yet foregrounded.

Figure 3. Cumulative layering of participation demands across curriculum stages

Note. Filled circles indicate demand domains foregrounded and retained at each stage; open circles indicate demands not yet foregrounded. The matrix represents curriculum architecture, not children's ability scores.

Figure 3 makes the cumulative architecture more explicit than a stage-by-stage completion chart. Stage 1 foregrounded entry and individual execution; Stage 2 retained those requirements while adding temporal and spatial coordination; Stage 3 retained the earlier demands while adding role interdependence and collective performance. The important pattern is therefore not a monotonic increase in task-completion percentages.

It is the expansion of the coordination system within which previously learned movement had to remain available.

Table 4. Participation-Demand Progression (PDP) framework derived from the case

Demand domain	Definition	Observable markers in this case	Typical breakdown point	Design implication
Task entry	Recognising the current activity and entering the participation frame	Narrative entry; icon recognition; orientation to teacher cue	Unclear task or delayed entry	Use one salient task cue and concise explanation
Individual execution	Mapping cue and demonstration onto bodily action	Basic movement completion; repetition after feedback	Movement sequence breaks; incomplete form	Stabilise short movement units before layering new constraints
Temporal-spatial coordination	Coordinating movement with music, direction and route	Start cue, connected combination, turning, circling, return point	Mistimed start; route loss; unsafe congestion	Externalise routes; preserve start and return points; allow repeated traversal
Role interdependence	Regulating one's action in relation to a partner or group role	Partner entry, waiting, leader and follower, role exchange	Premature movement; role confusion; position drift	Make roles and waiting positions explicit; rotate with support
Collective performance	Integrating prior demands into a shared presentation	Small-group presentation with movement, timing, space and peers	Breakdown when simultaneous constraints overload coordination	Sequence complexity cumulatively and rehearse transitions, not only movements

The central finding is not that children became progressively better at one stable task. The task of participating changed underneath them. Stage 1 demanded entry into a culturally framed movement problem and recognisable individual execution. Stage 2 required that same movement vocabulary to remain usable while timing and routes were coordinated. By Stage 3, successful action depended partly on another child's position, timing, and role. This is why the stage-specific percentages should not be read as a growth curve: they index different participation problems.

PDP names this relocation of difficulty. Existing dance research documents motor, balance, social, and emotional benefits [1], [2], [3], [4] , and synchronized-movement research shows that coordination with peers has consequences beyond individual motor performance [5] . The present analysis adds a curriculum-level claim. Participation is partly constituted by the relations that a task imposes. A route creates a spatial relation; a musical entry creates a temporal relation; leader–follower work creates reciprocal dependence. The child is not merely responding to curriculum. The child is acting inside a coordination architecture produced by it.

This distinction prevents PDP from collapsing into 'harder tasks' or 'more engagement'. A technically difficult gesture can be demanding without requiring social interdependence, whereas a simple partner action can become difficult because waiting, spacing, mutual monitoring, and role exchange must occur at the right moment. Two children may therefore look equally engaged while solving qualitatively different problems. A single engagement score would miss that difference.

Motor-learning and activity-based research helps explain why earlier action can become more stable through repeated, goal-directed practice [17], [28], [29]. The case suggests, however, that stabilisation is only one part of curricular progression. Once movement is sufficiently available, the pedagogically salient problem may move elsewhere to music, direction, return points, partners, or transitions. Progression is thus relational: competence has to be preserved while the relations around it change.

This interpretation also sharpens the use of scaffolding. Guided-play evidence emphasises calibration between adult guidance and the activity being learned [16]. In the present case, support was especially visible at route errors, waiting positions, role exchange, and transitions. These were not interchangeable failures. They called for different responses. Re-demonstrating a movement may help a form error but does little for a child who knows the movement and repeatedly enters a partner sequence too early. PDP therefore supports a demand-matching principle: first identify the coordination problem, then choose the support.

Digital and game-like resources can be read in the same way. Meta-analytic and review evidence shows that their effects depend on design and context, not on the labels 'gamified' or 'digital' alone [18], [19], [20], [21]. Within this curriculum, shared cues were useful when they externalised information that children needed for embodied action: what movement comes next, where the route turns, when a role begins and then receded. A support becomes pedagogically productive when it clarifies the current relation without replacing the movement problem itself.

Cultural accountability places a further limit on simplification. Preschool adaptation cannot mean reproducing adult stage performance at reduced scale, but neither can it strip a traditional dance of recognisable movement and meaning until only generic movement play remains. Work on traditional dance in early childhood emphasises age-appropriate content, contextual meaning, teacher usability, and viable teaching media [6], [7], [8], [9], [30]. PDP adds a design question to that literature: which cultural requirement must remain stable while a new coordination demand is introduced?

This question matters for curriculum integration more broadly. Integrated arts curricula can dilute disciplinary knowledge when artistic forms of doing and knowing are left implicit [14]. A demand-based analysis makes the artistic work visible before narrative, digital, spatial, or game-like supports are layered around it. That is important because dance should not become merely a delivery vehicle for external social-emotional or academic outcomes [10], [11], [12], [13].

For teachers, the framework converts a broad concern about 'participation' into a sequence of diagnostic questions. What can children already execute reliably? What new relation is being introduced? Which part of the environment should be made explicit? What would successful re-entry look like after feedback? Planning research, technology studies, and arts-teacher scholarship all show that enactment depends on local professional and organisational conditions [22], [23], [25], [26], [27], [33]. PDP does not replace that teacher judgement; it gives it a more specific object.

At the level of assessment, the same logic cautions against treating participation as a single score. If the criterion for success changes qualitatively, a global measure can show that performance changed without locating why. Future instruments could retain comparable indicators within distinct domains task entry, individual execution, temporal coordination, spatial coordination, role interdependence, and collective integration rather than forcing all stages into one scale. The present study does not validate such an instrument; it offers an empirically grounded domain structure that can be tested prospectively.

The novelty of PDP is therefore deliberately bounded. The study does not claim to discover progressive curriculum, embodied learning, peer cooperation, scaffolding, or traditional dance as new phenomena. Its contribution is to treat participation demand as the unit of analysis and to demonstrate, within one curriculum, how the meaning of successful participation was reconstituted as tasks became temporally, spatially, and socially interdependent. This is a shift from asking how much children participate to asking what their participation must coordinate.

The possible relevance beyond this case lies in that analytic question, not in exporting the Dai Peacock Dance sequence as a universal model. Dance traditions differ in movement vocabulary, cultural meaning, spatial conventions, teacher expertise, and performance norms. The substantive demands will therefore vary. What may travel is the curriculum-design question: when an individually executable action becomes coordinated with time, space, roles, and other bodies, how does the criterion for successful participation change?

The argument remains bounded by the evidence. The study involved one class of 30 children, one traditional-dance case, one teaching team, and no control group. Stage-specific indicators were intentionally non-equivalent, so their counts describe implementation rather than statistical growth. Adult records supported contextual interpretation but did not establish causal mechanisms. PDP was derived from a curriculum that deliberately layered constraints; it now requires prospective testing in other traditions, settings, and embodied activity domains.

Future work should therefore test the framework prospectively before implementation, develop comparable measures within each demand domain, and trace individual trajectories to see whether children encounter the same coordination transitions in the same way. Such studies could determine whether PDP is merely a useful description of this case or a more general design principle for embodied early-childhood curricula.

CONCLUSION

Participation in kindergarten dance does not progress simply because children become more active or more accurate. In this case, the criterion for successful participation changed: cue recognition and individual imitation had to remain available while children coordinated music and routes, and later while they waited, exchanged roles, monitored peers, and performed collectively. The novelty of participation-demand

progression lies in making this changing demand the unit of curriculum analysis. PDP explains why difficulty can persist even as movement familiarity grows: the source of difficulty moves from execution to relations among time, space, roles, and other bodies. For kindergarten teachers and curriculum designers, the practical implication is concrete. Stabilise short movement units before layering additional constraints; make routes and waiting positions externally visible when spatial or social timing becomes unstable; introduce partner roles with explicit entry, waiting, and exchange cues; and judge breakdown by the dominant coordination demand rather than by a single global participation score. PDP remains a bounded construct derived from one class and one traditional-dance case, but it offers a testable framework for designing and assessing other embodied curricula in which individually executable actions must become collectively coordinated.

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