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Managing a Play-Based Problem-Based Learning Curriculum in Early Childhood Education at PAUD Kusuma Bangsa

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ABSTRACT

This qualitative single-case study examines how PAUD Kusuma Bangsa manages a play-based adaptation of problem-based learning (PBL). Evidence from July–August 2026 comprises six interviews with a principal and two classroom teachers, observations of eight learning activities, and institutional documents. Analysis considers curriculum planning, organization, classroom implementation, and evaluation. Teachers planned concrete problems from children's everyday experiences and prepared open-ended materials. During activities, children explored possible solutions, shared constructions and ideas, and reflected with teacher prompts. One teacher generally facilitated while another supported materials and documentation, although a separate written division of duties was not found in the reviewed modules. Anecdotal notes, photographs, and developmental checklists documented children's processes and informed later revisions to the curriculum. Observations also showed that teachers sometimes intervened sooner than intended and that not every adjustment was formally recorded. The case illustrates an institutional feedback cycle for developmentally appropriate PBL; it does not test causal effects on children's developmental outcomes. More consistent documentation and repeated reflection may help sustain the approach.

Keywords: Curriculum Management; Problem-Based Learning; Early Childhood Education; Guided Play; Formative Assessment



ABSTRAK

Studi kasus kualitatif ini menelaah pengelolaan adaptasi problem-based learning (PBL) berbasis bermain di PAUD Kusuma Bangsa. Data yang dikumpulkan pada Juli–Agustus 2026 meliputi enam wawancara dengan kepala sekolah dan dua guru kelas, observasi delapan kegiatan pembelajaran, serta dokumen lembaga. Analisis mencakup perencanaan, pengorganisasian, pelaksanaan, dan evaluasi kurikulum. Guru merancang masalah konkret dari pengalaman sehari-hari anak dan menyiapkan bahan terbuka. Anak mencoba beberapa penyelesaian, menjelaskan hasilnya, dan melakukan refleksi dengan arahan guru. Seorang guru umumnya memfasilitasi, sementara guru lain membantu media serta dokumentasi, meskipun pembagian tugas tertulis tersendiri tidak ditemukan pada modul yang ditelaah. Catatan anekdot, foto, dan daftar perkembangan digunakan untuk menilai proses dan memperbaiki rancangan berikutnya. Observasi juga menunjukkan guru kadang membantu terlalu cepat dan tidak setiap perubahan tercatat formal. Studi ini menjelaskan siklus pengelolaan pada satu lembaga, bukan pengaruh kausal PBL terhadap perkembangan anak.

Kata kunci: Manajemen Kurikulum; Pembelajaran Berbasis Masalah; PAUD; Bermain Terbimbing; Asesmen Formatif

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1. INTRODUCTION

Early childhood education supports language, cognitive, social, emotional, and physical development through experiences that are meaningful to children. A curriculum needs to make those experiences possible, rather than merely list outcomes in a planning document. Developmentally appropriate practice asks educators to consider what children can do, what they have experienced, and what interests them as they organize a safe and responsive environment (National Association for the Education of Young Children, 2020).

Problem-based learning begins with a meaningful problem and invites learners to investigate possible responses (Barrows, 1986; Hmelo-Silver, 2004). For young children, the problem must be concrete and accessible through play. Deciding how to share materials or care for a classroom plant can prompt observation, talk, cooperation, and trial of alternative solutions. These activities retain the logic of inquiry while allowing children to move, manipulate objects, and communicate in age-appropriate ways.

Play-based learning does not imply that adults disappear from the activity. Teachers select materials, ask open-ended questions, notice what children understand, and provide help at an appropriate moment. Evidence on guided play shows that the design of adult support matters to learning (Weisberg et al., 2016; Pyle et al., 2017). A PBL label alone cannot establish that children experienced choice, exploration, or thoughtful support.

Curriculum management provides the conditions for those classroom interactions. Planning connects learning goals with familiar problem situations; organization assigns roles and arranges

time and materials; implementation puts these decisions into practice; and evaluation uses children's actions and teacher reflection to inform subsequent choices. Treating these functions as a cycle helps a school respond when a planned problem proves too abstract or when materials do not enable participation.

The relationship between institutional planning and children's experience is especially visible in the use of loose parts and other open-ended resources. Accessible materials can give children alternatives to compare and constructions to revise. Their presence alone is insufficient: adults must ensure safety, invite exploration, and observe how resources enter social interaction. Teacher preparation and the placement of materials are therefore curriculum decisions, not simply classroom decoration.

Prior work on problem-based learning addresses problem solving and collaboration, while research on play-based pedagogy highlights variation in adult guidance (Hmelo-Silver, 2004; Pyle et al., 2017). Evidence from older learners cannot automatically be generalized to preschool settings. This case asks how a PAUD institution coordinates its planning, daily practices, and evaluation so that a suitable version of PBL can be enacted.

PAUD Kusuma Bangsa provides a bounded case because the supplied manuscript documents curriculum plans, teacher coordination, classroom activities, and records of children's development. It also describes practical tensions, including occasions when teachers helped children sooner than planned and revisions that were not always documented in a new module. Such inconsistencies are useful evidence about implementation, rather than reasons to describe the curriculum as either wholly successful or unsuccessful.

The study addresses four connected questions: how problems and materials are planned; how responsibilities and resources are arranged; how children and teachers enact the adapted PBL stages; and how evidence from activities shapes later planning. Its purpose is to explain the management process in one institution. It does not compare PBL with another method or estimate a causal effect on developmental scores.

2. RESEARCH METHODS

This descriptive qualitative study used a single-case design at PAUD Kusuma Bangsa. The unit of analysis was the institution's management of play-based PBL, considered through planning, organization, implementation, and evaluation. A case approach is appropriate for explaining the interaction of decisions and classroom practice within a defined setting (Yin, 2018). The school was purposively selected because relevant participants, learning activities, and documents were available for examination.

Data were collected during July–August 2026. Key informants were the principal and two classroom teachers selected for direct involvement in curriculum planning and PBL activities. The source describes six in-depth interview sessions, some used to clarify earlier accounts. It reports

eight observations, four learning activities in each of the two teachers' classrooms. The small purposive group supports close analysis, not statistical representation.

Semistructured interviews addressed problem selection, instructional roles, learning resources, classroom facilitation, and evaluation. Observations followed activities from introduction of a problem through exploration and reflection. Documents reviewed included the institutional operational curriculum, teaching modules, assessment records, photo documentation, and evaluation materials. Comparing these forms of evidence helped distinguish an intended procedure from what occurred during lessons.

The researcher used interview prompts, an observation guide, and document-review notes. The supplied draft contains an unresolved placeholder about the researcher's previous relationship with the school; this article therefore makes no claim of independence or a particular prior relationship. Interpretations are limited to the reported evidence. The manuscript states that school permission was obtained and that informants checked summaries of their accounts.

Analysis followed repeated reading, initial coding, comparison across interviews, classroom notes, and documents, and thematic grouping. Codes addressed the relevance of problems, materials, adult support, children's exploration, documentation, and revisions. Discrepant instances, especially a teacher's early intervention and incomplete written records of changes, were retained in the analysis. The use of data displays and comparison is consistent with qualitative analysis procedures described by Miles et al. (2014).

Credibility was pursued through source and method triangulation and informant confirmation. The principal's account was compared with the two teachers' accounts, and statements about planning and evaluation were checked against observations and available documents. These checks help identify convergence and differences, but complete transcripts and all underlying records were not supplied for independent verification.

The analysis distinguishes evidence about process from evidence about developmental outcomes. Eight observations show selected classroom episodes; they cannot establish that the same pattern occurred in every activity. Anecdotal records and checklists document how staff assessed children, but the study did not administer a comparative developmental measure or follow a control group. Conclusions about PBL effectiveness must therefore remain within the limits of the case.

3. RESULTS AND FINDINGS

Planning began with everyday situations that children could recognize, such as sharing play equipment or caring for plants. The principal and teachers described choosing concrete prompts and matching them with curricular aims. Reviewed modules recorded problem scenarios, materials, activities, and assessment arrangements. When a prompt proved too complex or contained too many instructions, teachers reported simplifying the next activity. Planning functioned as an adjustable guide rather than a fixed script.

Teachers prepared loose parts and other materials that could be handled in several ways. Children could select objects, test an idea, and change a construction when it did not work. The case thus links environmental preparation with opportunities for choice and experimentation. The source also reports that access, safety, and sufficient materials needed attention before the activity began; availability of objects alone did not guarantee a productive exploration.

Organizing involved informal division of labor between two teachers. One generally introduced the problem and facilitated discussion, while the other helped distribute materials, supported children who needed assistance, and recorded activities. The reviewed modules did not include a separate written assignment of these responsibilities. This distinction matters: a coordinated practice was described and observed, but the institution had not fully formalized its arrangement in the documents examined.

The teaching sequence adapted five PBL stages for play: introducing a concrete problem, organizing children, allowing investigation, inviting children to communicate their solutions, and reflecting on what they tried. These were not rigid steps that every child completed in the same order. Some children returned to exploration after explaining an idea, and the teacher adjusted questions in response to their actions. The model served as a structure for learning opportunities rather than a checklist of uniform behavior.

During the eight observed activities, open-ended questions gave children opportunities to suggest possibilities, explain choices, and change an approach. Teachers invited group interaction and allowed children to manipulate materials before suggesting a solution. The examples show classroom processes consistent with guided inquiry. They do not quantify the frequency of particular skills or demonstrate that every child benefited equally.

A tension appeared when a child seemed uncertain: a teacher sometimes offered help sooner than intended. In an interview, the teacher recognized afterward that more time to try might have been useful. This does not mean adults should withhold support when it is needed. It shows that the timing and form of assistance are instructional decisions that require reflection, especially when a teacher wants children to exercise initiative.

Children's development was documented using anecdotal records, photographs, and checklists. These materials could show a sequence of choices, attempts, peer interaction, and explanation, rather than only the final product. Separately, the principal and teachers examined whether the prompt, resources, and adult guidance worked as planned. The source thus distinguishes assessment of an individual child from evaluation of the curriculum activity.

Evaluation informed later revisions to problem scenarios, material choices, and facilitation. Some revisions appeared in updated modules; others were described in staff reflection but not formally recorded. The feedback cycle was therefore operating, although its documentary trail was uneven. A concise record of the reason for each adjustment would help distinguish an intentional curriculum improvement from a change made only for one class.

4. DISCUSSION

The case suggests that play-based PBL depends on an institutional sequence of decisions rather than a teacher's use of a named method. Everyday problems need to be chosen, materials made available, adult roles coordinated, and evidence of children's activity reviewed. PBL scholarship emphasizes investigation and facilitation (Hmelo-Silver, 2004), while research on kindergarten play shows that adult guidance takes varied forms (Pyle et al., 2017). The contribution here is to show how those decisions were linked by curriculum management within one PAUD setting.

Concrete, familiar prompts help young children enter the activity without lengthy abstract explanation. Sharing equipment and caring for plants offer observable conditions and consequences that can be explored through speech, action, and cooperation. A meaningful problem should allow more than one response while remaining manageable and safe. This case identifies how teachers revised an overly difficult prompt; it does not show that every problem had the same developmental value.

The organization of resources and teacher roles shaped the opportunities children encountered. Open-ended materials invited alternative solutions when placed where children could select and use them. Meanwhile, one teacher could focus on facilitation while another monitored materials and documentation. Because the division of responsibilities was not separately written down, its consistency may depend on shared expectations. A brief role plan could make coordination easier when staffing or activities change.

Teacher questioning connected the planned curriculum with children's thinking. Asking what a child noticed or might try next can extend investigation without taking the problem away. Evidence from guided play indicates that well-timed adult support can enrich exploration (Weisberg et al., 2016; Fisher et al., 2013). The observed early intervention shows that the practical challenge is deciding how much help a child needs at that moment. Reflective review of episodes could help teachers refine this judgment.

The five adapted PBL stages offered structure while allowing children to move back and forth between exploration and explanation. Such flexibility is appropriate because preschoolers may communicate through gesture, construction, and play as well as through extended verbal reasoning. A rigid step-by-step requirement would risk turning inquiry into a scripted exercise. The source's eight observations support this description of process; they do not establish whether the approach produces higher outcomes than alternative play practices.

Child assessment and curriculum evaluation answer related but different questions. Anecdotal notes and photographs can show how one child tried, interacted, and explained. Reviewing the prompt, materials, teacher support, and level of participation asks whether the activity design should change. Keeping the two purposes distinct can prevent a poorly matched task from being misread solely as a child's lack of ability. In this case, both forms of evidence reportedly informed later planning.

Documentation was uneven even though teachers described a working feedback cycle. Some changes appeared in teaching modules, while others remained in informal reflection. A short record of the original prompt, what children did, the teacher's interpretation, and the next adjustment could preserve useful professional knowledge without adding a burdensome reporting system. Such a record would also allow the principal and teachers to examine whether later activities addressed a previously observed difficulty.

Transferability is limited by one institution, three key informants, six interviews, and eight classroom observations. The source does not provide a direct comparison with another curriculum model or standardized developmental outcomes. Research with several PAUD centers could examine how staffing, materials, and collaborative planning affect implementation, while longer observation could track how children respond across revised activities. The present findings are strongest as an account of how this school managed a developmentally adapted inquiry cycle.

5. CONCLUSION AND SUGGESTIONS

PAUD Kusuma Bangsa managed play-based PBL through linked planning, organization, implementation, and evaluation. Teachers chose everyday problems, prepared open-ended materials, coordinated classroom roles, guided children's investigation, and used records of children's processes to plan further activities.

Eight observations showed opportunities for exploration, communication, and reflection, alongside instances where teachers intervened sooner than intended. Some curricular changes were formally recorded, while others remained informal. The single-case study describes these practices but cannot establish a causal improvement in children's development.

Regular collaborative review, a concise record of curriculum adjustments, and clear arrangements for teacher roles may strengthen implementation. Further research should follow several centers over time and assess children's experiences alongside institutional processes.

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